

Page 1 of 3

REQUEST NUMBER: 10-1324

**ATTN: Valerie Davis**

**These Samples are on:**

**General Engineering Laboratories, Inc., Charleston, SC.**

LANL Request Number:10-1324

2040 Savage Rd

**Per Agreement Number:126310011**

**Charleston, SC 29407**

Project Cost Code: MR3A05529E00

**Please analyse the enclosed samples according to the schedule indicated:**

SHIP DATE: 1/19/2010

**TURNAROUND/REPORT DUE: 2/18/2010**

**TURNAROUND REQ'D: 30 Days**

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

**Signature:**

DE  
CINTNR SAMPLEID

Jedwulst.

| PRIORITY | METHOD CODE  | CNTNR | SAMPLE ID    | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|----------|--------------|-------|--------------|---------------|--------------|----------------------|
|          | SW-846:8082  | 1     | RE15-10-8410 | R             | 1/14/2010    |                      |
|          |              | 1     | RE15-10-8411 | R             | 1/14/2010    |                      |
|          |              | 1     | RE15-10-8412 | R             | 1/14/2010    |                      |
|          |              | 1     | RE15-10-8413 | R             | 1/14/2010    |                      |
|          |              | 1     | RE15-10-8441 | R             | 1/14/2010    |                      |
|          | SW-846:8260B | 1     | RE15-10-8410 | R             | 1/14/2010    |                      |
|          |              | 1     | RE15-10-8411 | R             | 1/14/2010    |                      |
|          |              | 1     | RE15-10-8412 | R             | 1/14/2010    |                      |
|          |              | 1     | RE15-10-8413 | R             | 1/14/2010    |                      |

Page 2 of 3

REQUEST NUMBER: 10-1324

| PRIORITY | METHOD CODE      | CNTNR | SAMPLE ID    | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|----------|------------------|-------|--------------|---------------|--------------|----------------------|
|          | SW-846.8260B     | 1     | RE15-10-8416 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8417 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8418 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8420 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8421 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8422 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8423 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8424 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8425 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8441 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8447 | S             | 1/14/2010    |                      |
|          | SW-846.8270C     | 1     | RE15-10-8410 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8411 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8412 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8413 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8416 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8417 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8418 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8420 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8421 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8422 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8423 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8424 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8425 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8441 | R             | 1/14/2010    |                      |
|          | SW-846.8321A_MOD | 1     | RE15-10-8410 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8411 | R             | 1/14/2010    |                      |

Tuesday, January 19, 2010

Page 3 of 3

REQUEST NUMBER: 10-1324

| PRIORITY         | METHOD CODE | CNTNR | SAMPLE ID    | SAMPLE<br>MATRIX | DATE SAMPLED | SPECIAL<br>INSTRUCTIONS |
|------------------|-------------|-------|--------------|------------------|--------------|-------------------------|
| SW-846:8321A_MOD |             |       |              |                  |              |                         |
| 1                |             | 1     | RE15-10-8413 | R                | 1/14/2010    |                         |
| 1                |             | 1     | RE15-10-8416 | R                | 1/14/2010    |                         |
| 1                |             | 1     | RE15-10-8417 | R                | 1/14/2010    |                         |
| 1                |             | 1     | RE15-10-8418 | R                | 1/14/2010    |                         |
| 1                |             | 1     | RE15-10-8420 | R                | 1/14/2010    |                         |
| 1                |             | 1     | RE15-10-8421 | R                | 1/14/2010    |                         |
| 1                |             | 1     | RE15-10-8422 | R                | 1/14/2010    |                         |
| 1                |             | 1     | RE15-10-8423 | R                | 1/14/2010    |                         |
| 1                |             | 1     | RE15-10-8424 | R                | 1/14/2010    |                         |
| 1                |             | 1     | RE15-10-8425 | R                | 1/14/2010    |                         |
| 1                |             | 1     | RE15-10-8441 | R                | 1/14/2010    |                         |

Final Page of REQUEST NUMBER 10-1324

Tuesday, January 19, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1324

## LOS ALAMOS

REQUEST NUMBER: 10-1324

## NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/18/2010

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 |
|--------------|------|--------------------|--------------------|---------|--------|
| RE15-10-8447 | 1    | SEPTUM AMBER GLASS | 8260B Trip Blank   | Ice     | S      |
| RE15-10-8410 | 1    | AMBER GLASS        | 8082+8270+NMED-EXP | Ice     | R      |
| RE15-10-8410 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8411 | 1    | AMBER GLASS        | 8082+8270+NMED-EXP | Ice     | R      |
| RE15-10-8411 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8412 | 1    | AMBER GLASS        | 8082+8270+NMED-EXP | Ice     | R      |
| RE15-10-8412 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8441 | 1    | AMBER GLASS        | 8082+8270+NMED-EXP | Ice     | R      |
| RE15-10-8441 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8413 | 1    | AMBER GLASS        | 8082+8270+NMED-EXP | Ice     | R      |
| RE15-10-8413 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8425 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8425 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8422 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8422 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8417 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8417 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8423 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8423 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8416 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8416 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8418 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8418 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8424 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8424 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8421 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8421 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8420 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8420 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |

Relinquished By:

Date

Time

Received By:

Date

Time

1/19/10 1400



**SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY**

EVENT ID: 2509

EVENT NAME: 4th Qtr. FY09 - SWMU 15-010(b) - Threemile Canyon

SAMPLE ID: RE15-10-8410

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED          |    | AS PLANNED               |        | AS COLLECTED |                          |
|-----------------------------|-----------|-----------------------|----|--------------------------|--------|--------------|--------------------------|
| DATE COLLECTED(MM/DD/YYYY): |           | 01/14/2010            |    | MEDIA:                   | QBT3   |              | SED                      |
| TIME COLLECTED (HH:MM)      |           | 1300                  |    | SUB-MEDIA:               | TUFF.1 |              | NA                       |
| PRS ID:                     | 15-010(b) | OK                    |    | SAMPLE TECH CODE:        | HA     |              | OK                       |
| LOCATION ID:                | 15-610863 | ↓                     |    | 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:               | B         | 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+8270+NME D-EXP    | 500 ML AMBER GLASS            | Ice          | Yes           |                      |
| 1 |          | 8260B                  | 125 ML SEPTUM AMBER GLASS     | Ice          | Yes           |                      |
| 1 |          | AM241+GS+ISO PU+ISOU   | 1 LITER POLY                  | None         | Yes           |                      |
| 1 |          | H3                     | 500 ML POLY                   | Ice          | Yes           |                      |
| 1 |          | METALS+U-GEL           | 125 ML POLY                   | Ice          | Yes           |                      |
| 1 |          | Perchlorate+CN+ N03+pH | 500 ML POLY                   | Ice          | Yes           |                      |
| 1 | ↓        | RADVANA+B+G            | 1 EA 8 IN RESEALABLE POLY BAG | None         | Yes           |                      |

SAMPLE DESC: Loamy silt brown, roots + rocks, pine needles

FTB: RE15-10-8447

SAMPLE COMMENTS:

NA

LOCATION DESC: 10b-12 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 22$  dpm

PID

H E negative  
ambient 2.0 ppm  
reading 2.0BY  $\leq 2340$  dpm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarlane

|                          |           |                        |           |
|--------------------------|-----------|------------------------|-----------|
| RELINQUISHED BY          | Date/Time | RECEIVED BY            | Date/Time |
| (Printed Name) MARIN     | 1/15/10   | (Printed Name) Jaylink | 1/15/10   |
| (Signature) Jan R. Marin | 0800      | (Signature)            | 830       |
| RELINQUISHED BY          | Date/Time | RECEIVED BY            | Date/Time |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2509

EVENT NAME: 4th Qtr. FY09 - SWMU 15-010(b) - Threemile Canyon

SAMPLE ID: RE15-10-8411

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED          |    | AS PLANNED               |        | AS COLLECTED |                            |
|-----------------------------|-----------|-----------------------|----|--------------------------|--------|--------------|----------------------------|
| DATE COLLECTED(MM/DD/YYYY): |           | 01/14/2010            |    | MEDIA:                   | QBT3   |              | SED                        |
| TIME COLLECTED (HH:MM)      |           | 1316                  |    | SUB-MEDIA:               | TUFF 1 |              | NA                         |
| PRS ID:                     | 15-010(b) | OK                    |    | SAMPLE TECH CODE:        | HA     |              | OK                         |
| LOCATION ID:                | 15-010863 | ↓                     |    | 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   |        |              |                            |
| 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+8270+NME D-EXP   | 500 ML AMBER GLASS            | Ice          | Yes           |                      |
| 1 |          | 8260B                 | 125 ML SEPTUM AMBER GLASS     | Ice          | Yes           |                      |
| 1 |          | AM241+GS+ISO PU+ISOU  | 1 LITER POLY                  | None         | Yes           |                      |
| 1 |          | H3                    | 500 ML POLY                   | Ice          | Yes           |                      |
| 1 |          | METALS+U-GEL          | 125 ML POLY                   | Ice          | Yes           |                      |
| 1 |          | Perchlorate+CN+N03+pH | 500 ML POLY                   | Ice          | Yes           |                      |
| 1 |          | RADVANA+B+G           | 1 EA 8 IN RESEALABLE POLY BAG | None         | Yes           |                      |

SAMPLE DESC: Grey brown clay silt numerous roots, few rocks

SAMPLE COMMENTS: NA

LOCATION DESC: 10b-12 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 55$  dpm

PID

 $B\gamma \leq 2180$  dpmambient  
reading

RS 01-14-10

0.0 ppm

RS 01-14-10

0.0 ppm  
53.0

COLLECTED BY (PRINT)

REVIEWED BY (PRINT)

R Saunders

T. McFarland

|                         |           |                         |           |
|-------------------------|-----------|-------------------------|-----------|
| RELINQUISHED BY         | Date/Time | RECEIVED BY             | Date/Time |
| (Printed Name) MARIN    | 1/15/10   | (Printed Name) Jaynes   | 1/15/10   |
| (Signature) [Signature] | 0800      | (Signature) [Signature] | 830       |
| RELINQUISHED BY         | Date/Time | RECEIVED BY             | Date/Time |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2509

EVENT NAME: 4th Qtr. FY09 - SWMU 15-010(b) - Threemile Canyon

SAMPLE ID: RE15-10-8412

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED | AS PLANNED               |       | AS COLLECTED |
|-----------------------------|-----------|--------------|--------------------------|-------|--------------|
| DATE COLLECTED(MM/DD/YYYY): |           | 01/14/2010   | MEDIA:                   | OBT3  | SED          |
| TIME COLLECTED(HH:MM)       |           | 1350         | SUB-MEDIA:               | TUFF1 | NA           |
| PRS ID:                     | 15-010(b) | OK           | SAMPLE TECH CODE:        | HA    | OK           |
| LOCATION ID:                | 15-610864 | ↓            | 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+8270+NME D-EXP    | 500 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 |          | 8260B                  | 125 ML SEPTUM AMBER GLASS     | Ice          | Y             |                      |
| 1 |          | AM241+GS+ISO PU+ISOU   | 1 LITER POLY                  | None         | Y             |                      |
| 1 |          | H3                     | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | METALS+U-GEL           | 125 ML POLY                   | Ice          | Y             |                      |
| 1 |          | Perchlorate+CN+ N03+pH | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | RADVANA+B+G            | 1 EA 8 IN RESEALABLE POLY BAG | None         | Y             |                      |

SAMPLE DESC: dark brown silty sand, rocks, pine needles

ED: RE15-10-8441

SAMPLE COMMENTS:

NA

LOCATION DESC: 10b-11 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

 $\alpha \leq 16$  dpm

PID

ambient  
reading 0.0 ppm $\text{BY} \leq 2370$  dpm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

|                         |           |                      |           |
|-------------------------|-----------|----------------------|-----------|
| RELINQUISHED BY         | Date/Time | RECEIVED BY          | Date/Time |
| (Printed Name) MARIN    | 1/15/10   | (Printed Name) Jayne | 1/15/10   |
| (Signature) J. R. Marin | 0800      | (Signature)          | 830       |
| RELINQUISHED BY         | Date/Time | RECEIVED BY          | Date/Time |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2509

EVENT NAME: 4th Qtr. FY09 - SWMU 15-010(b) - Threemile Canyon

SAMPLE ID: RE15-10-8413

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED                |  | AS PLANNED               |     | AS COLLECTED |  |
|-----------------------------|-----------|-----------------------------|--|--------------------------|-----|--------------|--|
| DATE COLLECTED(MM/DD/YYYY): |           | 01/14/2010                  |  | MEDIA: QBT3              |     | SED          |  |
| TIME COLLECTED (HH:MM)      |           | 1430                        |  | SUB-MEDIA: TUFF 1        |     | NA           |  |
| PRS ID:                     | 15-010(b) | OK                          |  | SAMPLE TECH CODE:        | HA  | OK           |  |
| LOCATION ID:                | 15-610864 | ↓                           |  | 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     |     |              |  |
| 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+8270+NME D-EXP    | 500 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 |          | 8260B                  | 125 ML SEPTUM AMBER GLASS     | Ice          | Y             |                      |
| 1 |          | AM241+GS+ISO PU+ISOU   | 1 LITER POLY                  | None         | Y             |                      |
| 1 |          | H3                     | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | METALS+U-GEL           | 125 ML POLY                   | Ice          | Y             |                      |
| 1 |          | Perchlorate+CN+ N03+pH | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | RADVANA+B+G            | 1 EA 8 IN RESEALABLE POLY BAG | None         | Y             |                      |

SAMPLE DESC: brownish grey silty sand with lots of roots

SAMPLE COMMENTS:

NA

LOCATION DESC: 10b-11 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 22$  dpm

PID

 $\text{BY} \leq 2550$  dpm

ambient reading 0.0 / 5.1 ppm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

|                         |           |                         |           |
|-------------------------|-----------|-------------------------|-----------|
| RELINQUISHED BY         | Date/Time | RECEIVED BY             | Date/Time |
| (Printed Name) MARIN    | 1/15/10   | (Printed Name) Jaynes   | 1/15/10   |
| (Signature) [Signature] | 0805      | (Signature) [Signature] | 830       |
| RELINQUISHED BY         | Date/Time | RECEIVED BY             | Date/Time |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2509

EVENT NAME: 4th Qtr. FY09 - SWMU 15-010(b) - Threemile Canyon

SAMPLE ID: RE15-10-8416

WORK ORDER:

| AS PLANNED                  |  | AS COLLECTED                |  | AS PLANNED               |  | AS COLLECTED |  |
|-----------------------------|--|-----------------------------|--|--------------------------|--|--------------|--|
| DATE COLLECTED(MM/DD/YYYY): |  | 01/14/2010                  |  | MEDIA:                   |  | QBT3         |  |
| TIME COLLECTED (HH:MM)      |  | 1345                        |  | SUB-MEDIA:               |  | TUFF 1       |  |
| PRS ID: 15-010(b)           |  | OK                          |  | SAMPLE TECH CODE:        |  | HA           |  |
| LOCATION ID: 15-610866      |  | ↓                           |  | FIELD QC TYPE:           |  | NA           |  |
| LOCATION TYPE: GENERIC      |  | ↓                           |  | FIELD PREP:              |  | NA           |  |
| TOP DEPTH: 0                |  | 0.0                         |  | SAMPLE USAGE:            |  | INV          |  |
| BOTTOM DEPTH: 0             |  | 0.7                         |  | SCREEN/PORT DESC:        |  | NA           |  |
| FIELD MATRIX: R             |  | SED                         |  | EXCAVATED: YES/NO/NA     |  |              |  |
| 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   | 8260B                 | 125 ML SEPTUM AMBER GLASS     | Ice          | y             |                      |
| 1 |          | 8270C+NMED Exp        | 500 ML AMBER GLASS            | Ice          | y             |                      |
| 1 |          | AM241+GS+ISO PU+ISOU  | 1 LITER POLY                  | None         | y             |                      |
| 1 |          | H3                    | 500 ML POLY                   | Ice          | y             |                      |
| 1 |          | METALS+U-GEL          | 125 ML POLY                   | Ice          | y             |                      |
| 1 |          | Perchlorate+CN+N03+pH | 500 ML POLY                   | 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: 10b-13, drainage

## FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 55$  dpm    PID reading 0.2  
 $\beta \leq 2210$  dpm    ambient 0.0 ppm  
 HE negative

COLLECTED BY (PRINT)

REVIEWED BY (PRINT)

TL McFarlane

R Saunders

RELINQUISHED BY

(Printed Name) MARIN

(Signature)

for R. Marin

Date/Time

1/15/10

0805

RECEIVED BY

(Printed Name)

(Signature)

Jay Kelly

Date/Time

1/15/10

830

RELINQUISHED BY

Date/Time

RECEIVED BY

Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2509

EVENT NAME: 4th Qtr. FY09 - SWMU 15-010(b) - Threemile Canyon

SAMPLE ID: RE15-10-8417

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED                |  | AS PLANNED               |  | AS COLLECTED |  |
|-----------------------------|-----------|-----------------------------|--|--------------------------|--|--------------|--|
| DATE COLLECTED(MM/DD/YYYY): |           | 01/14/2010                  |  | MEDIA: QBT3              |  | SED          |  |
| TIME COLLECTED (HH:MM)      |           | 1352                        |  | SUB-MEDIA: TUFF 1        |  | NA           |  |
| PRS ID:                     | 15-010(b) | ok                          |  | SAMPLE TECH CODE: HA     |  | ok           |  |
| LOCATION ID:                | 15-610866 | ↓                           |  | FIELD QC TYPE: NA        |  | ↓            |  |
| LOCATION TYPE:              | GENERIC   | ↓                           |  | FIELD PREP: NA           |  | ↓            |  |
| TOP DEPTH:                  | 0         | 1.0                         |  | SAMPLE USAGE: INV        |  | ↓            |  |
| BOTTOM DEPTH:               | 0         | 1.7                         |  | 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   | 8260B                  | 125 ML SEPTUM AMBER GLASS     | Ice          | Y             |                      |
| 1 |          | 8270C+NMED Exp         | 500 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 |          | AM241+GS+ISO PU+ISOU   | 1 LITER POLY                  | None         | Y             |                      |
| 1 |          | H3                     | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | METALS+U-GEL           | 125 ML POLY                   | Ice          | Y             |                      |
| 1 |          | Perchlorate+CN+ N03+pH | 500 ML POLY                   | 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:

10b-13, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 33$  dpm

PID

reading 0.0  
ambient 0.0 ppmBX  $\leq 2640$  dpm

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

R Saunders

|                          |           |                         |           |
|--------------------------|-----------|-------------------------|-----------|
| RELINQUISHED BY          | Date/Time | RECEIVED BY             | Date/Time |
| (Printed Name) MARIN     | 1/15/10   | (Printed Name) Jayfield | 1/15/10   |
| (Signature) Jan R. Marin | 0805      | (Signature)             | 830       |
| RELINQUISHED BY          | Date/Time | RECEIVED BY             | Date/Time |

**SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY**

EVENT ID: 2509

EVENT NAME: 4th Qtr. FY09 - SWMU 15-010(b) - Threemile Canyon

SAMPLE ID: RE15-10-8418

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED          |    | AS PLANNED               |        | AS COLLECTED |                          |
|-----------------------------|-----------|-----------------------|----|--------------------------|--------|--------------|--------------------------|
| DATE COLLECTED(MM/DD/YYYY): |           | 01/14/2010            |    | MEDIA:                   | QBT3   |              | SED                      |
| TIME COLLECTED (HH:MM)      |           | 1445                  |    | SUB-MEDIA:               | TUFF 1 |              | NA                       |
| PRS ID:                     | 15-010(b) | OK                    |    | SAMPLE TECH CODE:        | HA     |              | OK                       |
| LOCATION ID:                | 15-610867 | ↓                     |    | 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   | 8260B                 | 125 ML SEPTUM AMBER GLASS     | Ice          | Y             |                      |
| 1 |          | 8270C+NMED Exp        | 500 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 |          | AM241+GS+ISO PU+ISOU  | 1 LITER POLY                  | None         | Y             |                      |
| 1 |          | H3                    | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | METALS+U-GEL          | 125 ML POLY                   | Ice          | Y             |                      |
| 1 |          | Perchlorate+CN+N03+pH | 500 ML POLY                   | Ice          | Y             |                      |
| 1 | ↓        | RADVANA+B+G           | 1 EA 8 IN RESEALABLE POLY BAG | None         | Y             |                      |

SAMPLE DESC:

Brown silt, roots

SAMPLE COMMENTS:

NA

LOCATION DESC:

10b-10, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 33$  dpm  
 $\beta \leq 2710$  dpm

PID ambient reading 0.0 ppm  
 HE negative

COLLECTED BY (PRINT)

TLMcFarlang

REVIEWED BY (PRINT)

R. Saunders

|                         |           |                         |           |
|-------------------------|-----------|-------------------------|-----------|
| RELINQUISHED BY         | Date/Time | RECEIVED BY             | Date/Time |
| (Printed Name) MARIN    | 1/15/10   | (Printed Name) Jaylantz | 1/15/10   |
| (Signature) [Signature] | 0805      | (Signature) [Signature] | 830       |
| RELINQUISHED BY         | Date/Time | RECEIVED BY             | Date/Time |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2509

EVENT NAME: 4th Qtr. FY09 - SWMU 15-010(b) - Threemile Canyon

SAMPLE ID: RE15-10-8420

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED                |  | AS PLANNED               |  | AS COLLECTED |  |
|-----------------------------|-----------|-----------------------------|--|--------------------------|--|--------------|--|
| DATE COLLECTED(MM/DD/YYYY): |           | 01/14/2010                  |  | MEDIA:                   |  | OBT3         |  |
| TIME COLLECTED (HH:MM)      |           | 1515                        |  | SUB-MEDIA:               |  | TUFF 1       |  |
| PRS ID:                     | 15-010(b) | OK                          |  | SAMPLE TECH CODE:        |  | HA           |  |
| LOCATION ID:                | 15-610868 | ↓                           |  | FIELD QC TYPE:           |  | NA           |  |
| LOCATION TYPE:              | GENERIC   | ↓                           |  | FIELD PREP:              |  | NA           |  |
| TOP DEPTH:                  | 0         | 0.05'                       |  | SAMPLE USAGE:            |  | INV          |  |
| BOTTOM DEPTH:               | 0         | 0.6                         |  | 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   | 8260B                 | 125 ML SEPTUM AMBER GLASS     | Ice          | Y             |                      |
| 1 |          | 8270C+NMED Exp        | 500 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 |          | AM241+GS+ISO PU+ISOU  | 1 LITER POLY                  | None         | Y             |                      |
| 1 |          | H3                    | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | METALS+U-GEL          | 125 ML POLY                   | Ice          | Y             |                      |
| 1 |          | Perchlorate+CN+N03+pH | 500 ML POLY                   | Ice          | Y             |                      |
| 1 | ✓        | RADVANA+B+G           | 1 EA 8 IN RESEALABLE POLY BAG | None         | Y             |                      |

SAMPLE DESC: dark brown sand with rocks

SAMPLE COMMENTS: NA

LOCATION DESC: 10b-9 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 16$  dpm

PID

HE negative  
ambient reading 0.0 ppmBY  $\leq 2520$  dpm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

|                         |           |                             |           |
|-------------------------|-----------|-----------------------------|-----------|
| RELINQUISHED BY         | Date/Time | RECEIVED BY                 | Date/Time |
| (Printed Name) MARIN    | 11/15/10  | (Printed Name) Jay Williams | 11/15/10  |
| (Signature) [Signature] | 0805      | (Signature) [Signature]     | 830       |
| RELINQUISHED BY         | Date/Time | RECEIVED BY                 | Date/Time |



## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2509

EVENT NAME: 4th Qtr. FY09 - SWMU 15-010(b) - Threemile Canyon

SAMPLE ID: RE15-10-8421

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED          |    | AS PLANNED               |       | AS COLLECTED |                            |
|-----------------------------|-----------|-----------------------|----|--------------------------|-------|--------------|----------------------------|
| DATE COLLECTED(MM/DD/YYYY): |           | 01/14/2010            |    | MEDIA:                   | QBT3  |              | SED                        |
| TIME COLLECTED (HH:MM)      |           | 1525                  |    | SUB-MEDIA:               | TUFF1 |              | NA                         |
| PRS ID:                     | 15-010(b) | OK                    |    | SAMPLE TECH CODE:        | HA    |              | OK                         |
| LOCATION ID:                | 15-610868 | ↓                     |    | 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   |       |              |                            |
| COMPOSITE TYPE:             | NA        |                       |    | COMPOSITE TIME INTERVAL: | NA    |              | WATER FLOWING: YES (NO) NA |
| BOREHOLE: YES (NO) NA       |           | BOREHOLE DECLINATION: | NA | BOREHOLE DIRECTION:      | NA    |              |                            |

| # | PRIORITY | ORDER                 | QNTNR                         | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|-----------------------|-------------------------------|--------------|---------------|----------------------|
| 1 | normal   | 8260B                 | 125 ML SEPTUM AMBER GLASS     | Ice          | Y             |                      |
| 1 | ↓        | 8270C+NMED-Exp        | 500 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 |          | AM241+GS+ISO PU+ISOU  | 1 LITER POLY                  | None         | Y             |                      |
| 1 |          | H3                    | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | METALS+U-GEL          | 125 ML POLY                   | Ice          | Y             |                      |
| 1 |          | Perchlorate+CN+N03+pH | 500 ML POLY                   | Ice          | Y             |                      |
| 1 | ✓        | RADVANA+B+G           | 1 EA 8 IN RESEALABLE POLY BAG | None         | Y             |                      |

SAMPLE DESC: dark brown soil, few small clumps of moist soil

SAMPLE COMMENTS:

NA

LOCATION DESC: 10b-9 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

$2 \leq 11$  dpm      PID      ambient reading 0.6 ppm  
 $88 \leq 2510$  dpm      0.0

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) TLMcFarland

R Saunders

|                         |           |                            |           |
|-------------------------|-----------|----------------------------|-----------|
| RELINQUISHED BY         | Date/Time | RECEIVED BY                | Date/Time |
| (Printed Name) MARIN    | 1/15/10   | (Printed Name) [Signature] | 1/15/10   |
| (Signature) [Signature] | 0805      | (Signature) [Signature]    | 830       |
| RELINQUISHED BY         | Date/Time | RECEIVED BY                | Date/Time |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2509

EVENT NAME: 4th Qtr. FY09 - SWMU 15-010(b) - Threemile Canyon

SAMPLE ID: RE15-10-8422

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED          |    | AS PLANNED               |        | AS COLLECTED |                          |
|-----------------------------|-----------|-----------------------|----|--------------------------|--------|--------------|--------------------------|
| DATE COLLECTED(MM/DD/YYYY): |           | 01/14/2010            |    | MEDIA:                   | OBT3   |              | SED                      |
| TIME COLLECTED (HH:MM)      |           | 1526                  |    | SUB-MEDIA:               | TUFF 1 |              | NA                       |
| PRS ID:                     | 15-010(b) | OK                    |    | SAMPLE TECH CODE:        | HA     |              | OK                       |
| LOCATION ID:                | 15-610869 |                       |    | FIELD QC TYPE:           | NA     |              |                          |
| LOCATION TYPE:              | GENERIC   |                       |    | FIELD PREP:              | NA     |              |                          |
| TOP DEPTH:                  | 0         | 0.0                   |    | SAMPLE USAGE:            | INV    |              |                          |
| BOTTOM DEPTH:               | 0         | 0.6                   |    | 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   | 8260B                  | 125 ML SEPTUM AMBER GLASS     | Ice          | Y             |                      |
| 1 |          | 8270C+NMED Exp         | 500 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 |          | AM241+GS+ISO PU+ISOU   | 1 LITER POLY                  | None         | Y             |                      |
| 1 |          | H3                     | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | METALS+U-GEL           | 125 ML POLY                   | Ice          | Y             |                      |
| 1 |          | Perchlorate+CN+ N03+pH | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | RADVANA+B+G            | 1 EA 8 IN RESEALABLE POLY BAG | None         | Y             |                      |

SAMPLE DESC: Brown loamy silt, roots and small rocks

SAMPLE COMMENTS: NA

LOCATION DESC: 10b-8 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \pm 22$  dpm

BY  $\pm 2140$  dpm

PID ambient reading  $\frac{0.0}{0.0}$  ppm

HE neg

COLLECTED BY (PRINT)

ThMcFarland

REVIEWED BY (PRINT)

Larry A. Lopez

|                          |           |                        |           |
|--------------------------|-----------|------------------------|-----------|
| RELINQUISHED BY          | Date/Time | RECEIVED BY            | Date/Time |
| (Printed Name) MARIN     | 1/15/10   | (Printed Name) Jaylenz | 1/15/10   |
| (Signature) Jan R. Marin | 0805      | (Signature)            | 830       |
| RELINQUISHED BY          | Date/Time | RECEIVED BY            | Date/Time |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2509

EVENT NAME: 4th Qtr. FY09 - SWMU 15-010(b) - Threemile Canyon

SAMPLE ID: RE15-10-8423

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED | AS PLANNED               |  | AS COLLECTED |
|-----------------------------|-----------|--------------|--------------------------|--|--------------|
| DATE COLLECTED(MM/DD/YYYY): |           | 01/14/2010   | MEDIA:                   |  | OBT3         |
| TIME COLLECTED(HH:MM)       |           | 15:38        | SUB-MEDIA:               |  | TUFF 1       |
| PRS ID:                     | 15-010(b) | OK           | SAMPLE TECH CODE:        |  | HA           |
| LOCATION ID:                | 15-610869 | ↓            | 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     |  |              |
| 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 | Regular  | 8260B                 | 125 ML SEPTUM AMBER GLASS     | Ice          | yes           |                      |
| 1 |          | 8270C+NMED Exp        | 500 ML AMBER GLASS            | Ice          | yes           |                      |
| 1 |          | AM241+GS+ISO PU+ISOU  | 1 LITER POLY                  | None         | yes           |                      |
| 1 |          | H3                    | 500 ML POLY                   | Ice          | yes           |                      |
| 1 |          | METALS+U-GEL          | 125 ML POLY                   | Ice          | yes           |                      |
| 1 |          | Perchlorate+CN+N03+pH | 500 ML POLY                   | Ice          | yes           |                      |
| 1 |          | RADVANA+B+G           | 1 EA 8 IN RESEALABLE POLY BAG | None         | yes           |                      |

SAMPLE DESC: Brown loamy silt, with roots &amp; rocks

SAMPLE COMMENTS:

none

LOCATION DESC:

106-8 Drainage Area

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 16$  dpm      PID ambient reading  $\frac{0.0}{0.0}$  ppm  
 $\beta \leq 2010$  dpm

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

Lorey A. Lopez

|                         |           |                       |           |
|-------------------------|-----------|-----------------------|-----------|
| RELINQUISHED BY         | Date/Time | RECEIVED BY           | Date/Time |
| (Printed Name) MARIN    | 1/15/10   | (Printed Name) Jay WS | 1/15/10   |
| (Signature) J. R. Marin | 0805      | (Signature)           | 830       |
| RELINQUISHED BY         | Date/Time | RECEIVED BY           | Date/Time |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2509

EVENT NAME: 4th Qtr. FY09 - SWMU 15-010(b) - Threemile Canyon

SAMPLE ID: RE15-10-8424

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED                               |  | AS PLANNED                 |        | AS COLLECTED |     |
|-----------------------------|-----------|--|--|----------------------------|--------|--------------|-----|
| DATE COLLECTED(MM/DD/YYYY): |           | RS 01-14-10<br><del>10/11</del> 01/14/2010 |  | MEDIA:                     | OBT3   |              | SED |
| TIME COLLECTED (HH:MM)      |           | 1553                                       |  | SUB-MEDIA:                 | TUFF 1 |              | NA  |
| PRS ID:                     | 15-010(b) | OK   |  | SAMPLE TECH CODE:          | HA     |              | OK  |
| LOCATION ID:                | 15-610870 | ↓  |  | FIELD QC TYPE:             | NA     |              | ↓   |
| LOCATION TYPE:              | GENERIC   | ✓  |  | FIELD PREP:                | NA     |              | ↓   |
| TOP DEPTH:                  | 0         | 0.0  |  | SAMPLE USAGE:              | INV    |              | ✓   |
| BOTTOM DEPTH:               | 0         | 0.7  |  | 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:        | N      |              |     |

| # | PRIORITY | ORDER                 | CNTNR                         | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|-----------------------|-------------------------------|--------------|---------------|----------------------|
| 1 | normal   | 8260B                 | 125 ML SEPTUM AMBER GLASS     | Ice          | Y             |                      |
| 1 |          | 8270C+NMED Exp        | 500 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 |          | AM241+GS+ISO PU+ISOU  | 1 LITER POLY                  | None         | Y             |                      |
| 1 |          | H3                    | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | METALS+U-GEL          | 125 ML POLY                   | Ice          | Y             |                      |
| 1 |          | Perchlorate+CN+N03+pH | 500 ML POLY                   | Ice          | Y             |                      |
| 1 | ✓        | RADVANA+B+G           | 1 EA 8 IN RESEALABLE POLY BAG | None         | Y             |                      |

SAMPLE DESC: Brown loamy silt, some rocks and roots

SAMPLE COMMENTS:

NA

LOCATION DESC: 10b-7 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 22$  dpm

PID

ambient reading 0.0 ppm

HE = NEG

 $\text{BY} \leq 2640$  dpm

COLLECTED BY (PRINT)

Larry A. Lopez

REVIEWED BY (PRINT)

TLMcFarlane

|                         |           |                       |           |
|-------------------------|-----------|-----------------------|-----------|
| RELINQUISHED BY         | Date/Time | RECEIVED BY           | Date/Time |
| (Printed Name) MARIN    | 1/15/10   | (Printed Name) Jayung | 1/15/10   |
| (Signature) J. R. Marin | 0805      | (Signature)           | 830       |
| RELINQUISHED BY         | Date/Time | RECEIVED BY           | Date/Time |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2509

EVENT NAME: 4th Qtr. FY09 - SWMU 15-010(b) - Threemile Canyon

SAMPLE ID: RE15-10-8425

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED          |    | AS PLANNED               |        | AS COLLECTED |                            |
|-----------------------------|-----------|-----------------------|----|--------------------------|--------|--------------|----------------------------|
| DATE COLLECTED(MM/DD/YYYY): |           | 01/14/2010            |    | MEDIA:                   | QBT3   |              | SED                        |
| TIME COLLECTED (HH:MM)      |           | 16:02                 |    | SUB-MEDIA:               | TUFF 1 |              | NA                         |
| PRS ID:                     | 15-010(b) | OK                    |    | SAMPLE TECH CODE:        | HA     |              | OK                         |
| LOCATION ID:                | 15-610870 | OK                    |    | FIELD QC TYPE:           | NA     |              |                            |
| LOCATION TYPE:              | GENERIC   | OK                    |    | FIELD PREP:              | NA     |              |                            |
| TOP DEPTH:                  | 0         | 1.0                   |    | SAMPLE USAGE:            | INV    |              |                            |
| BOTTOM DEPTH:               | 0         | 1.6                   |    | 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 | Regular  | 8260B                 | 125 ML SEPTUM AMBER GLASS     | Ice          | yes           |                      |
| 1 |          | 8270C+NMED Exp        | 500 ML AMBER GLASS            | Ice          | yes           |                      |
| 1 |          | AM241+GS+ISO PU+ISOU  | 1 LITER POLY                  | None         | yes           |                      |
| 1 |          | H3                    | 500 ML POLY                   | Ice          | yes           |                      |
| 1 |          | METALS+U-GEL          | 125 ML POLY                   | Ice          | yes           |                      |
| 1 |          | Perchlorate+CN+N03+pH | 500 ML POLY                   | Ice          | yes           |                      |
| 1 |          | RADVANA+B+G           | 1 EA 8 IN RESEALABLE POLY BAG | None         | yes           |                      |

SAMPLE DESC: Brown loamy silty soil with rocks + roots

FR RE15-10-8442

## SAMPLE COMMENTS:

Drainage Area by Oak Brush Area

## LOCATION DESC:

106-7, Drainage Area

## FIELD SCREENING/MEASUREMENT RESULTS:

K = 5 dpm  
B18 = 2460 dpm

HE = NEG

PID =  $\frac{\text{Ambient} - 0.0}{\text{Reading} - 0.0 \text{ dpm}}$ 

COLLECTED BY (PRINT)

Larry A. Lopez

REVIEWED BY (PRINT) T L McFarland

|                         |           |                            |           |
|-------------------------|-----------|----------------------------|-----------|
| RELINQUISHED BY         | Date/Time | RECEIVED BY                | Date/Time |
| (Printed Name) MARIN    | 1/15/10   | (Printed Name) [Signature] | 1/15/10   |
| (Signature) [Signature] | 0805      | (Signature) [Signature]    | 830       |
| RELINQUISHED BY         | Date/Time | RECEIVED BY                | Date/Time |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2509

EVENT NAME: 4th Qtr. FY09 - SWMU 15-010(b) - Threemile Canyon

SAMPLE ID: RE15-10-8441

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED |  | AS PLANNED               |       | AS COLLECTED |     |
|-----------------------------|-----------|--------------|--|--------------------------|-------|--------------|-----|
| DATE COLLECTED(MM/DD/YYYY): |           | 01/14/2010   |  | MEDIA:                   | QBT3  |              | SED |
| TIME COLLECTED(HH:MM)       |           | 1350         |  | SUB-MEDIA:               | TUFF1 |              | NA  |
| PRS ID:                     | 15-010(b) | OK           |  | SAMPLE TECH CODE:        | HA    |              | OK  |
| LOCATION ID:                | UNK       | 15-1610864   |  | FIELD QC TYPE:           | ED    |              |     |
| LOCATION TYPE:              | GENERIC   | OK           |  | FIELD PREP:              | NA    |              |     |
| TOP DEPTH:                  | 0         | 0.0          |  | SAMPLE USAGE:            | QC    |              |     |
| BOTTOM DEPTH:               | 0         | 0.5          |  | SCREEN/PORT DESC:        |       | NA           |     |
| FIELD MATRIX:               | R         | SED          |  | EXCAVATED: YES/NO/NA     |       |              |     |
| COMPOSITE TYPE:             | NA        |              |  | COMPOSITE TIME INTERVAL: | NA    |              |     |
| BOREHOLE: YES/NO/NA         |           |              |  | BOREHOLE DECLINATION:    | NA    |              |     |
|                             |           |              |  | BOREHOLE DIRECTION:      | NA    |              |     |

| # | PRIORITY | ORDER                  | CNTNR                         | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|------------------------|-------------------------------|--------------|---------------|----------------------|
| 1 | normal   | 8082+8270+NME D-EXP    | 500 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 |          | 8260B                  | 125 ML SEPTUM AMBER GLASS     | Ice          | Y             |                      |
| 1 |          | AM241+GS+ISO PU+ISOU   | 1 LITER POLY                  | None         | Y             |                      |
| 1 |          | H3                     | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | METALS+U-GEL           | 125 ML POLY                   | Ice          | Y             |                      |
| 1 |          | Perchlorate+CN+ N03+pH | 500 ML POLY                   | Ice          | Y             |                      |
| 1 | ✓        | RADVANA+B+G            | 1 EA 8 IN RESEALABLE POLY BAG | None         | Y             |                      |

SAMPLE DESC: QC Sample of RE15-10-8412

dark brown silty sand, rocksand pine needles

SAMPLE COMMENTS:

NA

LOCATION DESC: 10b-11 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 16 dpm

PID

HE negative

BX ≤ 2370 dpm

ambient  
reading 0.0 ppm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

|                         |           |                         |           |
|-------------------------|-----------|-------------------------|-----------|
| RELINQUISHED BY         | Date/Time | RECEIVED BY             | Date/Time |
| (Printed Name) MARIN    | 1/15/10   | (Printed Name) Jaykew   | 1/15/10   |
| (Signature) [Signature] | 0805      | (Signature) [Signature] | 830       |
| RELINQUISHED BY         | Date/Time | RECEIVED BY             | Date/Time |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2509

EVENT NAME: 4th Qtr. FY09 - SWMU 15-010(b) - Threemile Canyon

SAMPLE ID: RE15-10-8442

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED |  | AS PLANNED               |       | AS COLLECTED |    |
|-----------------------------|-----------|--------------|--|--------------------------|-------|--------------|----|
| DATE COLLECTED(MM/DD/YYYY): |           | 01/14/2010   |  | MEDIA:                   | NA    |              | OK |
| TIME COLLECTED (HH:MM)      |           | 1623         |  | SUB-MEDIA:               | OTHER |              |    |
| PRS ID:                     | 15-010(b) | OK           |  | SAMPLE TECH CODE:        | DC    |              |    |
| LOCATION ID:                | UNK       | 15-610870    |  | FIELD QC TYPE:           | FR    |              |    |
| LOCATION TYPE:              | GENERIC   | OK           |  | FIELD PREP:              | UF    |              |    |
| TOP DEPTH:                  | 0         |              |  | SAMPLE USAGE:            | QC    |              |    |
| BOTTOM DEPTH:               | 0         |              |  | SCREEN/PORT DESC:        |       | NA           |    |
| FIELD MATRIX:               | W         |              |  | 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   | METALS+U-GEL | 1 LITER POLY | Nitric Acid                      | Y             |                      |
| 1 |          | NO3NO2       | 250 ML POLY  | Sulfuric Acid (Hydrogen Sulfate) | Y             |                      |
| 1 |          | SW-846:6850  | 250 ML POLY  | Ice                              | Y             |                      |
| 1 |          | TCN          | 500 ML POLY  | Sodium Hydroxide                 | Y             |                      |

SAMPLE DESC: QC Sample of RE 15-10-8425

SAMPLE COMMENTS:

Rinsate

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

Th McFarland

REVIEWED BY (PRINT)

R Saunders

|                         |           |                         |           |
|-------------------------|-----------|-------------------------|-----------|
| RELINQUISHED BY         | Date/Time | RECEIVED BY             | Date/Time |
| (Printed Name) MARIN    | 1/15/10   | (Printed Name)          | 1/15/10   |
| (Signature) J. R. Marin | 0805      | (Signature) J. R. Marin | 830       |
| RELINQUISHED BY         | Date/Time | RECEIVED BY             | Date/Time |
| (Printed Name)          |           | (Printed Name)          |           |
| (Signature)             |           | (Signature)             |           |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2509

EVENT NAME: 4th Qtr. FY09 - SWMU 15-010(b) - Threemile Canyon

SAMPLE ID: RE15-10-8447

WORK ORDER:

| AS PLANNED                         |           | AS COLLECTED | AS PLANNED                              |       | AS COLLECTED |
|------------------------------------|-----------|--------------|---|-------|--------------|
| DATE COLLECTED(MM/DD/YYYY):        |           | 01/14/2010   | MEDIA:                                  | NA    | ok           |
| TIME COLLECTED (HH:MM)             |           | 1305         | SUB-MEDIA:                              | OTHER |              |
| PRS ID:                            | 15-010(b) | ok           | SAMPLE TECH CODE:                       | DC    |              |
| LOCATION ID:                       | UNK       | 15-610863    | FIELD QC TYPE:                          | ETB   |              |
| LOCATION TYPE:                     | GENERIC   | ok           | FIELD PREP:                             | NA    |              |
| TOP DEPTH:                         | 0         |              | SAMPLE USAGE:                           | QC    |              |
| BOTTOM DEPTH:                      | 0         |              | SCREEN/PORT DESC:                       |       | NA           |
| FIELD MATRIX:                      | S         |              | EXCAVATED: YES / <del>NO</del> / NA     |       |              |
| COMPOSITE TYPE:                    | NA        |              | COMPOSITE TIME INTERVAL:                | NA    |              |
|                                    |           |              | WATER FLOWING: YES / <del>NO</del> / NA |       |              |
| BOREHOLE: YES / <del>NO</del> / NA |           |              | BOREHOLE DECLINATION:                   | NA    |              |
|                                    |           |              | BOREHOLE DIRECTION:                     | NA    |              |

| #                    | PRIORITY | ORDER            | CNTNR                    | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|----------------------|----------|------------------|--------------------------|--------------|---------------|----------------------|
| 12m<br>11/15/10<br>1 | Regular  | 8260B Trip Blank | 40 ML SEPTUM AMBER GLASS | Ice          | Y             |                      |

SAMPLE DESC: QC Sample of RE15-10-8410

SAMPLE COMMENTS:

FTB

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

T. McFarland

REVIEWED BY (PRINT)

R. Saunders

|                          |           |                      |           |
|--------------------------|-----------|----------------------|-----------|
| RELINQUISHED BY          | Date/Time | RECEIVED BY          | Date/Time |
| (Printed Name) MARIN     | 1/15/10   | (Printed Name)       | 1/15/10   |
| (Signature) Jan R. Marin | 0805      | (Signature) Jay W. G | 830       |
| RELINQUISHED BY          | Date/Time | RECEIVED BY          | Date/Time |
| (Printed Name)           |           | (Printed Name)       |           |
| (Signature)              |           | (Signature)          |           |



## Rad Screening Data Release Form

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

RE15-10-7198

7199  
7200  
7201  
7202  
7203  
7204  
7205  
7206  
7207  
7208

RE15-10-7209

7210  
7211  
7220  
7221  
8410  
8411  
8412  
8413  
8416

RE15-10-8417

8418  
8420  
8421  
8422  
8423  
8424  
8425  
8441

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

.....

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

RE15-10-7233 FTB

7226 FR  
8442 FR  
8447 FTB

Reason:

.....

Print Last Name MARIN

Signature

Jon R. Marin

Date 1/15/10



2609 North River Road, Port Allen, Louisiana 70767  
1 (800) 403-4277 FAX (225) 383-2996

ARS Sample Delivery Group: ARS1-10-00074  
Analysis Description: Gross Alpha/Beta in (Soil, Sludge, Waste, Sediment (SO))  
Analysis Test Method: GPC-A-003

Request or PO Number: N/A  
Date Received: 1/16/2010  
Report Date: 01/19/10 08:47

| ARS Sample ID     | Client Sample ID | Isotope     | Analysis Results | Analysis Error +/- 2 s | HDC    | DLC   | Qual | Analysis Units | Analysis Date/Time | Analysis Technician | Tracer/Chem Recovery | Sample Matrix | Collection Date |
|-------------------|------------------|-------------|------------------|------------------------|--------|-------|------|----------------|--------------------|---------------------|----------------------|---------------|-----------------|
| ARS1-10-00074-001 | RE15-10-7198     | GROSS ALPHA | 8.481            | 9.395                  | 12.704 | 3.788 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-001 | RE15-10-7198     | GROSS BETA  | 35.365           | 11.796                 | 7.759  | 3.349 |      | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-002 | RE15-10-7199     | GROSS ALPHA | 8.244            | 9.257                  | 12.034 | 3.245 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-002 | RE15-10-7199     | GROSS BETA  | 29.146           | 10.316                 | 7.568  | 3.259 |      | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-003 | RE15-10-7200     | GROSS ALPHA | 8.086            | 9.171                  | 12.323 | 3.404 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-003 | RE15-10-7200     | GROSS BETA  | 18.714           | 8.008                  | 7.543  | 3.233 |      | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-004 | RE15-10-7201     | GROSS ALPHA | 12.874           | 10.871                 | 11.663 | 3.290 |      | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-004 | RE15-10-7201     | GROSS BETA  | 23.503           | 9.040                  | 7.440  | 3.203 |      | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-005 | RE15-10-7202     | GROSS ALPHA | 3.602            | 6.674                  | 11.839 | 3.317 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-005 | RE15-10-7202     | GROSS BETA  | 23.643           | 9.226                  | 8.096  | 3.505 |      | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-006 | RE15-10-7203     | GROSS ALPHA | 5.201            | 8.405                  | 14.027 | 4.183 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-006 | RE15-10-7203     | GROSS BETA  | 42.132           | 13.382                 | 7.726  | 3.315 |      | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-007 | RE15-10-7204     | GROSS ALPHA | 13.279           | 11.502                 | 12.861 | 3.739 |      | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-007 | RE15-10-7204     | GROSS BETA  | 36.451           | 12.046                 | 7.705  | 3.328 |      | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-008 | RE15-10-7205     | GROSS ALPHA | 12.092           | 11.685                 | 14.491 | 4.301 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-008 | RE15-10-7205     | GROSS BETA  | 33.533           | 11.460                 | 7.848  | 3.385 |      | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-009 | RE15-10-7206     | GROSS ALPHA | 5.827            | 8.341                  | 13.009 | 3.693 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-009 | RE15-10-7206     | GROSS BETA  | 20.202           | 8.442                  | 8.105  | 3.525 |      | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-010 | RE15-10-7207     | GROSS ALPHA | 10.096           | 10.246                 | 12.585 | 3.501 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-010 | RE15-10-7207     | GROSS BETA  | 33.343           | 11.617                 | 8.730  | 3.820 |      | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-011 | RE15-10-7208     | GROSS ALPHA | 7.986            | 9.423                  | 13.245 | 3.784 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-011 | RE15-10-7208     | GROSS BETA  | 21.012           | 8.547                  | 7.615  | 3.267 |      | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-012 | RE15-10-7209     | GROSS ALPHA | 18.210           | 13.442                 | 12.630 | 3.539 |      | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-012 | RE15-10-7209     | GROSS BETA  | 25.293           | 9.849                  | 8.561  | 3.744 |      | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-013 | RE15-10-7210     | GROSS ALPHA | 1.317            | 5.806                  | 13.133 | 3.818 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-013 | RE15-10-7210     | GROSS BETA  | 20.998           | 8.500                  | 7.782  | 3.355 |      | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-014 | RE15-10-7211     | GROSS ALPHA | 6.848            | 8.807                  | 13.001 | 3.858 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-014 | RE15-10-7211     | GROSS BETA  | 32.357           | 11.097                 | 7.769  | 3.354 |      | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-015 | RE15-10-7220     | GROSS ALPHA | 11.859           | 10.919                 | 12.591 | 3.551 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-015 | RE15-10-7220     | GROSS BETA  | 21.280           | 8.560                  | 7.375  | 3.155 |      | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-016 | RE15-10-7221     | GROSS ALPHA | 6.333            | 9.024                  | 14.580 | 4.561 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-016 | RE15-10-7221     | GROSS BETA  | 14.227           | 7.103                  | 7.943  | 3.441 |      | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-017 | RE15-10-8410     | GROSS ALPHA | 1.433            | 7.865                  | 16.454 | 5.615 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-017 | RE15-10-8410     | GROSS BETA  | 30.865           | 10.810                 | 7.966  | 3.438 |      | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |
| ARS1-10-00074-018 | RE15-10-8411     | GROSS ALPHA | 13.355           | 13.600                 | 18.992 | 6.782 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                  | SO            |                 |



2609 North River Road, Port Allen, Louisiana 70767  
1 (800) 401-4277 FAX (225) 381-2996


ARS Sample Delivery Group: ARS1-10-00074  
Analysis Description: Gross Alpha/Beta in (Soil, Sludge, Waste, Sediment (SO))  
Analysis Test Method: GPC-A-003

Request or PO Number: N/A  
Date Received: 1/16/2010  
Report Date: 01/19/10 08:47

| ARS Sample ID     | Client Sample ID | Isotope     | Analysis Results | Analysis Error +/- 2 s | MDC    | DLC   | Qual | Analysis Units | Analysis Date/Time | Analysis Technician | Trace/Chem Recovery | Sample Matrix | Collection Date |
|-------------------|------------------|-------------|------------------|------------------------|--------|-------|------|----------------|--------------------|---------------------|---------------------|---------------|-----------------|
| ARS1-10-00074-018 | RE15-10-8411     | GROSS BETA  | 38.776           | 12.689                 | 7.973  | 3.446 |      | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-019 | RE15-10-8412     | GROSS ALPHA | 3.435            | 8.191                  | 15.596 | 5.043 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-019 | RE15-10-8412     | GROSS BETA  | 32.389           | 11.178                 | 7.885  | 3.391 |      | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-020 | RE15-10-8413     | GROSS ALPHA | 11.680           | 11.849                 | 15.565 | 5.006 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-020 | RE15-10-8413     | GROSS BETA  | 31.286           | 10.957                 | 7.820  | 3.366 |      | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-021 | RE15-10-8416     | GROSS ALPHA | 12.822           | 11.429                 | 13.258 | 3.953 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-021 | RE15-10-8416     | GROSS BETA  | 30.423           | 10.716                 | 7.765  | 3.351 |      | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-022 | RE15-10-8417     | GROSS ALPHA | 6.085            | 8.128                  | 11.850 | 3.196 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-022 | RE15-10-8417     | GROSS BETA  | 33.086           | 11.184                 | 7.552  | 3.252 |      | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-023 | RE15-10-8418     | GROSS ALPHA | 4.011            | 7.091                  | 12.386 | 3.421 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-023 | RE15-10-8418     | GROSS BETA  | 27.750           | 10.006                 | 7.551  | 3.236 |      | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-024 | RE15-10-8420     | GROSS ALPHA | 9.619            | 9.842                  | 12.324 | 3.476 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-024 | RE15-10-8420     | GROSS BETA  | 30.517           | 10.570                 | 7.415  | 3.192 |      | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-025 | RE15-10-8421     | GROSS ALPHA | -2.253           | 1.306                  | 12.363 | 3.464 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-025 | RE15-10-8421     | GROSS BETA  | 23.707           | 9.187                  | 8.122  | 3.516 |      | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-026 | RE15-10-8422     | GROSS ALPHA | 7.292            | 9.323                  | 13.910 | 4.148 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-026 | RE15-10-8422     | GROSS BETA  | 25.392           | 9.579                  | 7.723  | 3.313 |      | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-027 | RE15-10-8423     | GROSS ALPHA | 5.470            | 8.177                  | 13.190 | 3.834 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-027 | RE15-10-8423     | GROSS BETA  | 36.604           | 12.016                 | 7.708  | 3.329 |      | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-028 | RE15-10-8424     | GROSS ALPHA | 5.344            | 8.314                  | 13.852 | 4.111 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-028 | RE15-10-8424     | GROSS BETA  | 25.519           | 9.577                  | 7.825  | 3.375 |      | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-029 | RE15-10-8425     | GROSS ALPHA | 7.427            | 8.898                  | 12.330 | 3.501 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-029 | RE15-10-8425     | GROSS BETA  | 31.566           | 11.010                 | 8.151  | 3.544 |      | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-030 | RE15-10-8441     | GROSS ALPHA | 6.440            | 8.899                  | 13.519 | 3.761 | U    | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| ARS1-10-00074-030 | RE15-10-8441     | GROSS BETA  | 28.850           | 10.592                 | 8.752  | 3.830 |      | pCi/g          | 1/18/2010          | CR                  | N/A                 | SO            |                 |
| NOTES:            |                  |             |                  |                        |        |       |      |                |                    |                     |                     |               |                 |

Project Manager 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.

| DATA VALIDATION COVER SHEET  |   |
|--|---|
| <div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> <b>5114-1</b> </div> <div style="width: 60%; text-align: center;"> <b>Data Validation Cover Sheet</b> </div> </div> | <div style="text-align: center;"> <b>Records Use only</b><br/> <br/> <small>EST. 1945</small> </div> |

| Section I.  |  |  |
|---|--|--|
| REQUEST NUMBER: <u>10-1324</u>  | VALIDATION DATE: <u>2/23/10</u>          | LAB CODE: <u>GEL</u>   |
| CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u>                                     |  |  |
| VALIDATOR: <u>Charissa Lewis</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 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 checked="" type="checkbox"/> OTHER (DESCRIBE): <u>VOCs</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 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 checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 9. TICS FORMS            |
| <input type="checkbox"/>   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. STANDARD CHROMATOGRAMS   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 10. TICS MASS SPECTRA    |
| <p>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):</p> <ol style="list-style-type: none"> <li>Sample RE15-10-8411 was re-analyzed at a dilution due to an over range detect for acetone. Therefore, the acetone result for the original analysis was qualified R,V7. In addition, all target analytes <u>except</u> acetone in sample -8411REDL were NDs and, thus, were qualified UJ,V88.</li> <li>The ICAL and ICV RRFs were &lt;0.05 for trichlorotrifluoroethane. The associated sample results were NDs and, thus, were qualified R,V7b.</li> <li>In the FTB, sample -8447, associated with samples -8410 and -8411, acetone was detected. The acetone result for sample -8410 was a detect <math>\leq 10X</math> the FTB concentration and, thus, was qualified U,V4d. The acetone result for sample -8411 was a detect <math>&gt; 10X</math> the FTB concentration and, thus, was not qualified.</li> <li>Sample -8413 was analyzed <math>&gt; 1X</math> but <math>\leq 2X</math> beyond the method specified HT. The sample results for acetone, methylene chloride and toluene were detects and, thus, were qualified J-,V9. The remaining associated sample results were NDs and, thus, were qualified UJ,V9.</li> <li>The ICV %Ds were <math>&gt; 20\%</math> for dichlorodifluoromethane, chloromethane and acetone. For the CCV associated with all samples <u>except</u> -8413, the %Ds were <math>&gt; 20\%</math> for 2-hexanone, n-butylbenzene and trichlorotrifluoroethane. For the CCV associated with sample -8413, the %Ds were <math>&gt; 20\%</math> for dichlorodifluoromethane and trichlorotrifluoroethane. The acetone results for samples -8447, -8411REDL, -8412, -8441, -8413, and -8422 were detects and, thus, were qualified J,V7c. The remaining associated sample results were NDs or qualified NDs and, thus, were qualified UJ,V7c.</li> <li>The surrogate bromofluorobenzene %Rs were <math>&gt;</math> the laboratory UAL for samples -8410, -8412 and the MS. The methylene chloride result for sample -8410 and tetrachloroethylene and m,p-xylenes results for sample -8412 were detects and, thus, were qualified J+,V3b. The remaining associated sample results were NDs and, thus, were not qualified. Since the MS was a QC sample, no sample data were qualified.</li> </ol> |                          |                                     |                             |                                     |                          |                          |                          |

## DATA VALIDATION COVER SHEET

**5114-1**

## Data Validation Cover Sheet

Records Use only



7. The MS/MSD %Rs and RPDs did not meet laboratory acceptance criteria for numerous analytes. Since MS/MSD analyses were not a client requirement, no sample data were qualified.

**Reviewed by:** Monica Dymerski **Level I** **Date:** 02/25/10

VALIDATOR'S SIGNATURE:


Chandro Lewis

DATE: 2/23/10

Form 5114-1, Revision 0.0

LOS ALAMOS

### Environmental Restoration Project

| VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST                             |   |
|--|---|
| <b>5114-2</b><br><br><b>Volatile Organic Compound (VOC) Analytical Data Validation Checklist</b> | Records Use only<br><br> |

| Yes No N/A                          |                                     |                                     |  | Assign Qualifier Listed Below If Criterion = Yes |                  |
|-------------------------------------|-------------------------------------|-------------------------------------|--|--|------------------|
| (Check One)                         |                                     |                                     |  | Non-detected Analyte                             | Detected Analyte |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | 1. The holding time was >1 and ≤2 times the applicable holding time requirement.   | UJ, V9   | J-, V9           |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 2. The holding time was >2 times the applicable holding time requirement.  | R, V9a   | J-, V9a          |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 3. The instrument performance sample did not pass method acceptance criteria.  | R, V16   | R, V16           |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 4. Samples were analyzed outside specific method tune time criteria.   | N/A  | J, V16b          |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.  | R, V16c  | R, V16c          |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | 6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.   | UJ or R, V7                                      | J, V7            |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 7. 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, V7a  | J, V7a           |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | 8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.   | R, V7b   | J, V7b           |
| <input checked="" type="checkbox"/> | <input 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, V7c  | J, V7c           |
| <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, V7d  | J, V7d           |
| <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, V7f   | R, V7f           |

# **VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST**


5114-2

## **Volatile Organic Compound (VOC) 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"/>            | 12. The sample result is $\leq 5X$ (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.  | U, V4  | N/A              |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $>5X$ (10X for common laboratory contaminants).                                       | N/A  | J, V4a           |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | 14. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.  | U, V4d   | N/A              |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.  | R, V4e   | R, V4e           |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 16. The IS retention time has shifted by more than 30 seconds.   | UJ, V0   | J, V0            |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.  | N/A  | J, V0a           |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.   | R, V0b   | R, V0b           |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 19. The quantitating IS are count is $<10\%$ of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows. | R, V1a   | J, V1a           |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 20. The IS area count for the quantitating IS is $<50\%$ but $>10\%$ for organics window relation to the previous continuing calibration. Follow the method-specific windows.  | UJ, V1b  | J, V1b           |

| VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST                             |   |
|--|---|
| <b>5114-2</b><br><br><b>Volatile Organic Compound (VOC) Analytical Data Validation Checklist</b> | Records Use only<br><br> |

| Yes No N/A                          |                                     |                                     |   | Assign Qualifier Listed Below If Criterion = Yes |                  |
|-------------------------------------|-------------------------------------|-------------------------------------|---|--|------------------|
| (Check One)                         |                                     |                                     |   | Non-detected Analyte                             | Detected Analyte |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 21. The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows. | UJ, V1c  | J, V1c           |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.                           | R, V1d   | R, V1d           |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.   | R, V3  | J-, V3           |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 24. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.          | UJ, V3a  | J-, V3a          |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | 25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.                  | N/A  | J+, V3b          |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.     | UJ, V3c  | J, V3c           |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.                    | R, V3d   | R, V3d           |
| <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, V12   | J-, V12          |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.                       | UV, V12a   | J-, V12a         |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.                                  | N/A  | J+, V12b         |



| VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST                             |   |
|--|---|
| <b>5114-2</b><br><br><b>Volatile Organic Compound (VOC) Analytical Data Validation Checklist</b> | Records Use only<br><br> |

| Yes   No   N/A<br>(Check One)       |                                     |                                     |   | Assign Qualifier Listed Below If<br>Criterion = Yes |                     |
|-------------------------------------|-------------------------------------|-------------------------------------|---|---|---------------------|
|                                     |                                     |                                     |   | Non-detected<br>Analyte                             | Detected<br>Analyte |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.   | R, V12c   | R, V12c             |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 32. The affected analyte is considered not detected because mass spectrum did not meet specifications.  | N/A   | U, V8               |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.  | R, V8a  | R, V8a              |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | 34. Duplicate, dilution, or reanalysis.   | UJ, V88   | J, V88              |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 35. The affected analytes have elevated detection limits and may not meet project DQOs 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, V15  | R, V15              |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | 36. 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"/>            | 37. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.  | UJ, R, V19  | J, R, V19           |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 2

SDG Number: 10-1324  
 Lab Sample ID: 245114001

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Allquot: 5 g  
 Column: DB-624

Matrix: S  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE15-10-8447  
 Batch ID: 946008  
 Run Date: 01/28/2010 11:28  
 Prep Date: 01/28/2009 11:01  
 Data File: 012810V5SV406.D

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|------------|-----------------------------|-----------|--------|-------|---------|-------------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.00   | ug/kg | 0.340   | 1.00 UJ,V7c |
| 74-87-3    | Chloromethane               | U         | 1.00   | ug/kg | 0.300   | 1.00 UJ,V7c |
| 75-01-4    | Vinyl chloride              | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 74-83-9    | Bromomethane                | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 75-00-3    | Chloroethane                | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 67-64-1    | Acetone                     | J         | 2.80   | ug/kg | 1.66    | 5.00 J,V7c  |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 74-88-4    | Iodomethane                 | U         | 5.00   | ug/kg | 1.60    | 5.00        |
| 75-09-2    | Methylene chloride          | U         | 5.00   | ug/kg | 2.00    | 5.00        |
| 75-15-0    | Carbon disulfide            | U         | 5.00   | ug/kg | 1.25    | 5.00        |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 78-93-3    | 2-Butanone                  | U         | 5.00   | ug/kg | 1.50    | 5.00        |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 67-66-3    | Chloroform                  | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 74-97-5    | Bromochloromethane          | U         | 1.00   | ug/kg | 0.330   | 1.00        |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 56-23-5    | Carbon tetrachloride        | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 71-43-2    | Benzene                     | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 79-01-6    | Trichloroethylene           | U         | 1.00   | ug/kg | 0.330   | 1.00        |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 75-27-4    | Bromodichloromethane        | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 74-95-3    | Dibromomethane              | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.00   | ug/kg | 1.25    | 5.00        |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 108-88-3   | Toluene                     | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 591-78-6   | 2-Hexanone                  | U         | 5.00   | ug/kg | 1.50    | 5.00 UJ,V7c |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 127-18-4   | Tetrachloroethylene         | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 124-48-1   | Dibromochloromethane        | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 108-90-7   | Chlorobenzene               | U         | 1.00   | ug/kg | 0.300   | 1.00        |

CLL  
 2/23/10

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114001

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: S  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE15-10-8447  
Batch ID: 946008  
Run Date: 01/28/2010 11:28  
Prep Date: 01/28/2009 11:01  
Data File: 012810V5SV406.D

| CAS No.     | Parname                               | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|-------------|---------------------------------------|-----------|--------|-------|---------|-------------|
| 100-41-4    | Ethylbenzene                          | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.00   | ug/kg | 0.300   | 2.00        |
| 95-47-6     | o-Xylene                              | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 100-42-5    | Styrene                               | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 75-25-2     | Bromobenzene                          | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 108-86-1    | Bromobenzene                          | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 103-65-1    | n-Propylbenzene                       | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 98-82-8     | Isopropylbenzene                      | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 104-51-8    | n-Butylbenzene                        | U         | 1.00   | ug/kg | 0.300   | 1.00 UJ,V7c |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.00   | ug/kg | 1.60    | 5.00 R,V7b  |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.00   | ug/kg | 0.300   | 1.00        |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.00   | ug/kg | 0.300   | 1.00        |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

CLL  
2/23/10

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114002

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.1  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 24.9  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE15-10-8410  
 Batch ID: 946008  
 Run Date: 01/28/2010 11:53  
 Prep Date: 01/28/2009 11:02  
 Data File: 012810V5\SV407.D

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|------------|-----------------------------|-----------|--------|-------|---------|-------------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.33   | ug/kg | 0.453   | 1.33 UJ,V7c |
| 74-87-3    | Chloromethane               | U         | 1.33   | ug/kg | 0.400   | 1.33 UJ,V7c |
| 75-01-4    | Vinyl chloride              | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 74-83-9    | Bromomethane                | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 75-00-3    | Chloroethane                | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 67-64-1    | Acetone                     | J         | 2.97   | ug/kg | 2.21    | 6.66 U,V4d  |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 74-88-4    | Iodomethane                 | U         | 6.66   | ug/kg | 2.13    | 6.66        |
| 75-09-2    | Methylene chloride          | J         | 2.90   | ug/kg | 2.66    | 6.66 J+,V3b |
| 75-15-0    | Carbon disulfide            | U         | 6.66   | ug/kg | 1.66    | 6.66        |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 78-93-3    | 2-Butanone                  | U         | 6.66   | ug/kg | 2.00    | 6.66        |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 67-66-3    | Chloroform                  | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 74-97-5    | Bromochloromethane          | U         | 1.33   | ug/kg | 0.440   | 1.33        |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 56-23-5    | Carbon tetrachloride        | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 71-43-2    | Benzene                     | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 79-01-6    | Trichloroethylene           | U         | 1.33   | ug/kg | 0.440   | 1.33        |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 75-27-4    | Bromodichloromethane        | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 74-95-3    | Dibromomethane              | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 6.66   | ug/kg | 1.66    | 6.66        |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 108-88-3   | Toluene                     | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 591-78-6   | 2-Hexanone                  | U         | 6.66   | ug/kg | 2.00    | 6.66 UJ,V7c |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 127-18-4   | Tetrachloroethylene         | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 124-48-1   | Dibromochloromethane        | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 108-90-7   | Chlorobenzene               | U         | 1.33   | ug/kg | 0.400   | 1.33        |

CLL  
2/23/10

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114002

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Allquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 24.9  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE15-10-8410  
Batch ID: 946008  
Run Date: 01/28/2010 11:53  
Prep Date: 01/28/2009 11:02  
Data File: 012810V5\SV407.D

| CAS No.     | Parmname   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|-------------|--|-----------|--------|-------|---------|-------------|
| 100-41-4    | Ethylbenzene   | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 179601-23-1 | m,p-Xylenes  | U         | 2.66   | ug/kg | 0.400   | 2.66        |
| 95-47-6     | o-Xylene   | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 100-42-5    | Styrene  | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 75-25-2     | Bromoforn  | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 79-34-5     | 1,1,2,2-Tetrachloroethane  | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 96-18-4     | 1,2,3-Trichloropropane   | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 108-86-1    | Bromobenzene   | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 103-65-1    | n-Propylbenzene  | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 95-49-8     | 2-Chlorotoluene  | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 98-82-8     | Isopropylbenzene   | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 108-67-8    | 1,3,5-Trimethylbenzene   | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 106-43-4    | 4-Chlorotoluene  | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 98-06-6     | tert-Butylbenzene  | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 95-63-6     | 1,2,4-Trimethylbenzene   | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 135-98-8    | sec-Butylbenzene   | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 99-87-6     | 4-Isopropyltoluene   | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 541-73-1    | 1,3-Dichlorobenzene  | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 106-46-7    | 1,4-Dichlorobenzene  | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 104-51-8    | n-Butylbenzene   | U         | 1.33   | ug/kg | 0.400   | 1.33 UJ,V7c |
| 96-12-8     | 1,2-Dibromo-3-chloropropane  | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane<br><i>Trichlorotrifluoroethane</i> | U         | 6.66   | ug/kg | 2.13    | 6.66 R,V7b  |
| 630-20-6    | 1,1,1,2-Tetrachloroethane  | U         | 1.33   | ug/kg | 0.400   | 1.33        |
| 95-50-1     | 1,2-Dichlorobenzene  | U         | 1.33   | ug/kg | 0.400   | 1.33        |

## Tentatively Identified Compound Summary

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

CLL  
2/23/10

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114003

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.1  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 15.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE15-10-8411  
 Batch ID: 946008  
 Run Date: 01/28/2010 12:19  
 Prep Date: 01/28/2009 11:05  
 Data File: 012810V5\SV408.D

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|------------|-----------------------------|-----------|--------|-------|---------|-------------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.18   | ug/kg | 0.402   | 1.18 UJ,V7c |
| 74-87-3    | Chloromethane               | U         | 1.18   | ug/kg | 0.354   | 1.18 UJ,V7c |
| 75-01-4    | Vinyl chloride              | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 74-83-9    | Bromomethane                | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 75-00-3    | Chloroethane                | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 67-64-1    | Acetone                     | E         | 710    | ug/kg | 1.96    | 5.91 R,V7   |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 74-88-4    | Iodomethane                 | U         | 5.91   | ug/kg | 1.89    | 5.91        |
| 75-09-2    | Methylene chloride          | J         | 4.34   | ug/kg | 2.36    | 5.91        |
| 75-15-0    | Carbon disulfide            | U         | 5.91   | ug/kg | 1.48    | 5.91        |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 78-93-3    | 2-Butanone                  | U         | 5.91   | ug/kg | 1.77    | 5.91        |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 67-66-3    | Chloroform                  | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 74-97-5    | Bromochloromethane          | U         | 1.18   | ug/kg | 0.390   | 1.18        |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 56-23-5    | Carbon tetrachloride        | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 71-43-2    | Benzene                     | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 79-01-6    | Trichloroethylene           | U         | 1.18   | ug/kg | 0.390   | 1.18        |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 75-27-4    | Bromodichloromethane        | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 74-95-3    | Dibromomethane              | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.91   | ug/kg | 1.48    | 5.91        |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 108-88-3   | Toluene                     |           | 18.5   | ug/kg | 0.354   | 1.18        |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 591-78-6   | 2-Hexanone                  | U         | 5.91   | ug/kg | 1.77    | 5.91 UJ,V7c |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 127-18-4   | Tetrachloroethylene         | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 124-48-1   | Dibromochloromethane        | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 108-90-7   | Chlorobenzene               | U         | 1.18   | ug/kg | 0.354   | 1.18        |

CLL  
 2/23/10

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114003    | Date Received: 01/20/2010 08:45  | %Moisture: 15.4      |
| Client ID: RE15-10-8411     | Client: LANL010                  | Project: LANL01004   |
| Batch ID: 946008            | Method: SW846 8260B              | SOP Ref: GL-OA-E-038 |
| Run Date: 01/28/2010 12:19  | Inst: VOA5.1                     | Dilution: 1          |
| Prep Date: 01/28/2009 11:05 | Analyst: DXK1                    | Purge Vol: 5 mL      |
| Data File: 012810V5SV408.D  | Aliquot: 5 g                     | Final Volume: 5 mL   |
|                             | Column: DB-624                   |                      |

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|-------------|---------------------------------------|-----------|--------|-------|---------|-------------|
| 100-41-4    | Ethylbenzene                          | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 179601-23-1 | m,p-Xylenes                           | J         | 0.732  | ug/kg | 0.354   | 2.36        |
| 95-47-6     | o-Xylene                              | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 100-42-5    | Styrene                               | J         | 0.555  | ug/kg | 0.354   | 1.18        |
| 75-25-2     | Bromoform                             | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 108-86-1    | Bromobenzene                          | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 103-65-1    | n-Propylbenzene                       | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 98-82-8     | Isopropylbenzene                      | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 104-51-8    | n-Butylbenzene                        | U         | 1.18   | ug/kg | 0.354   | 1.18 UJ,V7c |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.91   | ug/kg | 1.89    | 5.91 R,V7b  |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |             |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.18   | ug/kg | 0.354   | 1.18        |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.18   | ug/kg | 0.354   | 1.18        |

**Tentatively Identified Compound Summary**

| CAS No.     | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Flt | Qual |
|-------------|---------------------------------------|-------|-----------|-------|-----|------|
| 000508-32-7 | Tricyclo[2.2.1.0(2,6)]heptane, 1,7    | 14.45 | 7.11      | ug/kg | 96  | NJ   |
| 007785-70-8 | 1R- $\alpha$ -Pinene                  | 14.57 | 887       | ug/kg | 97  | NJ   |
| 000079-92-5 | Camphene                              | 14.89 | 33.2      | ug/kg | 97  | NJ   |
| 003479-89-8 | 1,3,5-Cycloheptatriene, 3,7,7-trim    | 15.18 | 13.1      | ug/kg | 95  | NJ   |
| 013466-78-9 | 3-Carene                              | 15.58 | 946       | ug/kg | 97  | NJ   |
| 000099-86-5 | 1,3-Cyclohexadiene, 1-methyl-4-(1-    | 15.66 | 6.98      | ug/kg | 97  | NJ   |
| 013898-73-2 | Cyclohexene, 1-methyl-5-(1-methyle    | 15.75 | 7.09      | ug/kg | 93  | NJ   |
| 000138-86-3 | Limonene                              | 15.8  | 1390      | ug/kg | 95  | NJ   |
| 000527-84-4 | Benzene, 1-methyl-2-(1-methylethyl    | 15.83 | 731       | ug/kg | 93  | NJ   |
| 000099-85-4 | 1,4-Cyclohexadiene, 1-methyl-4-(1-    | 16.12 | 17.8      | ug/kg | 96  | NJ   |

CLL  
2/23/10

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114003    | Date Received: 01/20/2010 08:45  | %Moisture: 15.4      |
| Client ID: RE15-10-8411     | Client: LANL010                  | Project: LANL01004   |
| Batch ID: 946008            | Method: SW846 8260B              | SOP Ref: GL-OA-E-038 |
| Run Date: 01/28/2010 12:19  | Inst: VOA5.I                     | Dilution: 1          |
| Prep Date: 01/28/2009 11:05 | Analyst: DXK1                    | Purge Vol: 5 mL      |
| Data File: 012810V5\SV408.D | Allquot: 5 g                     | Final Volume: 5 mL   |
|                             | Column: DB-624                   |                      |

| CAS No.  | Parmname                              | Qualifier | Result    | Units | MDL/LOD | PQL/LOQ |
|--|---------------------------------------|-----------|-----------|-------|---------|---------|
| <b>Tentatively Identified Compound Summary</b> |                                       |           |           |       |         |         |
| CAS No.  | Tentatively Identified Compound (TIC) | RT        | Estimated | Units | Fit     | Qual    |
| 029050-33-7                                    | (+)-4-Carene                          | 16.54     | 118       | ug/kg | 97      | NJ      |
| 001195-32-0                                    | Benzene, 1-methyl-4-(1-methylethen    | 16.73     | 50.2      | ug/kg | 96      | NJ      |
| 000464-48-2                                    | Bicyclo[2.2.1]heptan-2-one, 1,7,7-    | 18.23     | 18.4      | ug/kg | 97      | NJ      |

CLL  
2/23/10



**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114003

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Allquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 15.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 50  
 Purge Vol: 5 mL  
 Final Volume: 10 mL

Client ID: RE15-10-8411REDL  
 Batch ID: 946008  
 Run Date: 01/28/2010 20:15  
 Prep Date: 01/28/2010 15:10  
 Data File: 012810V5\5V426.D

| CAS No.    | Parminame                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ    |
|------------|-----------------------------|-----------|--------|-------|---------|------------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 118    | ug/kg | 40.2    | 118 UJ,V88 |
| 74-87-3    | Chloromethane               | U         | 118    | ug/kg | 35.4    | 118        |
| 75-01-4    | Vinyl chloride              | U         | 118    | ug/kg | 35.4    | 118        |
| 74-83-9    | Bromomethane                | U         | 118    | ug/kg | 35.4    | 118        |
| 75-00-3    | Chloroethane                | U         | 118    | ug/kg | 35.4    | 118        |
| 75-69-4    | Trichlorofluoromethane      | U         | 118    | ug/kg | 35.4    | 118        |
| 67-64-1    | Acetone                     |           | 689    | ug/kg | 196     | 591 J,V7c  |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 118    | ug/kg | 35.4    | 118 UJ,V88 |
| 74-88-4    | Iodomethane                 | U         | 591    | ug/kg | 189     | 591        |
| 75-09-2    | Methylene chloride          | U         | 591    | ug/kg | 236     | 591        |
| 75-15-0    | Carbon disulfide            | U         | 591    | ug/kg | 148     | 591        |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 118    | ug/kg | 35.4    | 118        |
| 75-34-3    | 1,1-Dichloroethane          | U         | 118    | ug/kg | 35.4    | 118        |
| 78-93-3    | 2-Butanone                  | U         | 591    | ug/kg | 177     | 591        |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 118    | ug/kg | 35.4    | 118        |
| 594-20-7   | 2,2-Dichloropropane         | U         | 118    | ug/kg | 35.4    | 118        |
| 67-66-3    | Chloroform                  | U         | 118    | ug/kg | 35.4    | 118        |
| 74-97-5    | Bromochloromethane          | U         | 118    | ug/kg | 39.0    | 118        |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 118    | ug/kg | 35.4    | 118        |
| 563-58-6   | 1,1-Dichloropropene         | U         | 118    | ug/kg | 35.4    | 118        |
| 56-23-5    | Carbon tetrachloride        | U         | 118    | ug/kg | 35.4    | 118        |
| 107-06-2   | 1,2-Dichloroethane          | U         | 118    | ug/kg | 35.4    | 118        |
| 71-43-2    | Benzene                     | U         | 118    | ug/kg | 35.4    | 118        |
| 79-01-6    | Trichloroethylene           | U         | 118    | ug/kg | 39.0    | 118        |
| 78-87-5    | 1,2-Dichloropropane         | U         | 118    | ug/kg | 35.4    | 118        |
| 75-27-4    | Bromodichloromethane        | U         | 118    | ug/kg | 35.4    | 118        |
| 74-95-3    | Dibromomethane              | U         | 118    | ug/kg | 35.4    | 118        |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 591    | ug/kg | 148     | 591        |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 118    | ug/kg | 35.4    | 118        |
| 108-88-3   | Toluene                     | U         | 118    | ug/kg | 35.4    | 118        |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 118    | ug/kg | 35.4    | 118        |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 118    | ug/kg | 35.4    | 118        |
| 591-78-6   | 2-Hexanone                  | U         | 591    | ug/kg | 177     | 591        |
| 142-28-9   | 1,3-Dichloropropane         | U         | 118    | ug/kg | 35.4    | 118        |
| 127-18-4   | Tetrachloroethylene         | U         | 118    | ug/kg | 35.4    | 118        |
| 124-48-1   | Dibromochloromethane        | U         | 118    | ug/kg | 35.4    | 118        |
| 106-93-4   | 1,2-Dibromoethane           | U         | 118    | ug/kg | 35.4    | 118        |
| 108-90-7   | Chlorobenzene               | U         | 118    | ug/kg | 35.4    | 118        |

CLL  
 2/23/10

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114003

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.1  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 15.4  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 50  
Purge Vol: 5 mL  
Final Volume: 10 mL

Client ID: RE15-10-8411REDL  
Batch ID: 946008  
Run Date: 01/28/2010 20:15  
Prep Date: 01/28/2010 15:10  
Data File: 012810VS\SV426.D

| CAS No.     | Parmaame                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |        |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|--------|
| 100-41-4    | Ethylbenzene                          | U         | 118    | ug/kg | 35.4    | 118     | UJ.V88 |
| 179601-23-1 | m,p-Xylenes                           | U         | 236    | ug/kg | 35.4    | 236     |        |
| 95-47-6     | o-Xylene                              | U         | 118    | ug/kg | 35.4    | 118     |        |
| 100-42-5    | Styrene                               | U         | 118    | ug/kg | 35.4    | 118     |        |
| 75-25-2     | Bromoform                             | U         | 118    | ug/kg | 35.4    | 118     |        |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 118    | ug/kg | 35.4    | 118     |        |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 118    | ug/kg | 35.4    | 118     |        |
| 108-86-1    | Bromobenzene                          | U         | 118    | ug/kg | 35.4    | 118     |        |
| 103-65-1    | n-Propylbenzene                       | U         | 118    | ug/kg | 35.4    | 118     |        |
| 95-49-8     | 2-Chlorotoluene                       | U         | 118    | ug/kg | 35.4    | 118     |        |
| 98-82-8     | Isopropylbenzene                      | U         | 118    | ug/kg | 35.4    | 118     |        |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 118    | ug/kg | 35.4    | 118     |        |
| 106-43-4    | 4-Chlorotoluene                       | U         | 118    | ug/kg | 35.4    | 118     |        |
| 98-06-6     | tert-Butylbenzene                     | U         | 118    | ug/kg | 35.4    | 118     |        |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 118    | ug/kg | 35.4    | 118     |        |
| 135-98-8    | sec-Butylbenzene                      | U         | 118    | ug/kg | 35.4    | 118     |        |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 118    | ug/kg | 35.4    | 118     |        |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 118    | ug/kg | 35.4    | 118     |        |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 118    | ug/kg | 35.4    | 118     |        |
| 104-51-8    | n-Butylbenzene                        | U         | 118    | ug/kg | 35.4    | 118     |        |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 118    | ug/kg | 35.4    | 118     |        |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 591    | ug/kg | 189     | 591     |        |
|             | Trichlorotrifluoroethane              |           |        |       |         |         |        |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 118    | ug/kg | 35.4    | 118     |        |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 118    | ug/kg | 35.4    | 118     |        |

## Tentatively Identified Compound Summary

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

CLL  
2/23/10

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114004

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 7.6  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE15-10-8412  
Batch ID: 946008  
Run Date: 01/28/2010 12:45  
Prep Date: 01/28/2009 11:06  
Data File: 012810V5SV409.D

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |        |
|------------|-----------------------------|-----------|--------|-------|---------|---------|--------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.08   | ug/kg | 0.368   | 1.08    | UJ,V7c |
| 74-87-3    | Chloromethane               | U         | 1.08   | ug/kg | 0.325   | 1.08    | UJ,V7c |
| 75-01-4    | Vinyl chloride              | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 74-83-9    | Bromomethane                | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 75-00-3    | Chloroethane                | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 67-64-1    | Acetone                     | J         | 2.85   | ug/kg | 1.80    | 5.41    | J,V7c  |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 74-88-4    | Iodomethane                 | U         | 5.41   | ug/kg | 1.73    | 5.41    |        |
| 75-09-2    | Methylene chloride          | U         | 5.41   | ug/kg | 2.16    | 5.41    |        |
| 75-15-0    | Carbon disulfide            | U         | 5.41   | ug/kg | 1.35    | 5.41    |        |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 78-93-3    | 2-Butanone                  | U         | 5.41   | ug/kg | 1.62    | 5.41    |        |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 67-66-3    | Chloroform                  | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 74-97-5    | Bromochloromethane          | U         | 1.08   | ug/kg | 0.357   | 1.08    |        |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 56-23-5    | Carbon tetrachloride        | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 71-43-2    | Benzene                     | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 79-01-6    | Trichloroethylene           | U         | 1.08   | ug/kg | 0.357   | 1.08    |        |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 75-27-4    | Bromodichloromethane        | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 74-95-3    | Dibromomethane              | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.41   | ug/kg | 1.35    | 5.41    |        |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 108-88-3   | Toluene                     | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 591-78-6   | 2-Hexanone                  | U         | 5.41   | ug/kg | 1.62    | 5.41    | UJ,V7c |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 127-18-4   | Tetrachloroethylene         | J         | 0.584  | ug/kg | 0.325   | 1.08    | J+,V3b |
| 124-48-1   | Dibromochloromethane        | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |
| 108-90-7   | Chlorobenzene               | U         | 1.08   | ug/kg | 0.325   | 1.08    |        |

CLL  
2/23/10

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114004

Client ID: RE15-10-8412  
Batch ID: 946008  
Run Date: 01/28/2010 12:45  
Prep Date: 01/28/2009 11:06  
Data File: 012810V5SV409.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 7.6  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|-------------|---------------------------------------|-----------|--------|-------|---------|-------------|
| 100-41-4    | Ethylbenzene                          | U         | 1.08   | ug/kg | 0.325   | 1.08        |
| 179601-23-1 | m,p-Xylenes                           | J         | 0.400  | ug/kg | 0.325   | 2.16 J+,V3b |
| 95-47-6     | o-Xylene                              | U         | 1.08   | ug/kg | 0.325   | 1.08        |
| 100-42-5    | Styrene                               | U         | 1.08   | ug/kg | 0.325   | 1.08        |
| 75-25-2     | Bromoform                             | U         | 1.08   | ug/kg | 0.325   | 1.08        |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.08   | ug/kg | 0.325   | 1.08        |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.08   | ug/kg | 0.325   | 1.08        |
| 108-86-1    | Bromobenzene                          | U         | 1.08   | ug/kg | 0.325   | 1.08        |
| 103-65-1    | n-Propylbenzene                       | U         | 1.08   | ug/kg | 0.325   | 1.08        |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.08   | ug/kg | 0.325   | 1.08        |
| 98-82-8     | Isopropylbenzene                      | U         | 1.08   | ug/kg | 0.325   | 1.08        |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.08   | ug/kg | 0.325   | 1.08        |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.08   | ug/kg | 0.325   | 1.08        |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.08   | ug/kg | 0.325   | 1.08        |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.08   | ug/kg | 0.325   | 1.08        |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.08   | ug/kg | 0.325   | 1.08        |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.08   | ug/kg | 0.325   | 1.08        |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.08   | ug/kg | 0.325   | 1.08        |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.08   | ug/kg | 0.325   | 1.08        |
| 104-51-8    | n-Butylbenzene                        | U         | 1.08   | ug/kg | 0.325   | 1.08 UJ,V7c |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.08   | ug/kg | 0.325   | 1.08        |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.41   | ug/kg | 1.73    | 5.41 R,V7b  |
|             | Trichlorotrifluoroethane              |           |        |       |         |             |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.08   | ug/kg | 0.325   | 1.08        |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.08   | ug/kg | 0.325   | 1.08        |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Flt | Qual |
|---------|---------------------------------------|-------|-----------|-------|-----|------|
|         | unknown siloxane                      | 16.55 | 11.3      | ug/kg | 0   | J    |

CLL  
2/23/10

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114005

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 9.6  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE15-10-8441  
 Batch ID: 946008  
 Run Date: 01/28/2010 13:23  
 Prep Date: 01/28/2009 11:07  
 Data File: 012810V5\5V410.D

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|------------|-----------------------------|-----------|--------|-------|---------|-------------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.11   | ug/kg | 0.376   | 1.11 UJ,V7c |
| 74-87-3    | Chloromethane               | U         | 1.11   | ug/kg | 0.332   | 1.11 UJ,V7c |
| 75-01-4    | Vinyl chloride              | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 74-83-9    | Bromomethane                | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 75-00-3    | Chloroethane                | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 67-64-1    | Acetone                     | J         | 1.85   | ug/kg | 1.84    | 5.53 J,V7c  |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 74-88-4    | Iodomethane                 | U         | 5.53   | ug/kg | 1.77    | 5.53        |
| 75-09-2    | Methylene chloride          | U         | 5.53   | ug/kg | 2.21    | 5.53        |
| 75-15-0    | Carbon disulfide            | U         | 5.53   | ug/kg | 1.38    | 5.53        |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 78-93-3    | 2-Butanone                  | U         | 5.53   | ug/kg | 1.66    | 5.53        |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 67-66-3    | Chloroform                  | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 74-97-5    | Bromochloromethane          | U         | 1.11   | ug/kg | 0.365   | 1.11        |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 56-23-5    | Carbon tetrachloride        | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 71-43-2    | Benzene                     | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 79-01-6    | Trichloroethylene           | U         | 1.11   | ug/kg | 0.365   | 1.11        |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 75-27-4    | Bromodichloromethane        | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 74-95-3    | Dibromomethane              | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.53   | ug/kg | 1.38    | 5.53        |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 108-88-3   | Toluene                     | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 591-78-6   | 2-Hexanone                  | U         | 5.53   | ug/kg | 1.66    | 5.53 UJ,V7c |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 127-18-4   | Tetrachloroethylene         | J         | 0.354  | ug/kg | 0.332   | 1.11        |
| 124-48-1   | Dibromochloromethane        | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 108-90-7   | Chlorobenzene               | U         | 1.11   | ug/kg | 0.332   | 1.11        |

CLL  
2/23/10

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114005

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 9.6  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE15-10-8441  
 Batch ID: 946008  
 Run Date: 01/28/2010 13:23  
 Prep Date: 01/28/2009 11:07  
 Data File: 012810V5SV410.D

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|-------------|---------------------------------------|-----------|--------|-------|---------|-------------|
| 100-41-4    | Ethylbenzene                          | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.21   | ug/kg | 0.332   | 2.21        |
| 95-47-6     | o-Xylene                              | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 100-42-5    | Styrene                               | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 75-25-2     | Bromoforn                             | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 108-86-1    | Bromobenzene                          | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 103-65-1    | n-Propylbenzene                       | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 98-82-8     | Isopropylbenzene                      | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 104-51-8    | n-Butylbenzene                        | U         | 1.11   | ug/kg | 0.332   | 1.11 UJ,V7c |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.53   | ug/kg | 1.77    | 5.53 R,V7b  |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |             |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.332   | 1.11        |

## Tentatively Identified Compound Summary

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Flt | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

CLL  
2/23/10

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114006

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.1  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 10.6  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE15-10-8413  
 Batch ID: 946008  
 Run Date: 01/31/2010 16:34  
 Prep Date: 01/31/2009 10:37  
 Data File: 013110V5SV713.D

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |       |
|------------|-----------------------------|-----------|--------|-------|---------|---------|-------|
| 75-71-8    | Dichlorodifluoromethane     | HU        | 1.12   | ug/kg | 0.380   | 1.12    | UJ,V9 |
| 74-87-3    | Chloromethane               | HU        | 1.12   | ug/kg | 0.336   | 1.12    | ↓     |
| 75-01-4    | Vinyl chloride              | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 74-83-9    | Bromomethane                | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 75-00-3    | Chloroethane                | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 75-69-4    | Trichlorofluoromethane      | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 67-64-1    | Acetone                     | H         | 54.4   | ug/kg | 1.86    | 5.59    | J-,V9 |
| 75-35-4    | 1,1-Dichloroethylene        | HU        | 1.12   | ug/kg | 0.336   | 1.12    | UJ,V9 |
| 74-88-4    | Iodomethane                 | HU        | 5.59   | ug/kg | 1.79    | 5.59    | UJ,V9 |
| 75-09-2    | Methylene chloride          | HJ        | 4.18   | ug/kg | 2.24    | 5.59    | J-,V9 |
| 75-15-0    | Carbon disulfide            | HU        | 5.59   | ug/kg | 1.40    | 5.59    | UJ,V9 |
| 156-60-5   | trans-1,2-Dichloroethylene  | HU        | 1.12   | ug/kg | 0.336   | 1.12    | ↓     |
| 75-34-3    | 1,1-Dichloroethane          | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 78-93-3    | 2-Butanone                  | HU        | 5.59   | ug/kg | 1.68    | 5.59    |       |
| 156-59-2   | cis-1,2-Dichloroethylene    | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 594-20-7   | 2,2-Dichloropropane         | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 67-66-3    | Chloroform                  | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 74-97-5    | Bromochloromethane          | HU        | 1.12   | ug/kg | 0.369   | 1.12    |       |
| 71-55-6    | 1,1,1-Trichloroethane       | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 563-58-6   | 1,1-Dichloropropene         | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 56-23-5    | Carbon tetrachloride        | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 107-06-2   | 1,2-Dichloroethane          | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 71-43-2    | Benzene                     | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 79-01-6    | Trichloroethylene           | HU        | 1.12   | ug/kg | 0.369   | 1.12    |       |
| 78-87-5    | 1,2-Dichloropropane         | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 75-27-4    | Bromodichloromethane        | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 74-95-3    | Dibromomethane              | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 108-10-1   | 4-Methyl-2-pentanone        | HU        | 5.59   | ug/kg | 1.40    | 5.59    |       |
| 10061-01-5 | cis-1,3-Dichloropropylene   | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 108-88-3   | Toluene                     | H         | 1.44   | ug/kg | 0.336   | 1.12    | J-,V9 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HU        | 1.12   | ug/kg | 0.336   | 1.12    | UJ,V9 |
| 79-00-5    | 1,1,2-Trichloroethane       | HU        | 1.12   | ug/kg | 0.336   | 1.12    | ↓     |
| 591-78-6   | 2-Hexanone                  | HU        | 5.59   | ug/kg | 1.68    | 5.59    |       |
| 142-28-9   | 1,3-Dichloropropane         | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 127-18-4   | Tetrachloroethylene         | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 124-48-1   | Dibromochloromethane        | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 106-93-4   | 1,2-Dibromoethane           | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 108-90-7   | Chlorobenzene               | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114006

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.1  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 10.6  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE15-10-8413  
 Batch ID: 946008  
 Run Date: 01/31/2010 16:34  
 Prep Date: 01/31/2009 10:37  
 Data File: 013110V5SV713.D

| CAS No.     | Parmname   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |       |
|-------------|--|-----------|--------|-------|---------|---------|-------|
| 100-41-4    | Ethylbenzene   | HU        | 1.12   | ug/kg | 0.336   | 1.12    | UJ,V9 |
| 179601-23-1 | m,p-Xylenes  | HU        | 2.24   | ug/kg | 0.336   | 2.24    |       |
| 95-47-6     | o-Xylene   | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 100-42-5    | Styrene  | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 75-25-2     | Bromoform  | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 79-34-5     | 1,1,2,2-Tetrachloroethane  | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 96-18-4     | 1,2,3-Trichloropropane   | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 108-86-1    | Bromobenzene   | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 103-65-1    | n-Propylbenzene  | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 95-49-8     | 2-Chlorotoluene  | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 98-82-8     | Isopropylbenzene   | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 108-67-8    | 1,3,5-Trimethylbenzene   | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 106-43-4    | 4-Chlorotoluene  | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 98-06-6     | tert-Butylbenzene  | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 95-63-6     | 1,2,4-Trimethylbenzene   | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 135-98-8    | sec-Butylbenzene   | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 99-87-6     | 4-Isopropyltoluene   | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 541-73-1    | 1,3-Dichlorobenzene  | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 106-46-7    | 1,4-Dichlorobenzene  | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 104-51-8    | n-Butylbenzene   | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 96-12-8     | 1,2-Dibromo-3-chloropropane  | HU        | 1.12   | ug/kg | 0.336   | 1.12    |       |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane<br><i>Trichlorotrifluoroethane</i> | HU        | 5.59   | ug/kg | 1.79    | 5.59    | R,V7b |
| 630-20-6    | 1,1,1,2-Tetrachloroethane  | HU        | 1.12   | ug/kg | 0.336   | 1.12    | UJ,V9 |
| 95-50-1     | 1,2-Dichlorobenzene  | HU        | 1.12   | ug/kg | 0.336   | 1.12    | UJ,V9 |

## Tentatively Identified Compound Summary

| CAS No.     | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|-------------|---------------------------------------|-------|-----------|-------|-----|------|
|             | unknown                               | 6.5   | 77.1      | ug/kg | 0   | J    |
| 000105-37-3 | Propanoic acid, ethyl ester           | 10.91 | 5.64      | ug/kg | 91  | NJ   |
| 000105-54-4 | Butanoic acid, ethyl ester            | 12.46 | 6.78      | ug/kg | 91  | NJ   |

CLL  
 2/23/10



**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114007

Client ID: RE15-10-8425  
 Batch ID: 946008  
 Run Date: 01/28/2010 14:14  
 Prep Date: 01/28/2009 11:09  
 Data File: 012810V5\5V412.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/23/2010 09:20  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 10.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.    | Parmaame                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|------------|-----------------------------|-----------|--------|-------|---------|-------------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.12   | ug/kg | 0.379   | 1.12 UJ,V7c |
| 74-87-3    | Chloromethane               | U         | 1.12   | ug/kg | 0.335   | 1.12 UJ,V7c |
| 75-01-4    | Vinyl chloride              | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 74-83-9    | Bromomethane                | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 75-00-3    | Chloroethane                | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 67-64-1    | Acetone                     | U         | 5.58   | ug/kg | 1.85    | 5.58 UJ,V7c |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 74-88-4    | Iodomethane                 | U         | 5.58   | ug/kg | 1.79    | 5.58        |
| 75-09-2    | Methylene chloride          | U         | 5.58   | ug/kg | 2.23    | 5.58        |
| 75-15-0    | Carbon disulfide            | U         | 5.58   | ug/kg | 1.40    | 5.58        |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 78-93-3    | 2-Butanone                  | U         | 5.58   | ug/kg | 1.67    | 5.58        |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 67-66-3    | Chloroform                  | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 74-97-5    | Bromochloromethane          | U         | 1.12   | ug/kg | 0.368   | 1.12        |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 56-23-5    | Carbon tetrachloride        | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 71-43-2    | Benzene                     | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 79-01-6    | Trichloroethylene           | U         | 1.12   | ug/kg | 0.368   | 1.12        |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 75-27-4    | Bromodichloromethane        | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 74-95-3    | Dibromomethane              | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.58   | ug/kg | 1.40    | 5.58        |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 108-88-3   | Toluene                     | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 591-78-6   | 2-Hexanone                  | U         | 5.58   | ug/kg | 1.67    | 5.58 UJ,V7c |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 127-18-4   | Tetrachloroethylene         | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 124-48-1   | Dibromochloromethane        | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 108-90-7   | Chlorobenzene               | U         | 1.12   | ug/kg | 0.335   | 1.12        |

CLL  
 2/23/10

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114007

Client ID: RE15-10-8425  
 Batch ID: 946008  
 Run Date: 01/28/2010 14:14  
 Prep Date: 01/28/2009 11:09  
 Data File: 012810V5\5V412.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/23/2010 09:20  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 10.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.     | Parmname   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|-------------|--|-----------|--------|-------|---------|-------------|
| 100-41-4    | Ethylbenzene   | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 179601-23-1 | m,p-Xylenes  | U         | 2.23   | ug/kg | 0.335   | 2.23        |
| 95-47-6     | o-Xylene   | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 100-42-5    | Styrene  | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 75-25-2     | Bromoforn  | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 79-34-5     | 1,1,2,2-Tetrachloroethane  | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 96-18-4     | 1,2,3-Trichloropropane   | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 108-86-1    | Bromobenzene   | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 103-65-1    | n-Propylbenzene  | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 95-49-8     | 2-Chlorotoluene  | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 98-82-8     | Isopropylbenzene   | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 108-67-8    | 1,3,5-Trimethylbenzene   | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 106-43-4    | 4-Chlorotoluene  | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 98-06-6     | tert-Butylbenzene  | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 95-63-6     | 1,2,4-Trimethylbenzene   | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 135-98-8    | sec-Butylbenzene   | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 99-87-6     | 4-Isopropyltoluene   | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 541-73-1    | 1,3-Dichlorobenzene  | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 106-46-7    | 1,4-Dichlorobenzene  | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 104-51-8    | n-Butylbenzene   | U         | 1.12   | ug/kg | 0.335   | 1.12 UJ,V7c |
| 96-12-8     | 1,2-Dibromo-3-chloropropane  | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroetha<br><i>Trichlorotrifluoroethane</i> | U         | 5.58   | ug/kg | 1.79    | 5.58 R,V7b  |
| 630-20-6    | 1,1,1,2-Tetrachloroethane  | U         | 1.12   | ug/kg | 0.335   | 1.12        |
| 95-50-1     | 1,2-Dichlorobenzene  | U         | 1.12   | ug/kg | 0.335   | 1.12        |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

CLL  
2/23/10

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114008

Client ID: RE15-10-8422  
 Batch ID: 946008  
 Run Date: 01/28/2010 14:40  
 Prep Date: 01/28/2009 11:10  
 Data File: 012810V5\SV413.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/23/2010 09:20  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Allquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 10.9  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.    | Parminame                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|------------|-----------------------------|-----------|--------|-------|---------|-------------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.12   | ug/kg | 0.382   | 1.12 UJ,V7c |
| 74-87-3    | Chloromethane               | U         | 1.12   | ug/kg | 0.337   | 1.12 UJ,V7c |
| 75-01-4    | Vinyl chloride              | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 74-83-9    | Bromomethane                | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 75-00-3    | Chloroethane                | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 67-64-1    | Acetone                     | J         | 4.11   | ug/kg | 1.86    | 5.61 J,V7c  |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 74-88-4    | Iodomethane                 | U         | 5.61   | ug/kg | 1.80    | 5.61        |
| 75-09-2    | Methylene chloride          | J         | 3.71   | ug/kg | 2.25    | 5.61        |
| 75-15-0    | Carbon disulfide            | U         | 5.61   | ug/kg | 1.40    | 5.61        |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 78-93-3    | 2-Butanone                  | U         | 5.61   | ug/kg | 1.68    | 5.61        |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 67-66-3    | Chloroform                  | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 74-97-5    | Bromochloromethane          | U         | 1.12   | ug/kg | 0.371   | 1.12        |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 56-23-5    | Carbon tetrachloride        | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 71-43-2    | Benzene                     | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 79-01-6    | Trichloroethylene           | U         | 1.12   | ug/kg | 0.371   | 1.12        |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 75-27-4    | Bromodichloromethane        | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 74-95-3    | Dibromomethane              | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.61   | ug/kg | 1.40    | 5.61        |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 108-88-3   | Toluene                     | J         | 0.618  | ug/kg | 0.337   | 1.12        |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 591-78-6   | 2-Hexanone                  | U         | 5.61   | ug/kg | 1.68    | 5.61 UJ,V7c |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 127-18-4   | Tetrachloroethylene         | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 124-48-1   | Dibromochloromethane        | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 108-90-7   | Chlorobenzene               | U         | 1.12   | ug/kg | 0.337   | 1.12        |

CLL  
2/23/10

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

Page 2 of 2

SDG Number: 10-1324  
 Lab Sample ID: 245114008

Date Collected: 01/14/2010 12:00  
 Date Received: 01/23/2010 09:20  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 10.9  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE15-10-8422  
 Batch ID: 946008  
 Run Date: 01/28/2010 14:40  
 Prep Date: 01/28/2009 11:10  
 Data File: 012810V5\SV413.D

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|-------------|---------------------------------------|-----------|--------|-------|---------|-------------|
| 100-41-4    | Ethylbenzene                          | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.25   | ug/kg | 0.337   | 2.25        |
| 95-47-6     | o-Xylene                              | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 100-42-5    | Styrene                               | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 75-25-2     | Bromoform                             | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 108-86-1    | Bromobenzene                          | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 103-65-1    | n-Propylbenzene                       | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 98-82-8     | Isopropylbenzene                      | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 104-51-8    | n-Butylbenzene                        | U         | 1.12   | ug/kg | 0.337   | 1.12 UJ,V7c |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.61   | ug/kg | 1.80    | 5.61 R,V7b  |
|             | Trichlorotrifluoroethane              |           |        |       |         |             |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.12   | ug/kg | 0.337   | 1.12        |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.12   | ug/kg | 0.337   | 1.12        |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|-------|-----------|-------|-----|------|
|         | unknown siloxane                      | 16.55 | 8.84      | ug/kg | 0   | J    |

CLL  
 2/23/10

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 2

SDG Number: 10-1324  
 Lab Sample ID: 245114009

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.1  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 5.3  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE15-10-8417  
 Batch ID: 946008  
 Run Date: 01/28/2010 15:06  
 Prep Date: 01/28/2009 11:11  
 Data File: 012810V55V414.D

| CAS No.    | Parname                     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|------------|-----------------------------|-----------|--------|-------|---------|-------------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.06   | ug/kg | 0.359   | 1.06 UJ,V7c |
| 74-87-3    | Chloromethane               | U         | 1.06   | ug/kg | 0.317   | 1.06 UJ,V7c |
| 75-01-4    | Vinyl chloride              | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 74-83-9    | Bromomethane                | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 75-00-3    | Chloroethane                | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 67-64-1    | Acetone                     | U         | 5.28   | ug/kg | 1.75    | 5.28 UJ,V7c |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 74-88-4    | Iodomethane                 | U         | 5.28   | ug/kg | 1.69    | 5.28        |
| 75-09-2    | Methylene chloride          | U         | 5.28   | ug/kg | 2.11    | 5.28        |
| 75-15-0    | Carbon disulfide            | U         | 5.28   | ug/kg | 1.32    | 5.28        |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 78-93-3    | 2-Butanone                  | U         | 5.28   | ug/kg | 1.58    | 5.28        |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 67-66-3    | Chloroform                  | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 74-97-5    | Bromoethanol                | U         | 1.06   | ug/kg | 0.349   | 1.06        |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 56-23-5    | Carbon tetrachloride        | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 71-43-2    | Benzene                     | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 79-01-6    | Trichloroethylene           | U         | 1.06   | ug/kg | 0.349   | 1.06        |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 75-27-4    | Bromodichloromethane        | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 74-95-3    | Dibromomethane              | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.28   | ug/kg | 1.32    | 5.28        |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 108-88-3   | Toluene                     | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 591-78-6   | 2-Hexanone                  | U         | 5.28   | ug/kg | 1.58    | 5.28 UJ,V7c |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 127-18-4   | Tetrachloroethylene         | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 124-48-1   | Dibromochloromethane        | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 108-90-7   | Chlorobenzene               | U         | 1.06   | ug/kg | 0.317   | 1.06        |

CLL  
 2/23/10

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114009

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOAS.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 5.3  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE15-10-8417  
Batch ID: 946008  
Run Date: 01/28/2010 15:06  
Prep Date: 01/28/2009 11:11  
Data File: 012810V5SV414.D

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|-------------|---------------------------------------|-----------|--------|-------|---------|-------------|
| 100-41-4    | Ethylbenzene                          | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.11   | ug/kg | 0.317   | 2.11        |
| 95-47-6     | o-Xylene                              | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 100-42-5    | Styrene                               | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 75-25-2     | Bromoform                             | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 108-86-1    | Bromobenzene                          | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 103-65-1    | n-Propylbenzene                       | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 98-82-8     | Isopropylbenzene                      | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 104-51-8    | n-Butylbenzene                        | U         | 1.06   | ug/kg | 0.317   | 1.06 UJ,V7c |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.28   | ug/kg | 1.69    | 5.28 R,V7b  |
|             | Trichlorotrifluoroethane              |           |        |       |         |             |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.06   | ug/kg | 0.317   | 1.06        |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.06   | ug/kg | 0.317   | 1.06        |

## Tentatively Identified Compound Summary

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

CLL  
2/23/10

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114010

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.1  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 9.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE15-10-8423  
 Batch ID: 946008  
 Run Date: 01/28/2010 15:32  
 Prep Date: 01/28/2009 11:12  
 Data File: 012810V55V415.D

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|------------|-----------------------------|-----------|--------|-------|---------|-------------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.10   | ug/kg | 0.375   | 1.10 UJ,V7c |
| 74-87-3    | Chloromethane               | U         | 1.10   | ug/kg | 0.331   | 1.10 UJ,V7c |
| 75-01-4    | Vinyl chloride              | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 74-83-9    | Bromomethane                | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 75-00-3    | Chloroethane                | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 67-64-1    | Acetone                     | U         | 5.52   | ug/kg | 1.83    | 5.52 UJ,V7c |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 74-88-4    | Iodomethane                 | U         | 5.52   | ug/kg | 1.77    | 5.52        |
| 75-09-2    | Methylene chloride          | U         | 5.52   | ug/kg | 2.21    | 5.52        |
| 75-15-0    | Carbon disulfide            | U         | 5.52   | ug/kg | 1.38    | 5.52        |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 78-93-3    | 2-Butanone                  | U         | 5.52   | ug/kg | 1.65    | 5.52        |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 67-66-3    | Chloroform                  | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 74-97-5    | Bromochloromethane          | U         | 1.10   | ug/kg | 0.364   | 1.10        |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 56-23-5    | Carbon tetrachloride        | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 71-43-2    | Benzene                     | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 79-01-6    | Trichloroethylene           | U         | 1.10   | ug/kg | 0.364   | 1.10        |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 75-27-4    | Bromodichloromethane        | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 74-95-3    | Dibromomethane              | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.52   | ug/kg | 1.38    | 5.52        |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 108-88-3   | Toluene                     | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 591-78-6   | 2-Hexanone                  | U         | 5.52   | ug/kg | 1.65    | 5.52 UJ,V7c |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 127-18-4   | Tetrachloroethylene         | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 124-48-1   | Dibromochloromethane        | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 108-90-7   | Chlorobenzene               | U         | 1.10   | ug/kg | 0.331   | 1.10        |

CLL  
2/23/10

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114010

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 9.4  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE15-10-8423  
Batch ID: 946008  
Run Date: 01/28/2010 15:32  
Prep Date: 01/28/2009 11:12  
Data File: 012810VS\SV415.D

| CAS No.     | Parmname  | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|-------------|---|-----------|--------|-------|---------|-------------|
| 100-41-4    | Ethylbenzene  | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 179601-23-1 | m,p-Xylenes   | U         | 2.21   | ug/kg | 0.331   | 2.21        |
| 95-47-6     | o-Xylene  | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 100-42-5    | Styrene   | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 75-25-2     | Bromoform   | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 79-34-5     | 1,1,2,2-Tetrachloroethane   | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 96-18-4     | 1,2,3-Trichloropropane  | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 108-86-1    | Bromobenzene  | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 103-65-1    | n-Propylbenzene   | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 95-49-8     | 2-Chlorotoluene   | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 98-82-8     | Isopropylbenzene  | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 108-67-8    | 1,3,5-Trimethylbenzene  | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 106-43-4    | 4-Chlorotoluene   | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 98-06-6     | tert-Butylbenzene   | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 95-63-6     | 1,2,4-Trimethylbenzene  | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 135-98-8    | sec-Butylbenzene  | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 99-87-6     | 4-Isopropyltoluene  | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 541-73-1    | 1,3-Dichlorobenzene   | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 106-46-7    | 1,4-Dichlorobenzene   | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 104-51-8    | n-Butylbenzene  | U         | 1.10   | ug/kg | 0.331   | 1.10 UJ,V7c |
| 96-12-8     | 1,2-Dibromo-3-chloropropane                                       | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane<br>Trichlorotrifluoroethane | U         | 5.52   | ug/kg | 1.77    | 5.52 R,V7b  |
| 630-20-6    | 1,1,1,2-Tetrachloroethane   | U         | 1.10   | ug/kg | 0.331   | 1.10        |
| 95-50-1     | 1,2-Dichlorobenzene   | U         | 1.10   | ug/kg | 0.331   | 1.10        |

## Tentatively Identified Compound Summary

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

CLL  
2/23/10



**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114011

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 9.6  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE15-10-8416  
Batch ID: 946008  
Run Date: 01/28/2010 15:58  
Prep Date: 01/28/2009 11:13  
Data File: 012810V5\SV416.D

| CAS No.    | Parname                     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|------------|-----------------------------|-----------|--------|-------|---------|-------------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.11   | ug/kg | 0.376   | 1.11 UJ,V7c |
| 74-87-3    | Chloromethane               | U         | 1.11   | ug/kg | 0.332   | 1.11 UJ,V7c |
| 75-01-4    | Vinyl chloride              | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 74-83-9    | Bromomethane                | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 75-00-3    | Chloroethane                | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 67-64-1    | Acetone                     | U         | 5.53   | ug/kg | 1.84    | 5.53 UJ,V7c |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 74-88-4    | Iodomethane                 | U         | 5.53   | ug/kg | 1.77    | 5.53        |
| 75-09-2    | Methylene chloride          | U         | 5.53   | ug/kg | 2.21    | 5.53        |
| 75-15-0    | Carbon disulfide            | U         | 5.53   | ug/kg | 1.38    | 5.53        |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 78-93-3    | 2-Butanone                  | U         | 5.53   | ug/kg | 1.66    | 5.53        |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 67-66-3    | Chloroform                  | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 74-97-5    | Bromochloromethane          | U         | 1.11   | ug/kg | 0.365   | 1.11        |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 56-23-5    | Carbon tetrachloride        | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 71-43-2    | Benzene                     | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 79-01-6    | Trichloroethylene           | U         | 1.11   | ug/kg | 0.365   | 1.11        |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 75-27-4    | Bromodichloromethane        | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 74-95-3    | Dibromomethane              | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.53   | ug/kg | 1.38    | 5.53        |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 108-88-3   | Toluene                     | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 591-78-6   | 2-Hexanone                  | U         | 5.53   | ug/kg | 1.66    | 5.53 UJ,V7c |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 127-18-4   | Tetrachloroethylene         | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 124-48-1   | Dibromochloromethane        | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 108-90-7   | Chlorobenzene               | U         | 1.11   | ug/kg | 0.332   | 1.11        |

CLL  
2/23/10

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114011    | Date Received: 01/20/2010 08:45  | %Moisture: 9.6       |
| Client ID: RE15-10-8416     | Client: LANL010                  | Project: LANL01004   |
| Batch ID: 946008            | Method: SW846 8260B              | SOP Ref: GL-OA-E-038 |
| Run Date: 01/28/2010 15:58  | Inst: VOA5.I                     | Dilution: 1          |
| Prep Date: 01/28/2009 11:13 | Analyst: DXK1                    | Purge Vol: 5 mL      |
| Data File: 012810V5\SV416.D | Allquot: 5 g                     | Final Volume: 5 mL   |
|                             | Column: DB-624                   |                      |

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|-------------|---------------------------------------|-----------|--------|-------|---------|-------------|
| 100-41-4    | Ethylbenzene                          | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.21   | ug/kg | 0.332   | 2.21        |
| 95-47-6     | o-Xylene                              | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 100-42-5    | Styrene                               | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 75-25-2     | Bromoform                             | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 108-86-1    | Bromobenzene                          | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 103-65-1    | n-Propylbenzene                       | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 98-82-8     | Isopropylbenzene                      | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 104-51-8    | n-Butylbenzene                        | U         | 1.11   | ug/kg | 0.332   | 1.11 UJ,V7c |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.53   | ug/kg | 1.77    | 5.53 R,V7b  |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |             |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.11   | ug/kg | 0.332   | 1.11        |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.332   | 1.11        |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

CLL  
2/23/10

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114012

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 11.3  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE15-10-8418  
 Batch ID: 946008  
 Run Date: 01/28/2010 16:23  
 Prep Date: 01/28/2009 11:14  
 Data File: 012810V5\SV417.D

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |        |
|------------|-----------------------------|-----------|--------|-------|---------|---------|--------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.13   | ug/kg | 0.383   | 1.13    | UJ,V7c |
| 74-87-3    | Chloromethane               | U         | 1.13   | ug/kg | 0.338   | 1.13    | UJ,V7c |
| 75-01-4    | Vinyl chloride              | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 74-83-9    | Bromomethane                | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 75-00-3    | Chloroethane                | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 67-64-1    | Acetone                     | U         | 5.64   | ug/kg | 1.87    | 5.64    | UJ,V7c |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 74-88-4    | Iodomethane                 | U         | 5.64   | ug/kg | 1.80    | 5.64    |        |
| 75-09-2    | Methylene chloride          | U         | 5.64   | ug/kg | 2.25    | 5.64    |        |
| 75-15-0    | Carbon disulfide            | U         | 5.64   | ug/kg | 1.41    | 5.64    |        |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 78-93-3    | 2-Butanone                  | U         | 5.64   | ug/kg | 1.69    | 5.64    |        |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 67-66-3    | Chloroform                  | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 74-97-5    | Bromochloromethane          | U         | 1.13   | ug/kg | 0.372   | 1.13    |        |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 56-23-5    | Carbon tetrachloride        | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 71-43-2    | Benzene                     | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 79-01-6    | Trichloroethylene           | U         | 1.13   | ug/kg | 0.372   | 1.13    |        |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 75-27-4    | Bromodichloromethane        | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 74-95-3    | Dibromomethane              | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.64   | ug/kg | 1.41    | 5.64    |        |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 108-88-3   | Toluene                     | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 591-78-6   | 2-Hexanone                  | U         | 5.64   | ug/kg | 1.69    | 5.64    | UJ,V7c |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 127-18-4   | Tetrachloroethylene         | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 124-48-1   | Dibromochloromethane        | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |
| 108-90-7   | Chlorobenzene               | U         | 1.13   | ug/kg | 0.338   | 1.13    |        |

CLL  
 2/23/10

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114012

Client ID: RE15-10-8418  
 Batch ID: 946008  
 Run Date: 01/28/2010 16:23  
 Prep Date: 01/28/2009 11:14  
 Data File: 012810V5\SV417.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 11.3  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|-------------|---------------------------------------|-----------|--------|-------|---------|-------------|
| 100-41-4    | Ethylbenzene                          | U         | 1.13   | ug/kg | 0.338   | 1.13        |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.25   | ug/kg | 0.338   | 2.25        |
| 95-47-6     | o-Xylene                              | U         | 1.13   | ug/kg | 0.338   | 1.13        |
| 100-42-5    | Styrene                               | U         | 1.13   | ug/kg | 0.338   | 1.13        |
| 75-25-2     | Bromoform                             | U         | 1.13   | ug/kg | 0.338   | 1.13        |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.13   | ug/kg | 0.338   | 1.13        |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.13   | ug/kg | 0.338   | 1.13        |
| 108-86-1    | Bromobenzene                          | U         | 1.13   | ug/kg | 0.338   | 1.13        |
| 103-65-1    | n-Propylbenzene                       | U         | 1.13   | ug/kg | 0.338   | 1.13        |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.13   | ug/kg | 0.338   | 1.13        |
| 98-82-8     | Isopropylbenzene                      | U         | 1.13   | ug/kg | 0.338   | 1.13        |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.13   | ug/kg | 0.338   | 1.13        |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.13   | ug/kg | 0.338   | 1.13        |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.13   | ug/kg | 0.338   | 1.13        |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.13   | ug/kg | 0.338   | 1.13        |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.13   | ug/kg | 0.338   | 1.13        |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.13   | ug/kg | 0.338   | 1.13        |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.13   | ug/kg | 0.338   | 1.13        |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.13   | ug/kg | 0.338   | 1.13        |
| 104-51-8    | n-Butylbenzene                        | U         | 1.13   | ug/kg | 0.338   | 1.13 UJ.V7c |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.13   | ug/kg | 0.338   | 1.13        |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.64   | ug/kg | 1.80    | 5.64 R.V7b  |
|             | Trichlorotrifluoroethane              |           |        |       |         |             |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.13   | ug/kg | 0.338   | 1.13        |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.13   | ug/kg | 0.338   | 1.13        |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|-------|-----------|-------|-----|------|
|         | unknown siloxane                      | 16.55 | 8.04      | ug/kg | 0   | J    |

CLL  
 2/23/10

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114013

Client ID: RE15-10-8424  
 Batch ID: 946008  
 Run Date: 01/28/2010 16:49  
 Prep Date: 01/28/2009 11:15  
 Data File: 012810V55V418.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 10  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|------------|-----------------------------|-----------|--------|-------|---------|-------------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.11   | ug/kg | 0.378   | 1.11 UJ,V7c |
| 74-87-3    | Chloromethane               | U         | 1.11   | ug/kg | 0.333   | 1.11 UJ,V7c |
| 75-01-4    | Vinyl chloride              | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 74-83-9    | Bromomethane                | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 75-00-3    | Chloroethane                | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 67-64-1    | Acetone                     | U         | 5.56   | ug/kg | 1.85    | 5.56 UJ,V7c |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 74-88-4    | Iodomethane                 | U         | 5.56   | ug/kg | 1.78    | 5.56        |
| 75-09-2    | Methylene chloride          | U         | 5.56   | ug/kg | 2.22    | 5.56        |
| 75-15-0    | Carbon disulfide            | U         | 5.56   | ug/kg | 1.39    | 5.56        |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 78-93-3    | 2-Butanone                  | U         | 5.56   | ug/kg | 1.67    | 5.56        |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 67-66-3    | Chloroform                  | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 74-97-5    | Bromochloromethane          | U         | 1.11   | ug/kg | 0.367   | 1.11        |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 56-23-5    | Carbon tetrachloride        | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 71-43-2    | Benzene                     | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 79-01-6    | Trichloroethylene           | U         | 1.11   | ug/kg | 0.367   | 1.11        |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 75-27-4    | Bromodichloromethane        | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 74-95-3    | Dibromomethane              | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.56   | ug/kg | 1.39    | 5.56        |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 108-88-3   | Toluene                     | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 591-78-6   | 2-Hexanone                  | U         | 5.56   | ug/kg | 1.67    | 5.56 UJ,V7c |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 127-18-4   | Tetrachloroethylene         | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 124-48-1   | Dibromochloromethane        | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 108-90-7   | Chlorobenzene               | U         | 1.11   | ug/kg | 0.333   | 1.11        |

CLL  
2/23/10

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114013

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Allquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 10  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE15-10-8424  
 Batch ID: 946008  
 Run Date: 01/28/2010 16:49  
 Prep Date: 01/28/2009 11:15  
 Data File: 012810V5\SV418.D

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|-------------|---------------------------------------|-----------|--------|-------|---------|-------------|
| 100-41-4    | Ethylbenzene                          | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.22   | ug/kg | 0.333   | 2.22        |
| 95-47-6     | o-Xylene                              | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 100-42-5    | Styrene                               | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 75-25-2     | Bromoforn                             | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 108-86-1    | Bromobenzene                          | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 103-65-1    | n-Propylbenzene                       | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 98-82-8     | Isopropylbenzene                      | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 104-51-8    | n-Butylbenzene                        | U         | 1.11   | ug/kg | 0.333   | 1.11 UJ,V7c |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.56   | ug/kg | 1.78    | 5.56 R,V7b  |
|             | Trichlorotrifluoroethane              |           |        |       |         |             |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.11   | ug/kg | 0.333   | 1.11        |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.333   | 1.11        |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|-------|-----------|-------|-----|------|
|         | unknown siloxane                      | 16.55 | 8.53      | ug/kg | 0   | J    |

CLL  
2/23/10

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114014

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 12.5  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE15-10-8421  
Batch ID: 946008  
Run Date: 01/28/2010 17:15  
Prep Date: 01/28/2009 11:16  
Data File: 012810V55V419.D

| CAS No.    | Param Name                  | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|------------|-----------------------------|-----------|--------|-------|---------|-------------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.14   | ug/kg | 0.388   | 1.14 UJ,V7c |
| 74-87-3    | Chloromethane               | U         | 1.14   | ug/kg | 0.343   | 1.14 UJ,V7c |
| 75-01-4    | Vinyl chloride              | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 74-83-9    | Bromomethane                | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 75-00-3    | Chloroethane                | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 67-64-1    | Acetone                     | U         | 5.71   | ug/kg | 1.90    | 5.71 UJ,V7c |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 74-88-4    | Iodomethane                 | U         | 5.71   | ug/kg | 1.83    | 5.71        |
| 75-09-2    | Methylene chloride          | U         | 5.71   | ug/kg | 2.28    | 5.71        |
| 75-15-0    | Carbon disulfide            | U         | 5.71   | ug/kg | 1.43    | 5.71        |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 78-93-3    | 2-Butanone                  | U         | 5.71   | ug/kg | 1.71    | 5.71        |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 67-66-3    | Chloroform                  | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 74-97-5    | Bromochloromethane          | U         | 1.14   | ug/kg | 0.377   | 1.14        |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 56-23-5    | Carbon tetrachloride        | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 71-43-2    | Benzene                     | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 79-01-6    | Trichloroethylene           | U         | 1.14   | ug/kg | 0.377   | 1.14        |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 75-27-4    | Bromodichloromethane        | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 74-95-3    | Dibromomethane              | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.71   | ug/kg | 1.43    | 5.71        |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 108-88-3   | Toluene                     | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 591-78-6   | 2-Hexanone                  | U         | 5.71   | ug/kg | 1.71    | 5.71 UJ,V7c |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 127-18-4   | Tetrachloroethylene         | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 124-48-1   | Dibromochloromethane        | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 108-90-7   | Chlorobenzene               | U         | 1.14   | ug/kg | 0.343   | 1.14        |

CLL  
2/23/10

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114014

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 12.5  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE15-10-8421  
 Batch ID: 946008  
 Run Date: 01/28/2010 17:15  
 Prep Date: 01/28/2009 11:16  
 Data File: 012810V5\SV419.D

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|-------------|---------------------------------------|-----------|--------|-------|---------|-------------|
| 100-41-4    | Ethylbenzene                          | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.28   | ug/kg | 0.343   | 2.28        |
| 95-47-6     | o-Xylene                              | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 100-42-5    | Styrene                               | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 75-25-2     | Bromoform                             | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 108-86-1    | Bromobenzene                          | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 103-65-1    | n-Propylbenzene                       | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 98-82-8     | Isopropylbenzene                      | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 104-51-8    | n-Butylbenzene                        | U         | 1.14   | ug/kg | 0.343   | 1.14 UJ,V7c |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.71   | ug/kg | 1.83    | 5.71 R,V7b  |
|             | Trichlorotrifluoroethane              |           |        |       |         |             |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.14   | ug/kg | 0.343   | 1.14        |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.14   | ug/kg | 0.343   | 1.14        |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Flt | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

CLL  
 2/23/10



**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114015

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Allquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 30.1  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE15-10-8420  
 Batch ID: 946008  
 Run Date: 01/28/2010 17:41  
 Prep Date: 01/28/2009 11:17  
 Data File: 012810V5\5V420.D

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|------------|-----------------------------|-----------|--------|-------|---------|-------------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.43   | ug/kg | 0.487   | 1.43 UJ,V7c |
| 74-87-3    | Chloromethane               | U         | 1.43   | ug/kg | 0.429   | 1.43 UJ,V7c |
| 75-01-4    | Vinyl chloride              | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 74-83-9    | Bromomethane                | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 75-00-3    | Chloroethane                | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 67-64-1    | Acetone                     | U         | 7.16   | ug/kg | 2.38    | 7.16 UJ,V7c |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 74-88-4    | Iodomethane                 | U         | 7.16   | ug/kg | 2.29    | 7.16        |
| 75-09-2    | Methylene chloride          | U         | 7.16   | ug/kg | 2.86    | 7.16        |
| 75-15-0    | Carbon disulfide            | U         | 7.16   | ug/kg | 1.79    | 7.16        |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 78-93-3    | 2-Butanone                  | U         | 7.16   | ug/kg | 2.15    | 7.16        |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 67-66-3    | Chloroform                  | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 74-97-5    | Bromoethanol                | U         | 1.43   | ug/kg | 0.472   | 1.43        |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 56-23-5    | Carbon tetrachloride        | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 71-43-2    | Benzene                     | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 79-01-6    | Trichloroethylene           | U         | 1.43   | ug/kg | 0.472   | 1.43        |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 75-27-4    | Bromodichloromethane        | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 74-95-3    | Dibromomethane              | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 7.16   | ug/kg | 1.79    | 7.16        |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 108-88-3   | Toluene                     | J         | 0.501  | ug/kg | 0.429   | 1.43        |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 591-78-6   | 2-Hexanone                  | U         | 7.16   | ug/kg | 2.15    | 7.16 UJ,V7c |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 127-18-4   | Tetrachloroethylene         | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 124-48-1   | Dibromochloromethane        | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.43   | ug/kg | 0.429   | 1.43        |
| 108-90-7   | Chlorobenzene               | U         | 1.43   | ug/kg | 0.429   | 1.43        |

CLL  
 2/23/10

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114015

Client ID: RE15-10-8420  
Batch ID: 946008  
Run Date: 01/28/2010 17:41  
Prep Date: 01/28/2009 11:17  
Data File: 012810V5\SV420.D


Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 30.1  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmaame   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |        |
|-------------|--|-----------|--------|-------|---------|---------|--------|
| 100-41-4    | Ethylbenzene   | U         | 1.43   | ug/kg | 0.429   | 1.43    |        |
| 179601-23-1 | m,p-Xylenes  | U         | 2.86   | ug/kg | 0.429   | 2.86    |        |
| 95-47-6     | o-Xylene   | U         | 1.43   | ug/kg | 0.429   | 1.43    |        |
| 100-42-5    | Styrene  | U         | 1.43   | ug/kg | 0.429   | 1.43    |        |
| 75-25-2     | Bromoform  | U         | 1.43   | ug/kg | 0.429   | 1.43    |        |
| 79-34-5     | 1,1,2,2-Tetrachloroethane  | U         | 1.43   | ug/kg | 0.429   | 1.43    |        |
| 96-18-4     | 1,2,3-Trichloropropane   | U         | 1.43   | ug/kg | 0.429   | 1.43    |        |
| 108-86-1    | Bromobenzene   | U         | 1.43   | ug/kg | 0.429   | 1.43    |        |
| 103-65-1    | n-Propylbenzene  | U         | 1.43   | ug/kg | 0.429   | 1.43    |        |
| 95-49-8     | 2-Chlorotoluene  | U         | 1.43   | ug/kg | 0.429   | 1.43    |        |
| 98-82-8     | Isopropylbenzene   | U         | 1.43   | ug/kg | 0.429   | 1.43    |        |
| 108-67-8    | 1,3,5-Trimethylbenzene   | U         | 1.43   | ug/kg | 0.429   | 1.43    |        |
| 106-43-4    | 4-Chlorotoluene  | U         | 1.43   | ug/kg | 0.429   | 1.43    |        |
| 98-06-6     | tert-Butylbenzene  | U         | 1.43   | ug/kg | 0.429   | 1.43    |        |
| 95-63-6     | 1,2,4-Trimethylbenzene   | U         | 1.43   | ug/kg | 0.429   | 1.43    |        |
| 135-98-8    | sec-Butylbenzene   | U         | 1.43   | ug/kg | 0.429   | 1.43    |        |
| 99-87-6     | 4-Isopropyltoluene   | U         | 1.43   | ug/kg | 0.429   | 1.43    |        |
| 541-73-1    | 1,3-Dichlorobenzene  | U         | 1.43   | ug/kg | 0.429   | 1.43    |        |
| 106-46-7    | 1,4-Dichlorobenzene  | U         | 1.43   | ug/kg | 0.429   | 1.43    |        |
| 104-51-8    | n-Butylbenzene   | U         | 1.43   | ug/kg | 0.429   | 1.43    | UJ,V7c |
| 96-12-8     | 1,2-Dibromo-3-chloropropane  | U         | 1.43   | ug/kg | 0.429   | 1.43    |        |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane<br><i>Trichlorotrifluoroethane</i> | U         | 7.16   | ug/kg | 2.29    | 7.16    | R,V7b  |
| 630-20-6    | 1,1,1,2-Tetrachloroethane  | U         | 1.43   | ug/kg | 0.429   | 1.43    |        |
| 95-50-1     | 1,2-Dichlorobenzene  | U         | 1.43   | ug/kg | 0.429   | 1.43    |        |

## Tentatively Identified Compound Summary

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

| DATA VALIDATION COVER SHEET  |   |
|--|---|
| <b>5115-1</b><br><br><p style="text-align: center;"><b>Data Validation Cover Sheet</b></p> | Records Use only<br><br> <p style="text-align: center;"><b>Los Alamos</b><br/>NATIONAL LABORATORY<br/><small>EST. 1945</small></p> |

**Section I.**

REQUEST NUMBER: 10-1324      VALIDATION DATE: 2/23/10      LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Charissa Lewis      ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

☒ OTHER (DESCRIBE): SVOCs

**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 checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 9. TICS FORMS            |
| <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. STANDARD CHROMATOGRAMS   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input 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):

- The ICV %Ds were >20% for 2-methyl-4,6-dinitrophenol; indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene. For the CCV associated with samples RE15-10-8410, -8411, -8412, -8441, -8425 and -8423, the %Ds were >20% for N-methyl-N-nitrosomethylamine; pyridine; bis(2-chloroethyl)ether; bis(2-chloroisopropyl)ether and 2-methyl-4,6-dinitrophenol. For the CCV associated with samples -8413, -8422, -8417, -8418, -8424, -8421, -8420, the %Ds were >20% for bis(2-chloroethyl)ether; bis(2-chloroisopropyl)ether; benzoic acid and 2-methyl-4,6-dinitrophenol. For the CCV associated with sample -8416, the CCV %Ds were >20% for benzoic acid and 2-methyl-4,6-dinitrophenol. The associated sample results were NDs and, thus, were qualified UJ,SV7c.
- The MS and/or MSD %Rs did not meet laboratory acceptance criteria for aniline; 4-chloroaniline; 3,3'-dichlorobenzidine and 3-nitroaniline. The MS/MSD RPD did not meet laboratory acceptance criteria for aniline. Since MS/MSD analyses were not a client requirement, no sample data were qualified.


**Reviewed by:** Monica Dymerski      **Level I**      **Date:** 02/25/10

|  |   |
|--|---|
| VALIDATOR'S SIGNATURE: <u>Charissa Lewis</u> | DATE: <u>2/23/10</u>                            |
| Form 5115-1, Revision 0.0                    | LOS ALAMOS<br>Environmental Restoration Project |




| SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST                             |   |
|---|---|
| <b>5115-2</b><br><br><b>Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist</b> | Records Use only<br><br> |


| Yes No N/A                          |                                     |                                     |  | Assign Qualifier Listed Below If Criterion = Yes |                  |
|-------------------------------------|-------------------------------------|-------------------------------------|--|--|------------------|
| (Check One)                         |                                     |                                     |  | Non-detected Analyte                             | Detected Analyte |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1. The holding time was >1 and ≤2 times the applicable holding time requirement.   | UJ, SV9  | J-, SV9          |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 2. The holding time was >2 times the applicable holding time requirement.  | R, SV9a  | J-, SV9a         |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.  | R, SV9b  | R, SV9b          |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 4. The instrument performance sample did not pass method acceptance criteria.  | R, SV16  | R, SV16          |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 5. Samples were analyzed outside specific method tune time criteria.   | N/A  | J, SV16b         |
| <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, SV16c   | R, SV16c         |
| <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, SV7                                       | J, SV7           |
| <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, SV7a   | J, SV7a          |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 9. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or Continuing Calibration Verification (CCV).   | R, SV7b  | J, SV7b          |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | 10. The Initial Calibration Verification (ICV) and/or CCV were recovered outside the method-specific limits.   | UJ, SV7c   | J, SV7c          |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 11. The ICV and/or CCV were not analyzed at the appropriate method frequency.  | UJ, SV7d   | J, SV7d          |

| SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST                             |   |
|---|---|
| <b>5115-2</b><br><br><b>Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist</b> | Records Use only<br><br> |

| Yes No N/A               |                                     |                                     |   | Assign Qualifier Listed Below If Criterion = Yes |                  |
|--------------------------|-------------------------------------|-------------------------------------|---|--|------------------|
| (Check One)              |                                     |                                     |   | Non-detected Analyte                             | Detected Analyte |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 12. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.   | R, SV7f  | R, SV7f          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 13. The sample result is $\leq 5X$ (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.   | U, SV4   | J, V4a           |
| <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 greater than 5X (10X for common laboratory contaminants).                              | N/A  | J, SV4a          |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 15. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.   | UJ, SV4d   | N/A              |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 16. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.   | R, SV4e  | R, SV4e          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 17. The IS retention time has shifted by more than 30 seconds.  | UJ, SV0  | J, SV0           |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 18. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.   | N/A  | J, SV0a          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 19. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.  | R, SV0b  | R, SV0b          |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 20. The quantitating IS area count is $<10\%$ of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows. | R, SV1a  | J, SV1a          |

| SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST                             |   |
|---|---|
| <b>5115-2</b><br><br><b>Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist</b> | Records Use only<br><br> |

| Yes No N/A               |                                     |                                     |  | Assign Qualifier Listed Below If Criterion = Yes |                  |
|--------------------------|-------------------------------------|-------------------------------------|--|--|------------------|
| (Check One)              |                                     |                                     |  | Non-detected Analyte                             | Detected Analyte |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 21. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow method-specific windows.                | UJ, SV1b   | J, SV1b          |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 22. The IS area count for the quantitating IS is >200% of the area count for the previous continuing calibration. Follow method-specific windows.                                  | UJ, SV1c   | J, SV1c          |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 23. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.  | R, SV1d  | R, SV1d          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 24. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.  | R, SV3   | J-, SV3          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 25. The surrogate is < the Lower Acceptance Level (LAL) but $\geq 10\%R$ . Follow the external laboratory limits located within the associated data package.                       | UJ, SV3a   | J-, SV3a         |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 26. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.   | N/A  | J+, SV3b         |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 27. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package. | UJ, SV3c   | J, SV3c          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 28. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.   | R, SV3d  | R, SV3d          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 29. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.   | R, SV12  | J-, SV12         |

| SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST                             |   |
|---|---|
| <b>5115-2</b><br><br><b>Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist</b> | Records Use only<br><br> |

| Yes No N/A                          |                                     |                                     |   | Assign Qualifier Listed Below If Criterion = Yes |                  |
|-------------------------------------|-------------------------------------|-------------------------------------|---|--|------------------|
| (Check One)                         |                                     |                                     |   | Non-detected Analyte                             | Detected Analyte |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 30. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.  | UJ, SV12a  | J-, SV12a        |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 31. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.   | N/A  | J+, SV12b        |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 32. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.   | R, SV12c   | R, SV12c         |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 33. The affected analyte is considered not detected because mass spectrum did not meet specifications.  | N/A  | U, SV8           |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 34. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.  | R, SV8a  | R, SV8a          |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 35. Duplicate, dilution, or reanalysis.   | UJ, SV88   | J, SV88          |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 36. The affected analytes have elevated detection limits and may not meet project DQOs 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, SV15                                      | R, SV15          |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | 37. 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"/>            | 38. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.  | UJ, R, SV19                                      | J, R, SV19       |





**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114002

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 24.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|------------|-------------------------------|-----------|--------|-------|---------|-------------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 443    | ug/kg | 88.5    | 443 UJ,SV7c |
| 108-95-2   | Phenol                        | U         | 443    | ug/kg | 88.5    | 443         |
| 95-57-8    | 2-Chlorophenol                | U         | 443    | ug/kg | 88.5    | 443         |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 443    | ug/kg | 88.5    | 443         |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 443    | ug/kg | 88.5    | 443         |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 443    | ug/kg | 88.5    | 443         |
| 83-32-9    | Acenaphthene                  | U         | 44.3   | ug/kg | 14.6    | 44.3        |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 443    | ug/kg | 44.3    | 443         |
| 100-02-7   | 4-Nitrophenol                 | U         | 443    | ug/kg | 146     | 443         |
| 87-86-5    | Pentachlorophenol             | U         | 443    | ug/kg | 111     | 443         |
| 129-00-0   | Pyrene                        | U         | 44.3   | ug/kg | 13.3    | 44.3        |
| 110-86-1   | Pyridine                      | U         | 443    | ug/kg | 88.5    | 443 UJ,SV7c |
| 62-53-3    | Aniline                       | U         | 443    | ug/kg | 133     | 443         |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 443    | ug/kg | 88.5    | 443 UJ,SV7c |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 443    | ug/kg | 88.5    | 443         |
| 100-51-6   | Benzyl alcohol                | U         | 443    | ug/kg | 133     | 443         |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 443    | ug/kg | 88.5    | 443         |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 443    | ug/kg | 88.5    | 443 UJ,SV7c |
| 95-48-7    | o-Cresol                      | U         | 443    | ug/kg | 88.5    | 443         |
| 65794-96-9 | m,p-Cresols                   | U         | 443    | ug/kg | 133     | 443         |
| 67-72-1    | Hexachloroethane              | U         | 443    | ug/kg | 88.5    | 443         |
| 98-95-3    | Nitrobenzene                  | U         | 443    | ug/kg | 88.5    | 443         |
| 78-59-1    | Isophorone                    | U         | 443    | ug/kg | 88.5    | 443         |
| 88-75-5    | 2-Nitrophenol                 | U         | 443    | ug/kg | 88.5    | 443         |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 443    | ug/kg | 155     | 443         |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 443    | ug/kg | 88.5    | 443         |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 443    | ug/kg | 88.5    | 443         |
| 65-85-0    | Benzoic acid                  | U         | 885    | ug/kg | 221     | 885         |
| 91-20-3    | Naphthalene                   | U         | 44.3   | ug/kg | 13.3    | 44.3        |
| 106-47-8   | 4-Chloroaniline               | U         | 443    | ug/kg | 88.5    | 443         |
| 87-68-3    | Hexachlorobutadiene           | U         | 443    | ug/kg | 88.5    | 443         |
| 91-57-6    | 2-Methylnaphthalene           | U         | 44.3   | ug/kg | 8.85    | 44.3        |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 443    | ug/kg | 88.5    | 443         |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 443    | ug/kg | 88.5    | 443         |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 443    | ug/kg | 88.5    | 443         |
| 91-58-7    | 2-Chloronaphthalene           | U         | 44.3   | ug/kg | 14.6    | 44.3        |
| 88-74-4    | 2-Nitroaniline                | U         | 443    | ug/kg | 88.5    | 443         |
| 99-09-2    | o-Nitroaniline                |           |        |       |         |             |
|            | 3-Nitroaniline                | U         | 443    | ug/kg | 88.5    | 443         |

CLL  
2/23/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114002    | Date Received: 01/20/2010 08:45  | %Moisture: 24.9      |
| Client ID: RE15-10-8410     | Client: LANL010                  | Project: LANL01004   |
| Batch ID: 944874            | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Run Date: 01/27/2010 14:35  | Inst: MSD3.I                     | Dilution: 1          |
| Prep Date: 01/25/2010 21:06 | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Data File: s3a2714.d        | Allquot: 30.09 g                 | Final Volume: 1 mL   |
|                             | Column: J&W DB-5MS               | Level: LOW           |

| CAS No.   | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ      |
|-----------|----------------------------|-----------|--------|-------|---------|--------------|
| 131-11-3  | <i>m</i> -Nitroaniline     |           |        |       |         |              |
|           | Dimethylphthalate          | U         | 443    | ug/kg | 88.5    | 443          |
| 606-20-2  | 2,6-Dinitrotoluene         | U         | 443    | ug/kg | 44.3    | 443          |
| 208-96-8  | Acenaphthylene             | U         | 44.3   | ug/kg | 13.3    | 44.3         |
| 51-28-5   | 2,4-Dinitrophenol          | U         | 885    | ug/kg | 168     | 885          |
| 132-64-9  | Dibenzofuran               | U         | 443    | ug/kg | 88.5    | 443          |
| 84-66-2   | Diethylphthalate           | U         | 443    | ug/kg | 88.5    | 443          |
| 86-73-7   | Fluorene                   | U         | 44.3   | ug/kg | 13.3    | 44.3         |
| 7005-72-3 | 4-Chlorophenylphenylether  | U         | 443    | ug/kg | 88.5    | 443          |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol | U         | 443    | ug/kg | 88.5    | 443 UJ,SV7c  |
| 100-01-6  | 4-Nitroaniline             | U         | 443    | ug/kg | 133     | 443          |
|           | <i>p</i> -Nitroaniline     |           |        |       |         |              |
| 122-39-4  | Diphenylamine              | U         | 443    | ug/kg | 88.5    | 443          |
| 122-66-7  | Azobenzene                 | U         | 443    | ug/kg | 88.5    | 443          |
|           | 1,2-Diphenylhydrazine      |           |        |       |         |              |
| 101-55-3  | 4-Bromophenylphenylether   | U         | 443    | ug/kg | 88.5    | 443          |
| 118-74-1  | Hexachlorobenzene          | U         | 443    | ug/kg | 88.5    | 443          |
| 85-01-8   | Phenanthrene               | U         | 44.3   | ug/kg | 13.3    | 44.3         |
| 120-12-7  | Anthracene                 | U         | 44.3   | ug/kg | 8.85    | 44.3         |
| 84-74-2   | Di-n-butylphthalate        | U         | 443    | ug/kg | 88.5    | 443          |
| 206-44-0  | Fluoranthene               | U         | 44.3   | ug/kg | 13.3    | 44.3         |
| 85-68-7   | Butylbenzylphthalate       | U         | 443    | ug/kg | 88.5    | 443          |
| 56-55-3   | Benzo(a)anthracene         | U         | 44.3   | ug/kg | 13.3    | 44.3         |
| 91-94-1   | 3,3'-Dichlorobenzidine     | U         | 443    | ug/kg | 133     | 443          |
| 218-01-9  | Chrysene                   | U         | 44.3   | ug/kg | 13.3    | 44.3         |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | U         | 443    | ug/kg | 88.5    | 443          |
| 117-84-0  | Di-n-octylphthalate        | U         | 443    | ug/kg | 88.5    | 443          |
| 205-99-2  | Benzo(b)fluoranthene       | U         | 44.3   | ug/kg | 13.3    | 44.3         |
| 207-08-9  | Benzo(k)fluoranthene       | U         | 44.3   | ug/kg | 13.3    | 44.3         |
| 50-32-8   | Benzo(a)pyrene             | U         | 44.3   | ug/kg | 13.3    | 44.3         |
| 193-39-5  | Indeno(1,2,3-cd)pyrene     | U         | 44.3   | ug/kg | 13.3    | 44.3 UJ,SV7c |
| 53-70-3   | Dibenzo(a,h)anthracene     | U         | 44.3   | ug/kg | 13.3    | 44.3 UJ,SV7c |
| 191-24-2  | Benzo(ghi)perylene         | U         | 44.3   | ug/kg | 13.3    | 44.3         |
| 120-82-1  | 1,2,4-Trichlorobenzene     | U         | 443    | ug/kg | 88.5    | 443          |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.12 | 370       | ug/kg |     | J    |
|         | Unknown                               | 2.3  | 314       | ug/kg |     | J    |

CLL  
2/23/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114002    | Date Received: 01/20/2010 08:45  | %Moisture: 24.9      |
|                             | Client: LANL010                  | Project: LANL01004   |
| Client ID: RE15-10-8410     | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Batch ID: 944874            | Inst: MSD3.I                     | Dilution: 1          |
| Run Date: 01/27/2010 14:35  | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Prep Date: 01/25/2010 21:06 | Aliquot: 30.09 g                 | Final Volume: 1 mL   |
| Data File: s3a2714.d        | Column: J&W DB-5MS               | Level: LOW           |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |  |       | Estimated |       |     |      |
|---|--|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC)    | RT    |           | Units | Fit | Qual |
|   | Unknown Aldol Condensate                 | 3.4   | 248       | ug/kg |     | JA   |
| 7785-70-8                               | 1R- $\alpha$ -Pinene                     | 4.18  | 517       | ug/kg | 98  | NJ   |
|   | Unknown                                  | 4.35  | 302       | ug/kg |     | J    |
|   | Unknown                                  | 4.48  | 382       | ug/kg |     | J    |
|   | Unknown                                  | 5.77  | 329       | ug/kg |     | J    |
| 103-82-2                                | Benzenecetic acid                        | 6.33  | 262       | ug/kg | 91  | NJ   |
| 544-63-8                                | Tetradecanoic acid                       | 9.19  | 286       | ug/kg | 99  | NJ   |
| 57-10-3                                 | n-Hexadecanoic acid                      | 10.13 | 215       | ug/kg | 98  | NJ   |
| 1000197-14-1                            | 4b,8-Dimethyl-2-isopropylphenanthrene, 4 | 10.6  | 181       | ug/kg | 98  | NJ   |
|   | Unknown                                  | 11.51 | 307       | ug/kg |     | J    |
|   | Unknown                                  | 11.76 | 467       | ug/kg |     | J    |
|   | Unknown                                  | 11.8  | 562       | ug/kg |     | J    |
| 1235-74-1                               | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.86 | 307       | ug/kg | 99  | NJ   |
|   | Unknown                                  | 11.89 | 229       | ug/kg |     | J    |
|   | Unknown                                  | 12.22 | 387       | ug/kg |     | J    |
|   | Unknown                                  | 12.35 | 670       | ug/kg |     | J    |
|   | Unknown                                  | 13.25 | 289       | ug/kg |     | J    |
| 309735-29-3                             | 1,2-Benzisothiazole, 3-(hexahydro-1H-aze | 13.33 | 255       | ug/kg | 91  | NJ   |
|   | Unknown                                  | 15.08 | 776       | ug/kg |     | J    |
| 2883-08-1                               | Cyclohexane, 1,1'-(2-methyl-1,3-propaned | 15.8  | 890       | ug/kg | 89  | NJ   |
|   | Unknown                                  | 15.89 | 514       | ug/kg |     | J    |
|   | Unknown                                  | 15.94 | 656       | ug/kg |     | J    |
|   | Unknown                                  | 16.82 | 645       | ug/kg |     | J    |
| 1000214-20-7                            | Stigmasterol, 22,23-dihydro-             | 17.65 | 1970      | ug/kg | 95  | NJ   |
| 1058-61-3                               | Stigmast-4-en-3-one                      | 18.79 | 1440      | ug/kg | 93  | NJ   |

CLL  
2/23/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114003

Client ID: RE15-10-8411  
Batch ID: 944874  
Run Date: 01/27/2010 15:52  
Prep Date: 01/25/2010 21:06  
Data File: s3a2717.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-SMS

Matrix: R  
%Moisture: 15.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                         | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|------------|----------------------------------|-----------|--------|-------|---------|-------------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine    | U         | 392    | ug/kg | 78.4    | 392 UJ,SV7c |
| 108-95-2   | Phenol                           | U         | 392    | ug/kg | 78.4    | 392         |
| 95-57-8    | 2-Chlorophenol                   | U         | 392    | ug/kg | 78.4    | 392         |
| 106-46-7   | 1,4-Dichlorobenzene              | U         | 392    | ug/kg | 78.4    | 392         |
| 621-64-7   | N-Nitrosodipropylamine           | U         | 392    | ug/kg | 78.4    | 392         |
| 59-50-7    | 4-Chloro-3-methylphenol          | U         | 392    | ug/kg | 78.4    | 392         |
| 83-32-9    | Acenaphthene                     | U         | 39.2   | ug/kg | 12.9    | 39.2        |
| 121-14-2   | 2,4-Dinitrotoluene               | U         | 392    | ug/kg | 39.2    | 392         |
| 100-02-7   | 4-Nitrophenol                    | U         | 392    | ug/kg | 129     | 392         |
| 87-86-5    | Pentachlorophenol                | U         | 392    | ug/kg | 98.0    | 392         |
| 129-00-0   | Pyrene                           | U         | 39.2   | ug/kg | 11.8    | 39.2        |
| 110-86-1   | Pyridine                         | U         | 392    | ug/kg | 78.4    | 392 UJ,SV7c |
| 62-53-3    | Aniline                          | U         | 392    | ug/kg | 118     | 392         |
| 111-44-4   | bis(2-Chloroethyl) ether         | U         | 392    | ug/kg | 78.4    | 392 UJ,SV7c |
| 541-73-1   | 1,3-Dichlorobenzene              | U         | 392    | ug/kg | 78.4    | 392         |
| 100-51-6   | Benzyl alcohol                   | U         | 392    | ug/kg | 118     | 392         |
| 95-50-1    | 1,2-Dichlorobenzene              | U         | 392    | ug/kg | 78.4    | 392         |
| 108-60-1   | bis(2-Chloroisopropyl)ether      | U         | 392    | ug/kg | 78.4    | 392 UJ,SV7c |
| 95-48-7    | o-Cresol                         | U         | 392    | ug/kg | 78.4    | 392         |
| 65794-96-9 | m,p-Cresols                      | U         | 392    | ug/kg | 118     | 392         |
| 67-72-1    | Hexachloroethane                 | U         | 392    | ug/kg | 78.4    | 392         |
| 98-95-3    | Nitrobenzene                     | U         | 392    | ug/kg | 78.4    | 392         |
| 78-59-1    | Isophorone                       | U         | 392    | ug/kg | 78.4    | 392         |
| 88-75-5    | 2-Nitrophenol                    | U         | 392    | ug/kg | 78.4    | 392         |
| 105-67-9   | 2,4-Dimethylphenol               | U         | 392    | ug/kg | 137     | 392         |
| 111-91-1   | bis(2-Chloroethoxy)methane       | U         | 392    | ug/kg | 78.4    | 392         |
| 120-83-2   | 2,4-Dichlorophenol               | U         | 392    | ug/kg | 78.4    | 392         |
| 65-85-0    | Benzoic acid                     | U         | 784    | ug/kg | 196     | 784         |
| 91-20-3    | Naphthalene                      | U         | 39.2   | ug/kg | 11.8    | 39.2        |
| 106-47-8   | 4-Chloroaniline                  | U         | 392    | ug/kg | 78.4    | 392         |
| 87-68-3    | Hexachlorobutadiene              | U         | 392    | ug/kg | 78.4    | 392         |
| 91-57-6    | 2-Methylnaphthalene              | U         | 39.2   | ug/kg | 7.84    | 39.2        |
| 77-47-4    | Hexachlorocyclopentadiene        | U         | 392    | ug/kg | 78.4    | 392         |
| 88-06-2    | 2,4,6-Trichlorophenol            | U         | 392    | ug/kg | 78.4    | 392         |
| 95-95-4    | 2,4,5-Trichlorophenol            | U         | 392    | ug/kg | 78.4    | 392         |
| 91-58-7    | 2-Chloronaphthalene              | U         | 39.2   | ug/kg | 12.9    | 39.2        |
| 88-74-4    | 2-Nitroaniline                   | U         | 392    | ug/kg | 78.4    | 392         |
| 99-09-2    | o-Nitroaniline<br>3-Nitroaniline | U         | 392    | ug/kg | 78.4    | 392         |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114003    | Date Received: 01/20/2010 08:45  | %Moisture: 15.4      |
| Client ID: RE15-10-8411     | Client: LANL010                  | Project: LANL01004   |
| Batch ID: 944874            | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Run Date: 01/27/2010 15:52  | Inst: MSD3.I                     | Dilution: 1          |
| Prep Date: 01/25/2010 21:06 | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Data File: s3a2717.d        | Aliquot: 30.14 g                 | Final Volume: 1 mL   |
|                             | Column: J&W DB-5MS               | Level: LOW           |

| CAS No.   | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ      |
|-----------|----------------------------|-----------|--------|-------|---------|--------------|
| 131-11-3  | <i>m</i> -Nitroaniline     |           |        |       |         |              |
|           | Dimethylphthalate          | U         | 392    | ug/kg | 78.4    | 392          |
| 606-20-2  | 2,6-Dinitrotoluene         | U         | 392    | ug/kg | 39.2    | 392          |
| 208-96-8  | Acenaphthylene             | U         | 39.2   | ug/kg | 11.8    | 39.2         |
| 51-28-5   | 2,4-Dinitrophenol          | U         | 784    | ug/kg | 149     | 784          |
| 132-64-9  | Dibenzofuran               | U         | 392    | ug/kg | 78.4    | 392          |
| 84-66-2   | Diethylphthalate           | U         | 392    | ug/kg | 78.4    | 392          |
| 86-73-7   | Fluorene                   | U         | 39.2   | ug/kg | 11.8    | 39.2         |
| 7005-72-3 | 4-Chlorophenylphenylether  | U         | 392    | ug/kg | 78.4    | 392          |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol | U         | 392    | ug/kg | 78.4    | 392 UJ,SV7c  |
| 100-01-6  | 4-Nitroaniline             | U         | 392    | ug/kg | 118     | 392          |
|           | <i>p</i> -Nitroaniline     |           |        |       |         |              |
| 122-39-4  | Diphenylamine              | U         | 392    | ug/kg | 78.4    | 392          |
| 122-66-7  | Azobenzene                 | U         | 392    | ug/kg | 78.4    | 392          |
|           | 1,2-Diphenylhydrazine      |           |        |       |         |              |
| 101-55-3  | 4-Bromophenylphenylether   | U         | 392    | ug/kg | 78.4    | 392          |
| 118-74-1  | Hexachlorobenzene          | U         | 392    | ug/kg | 78.4    | 392          |
| 85-01-8   | Phenanthrene               | U         | 39.2   | ug/kg | 11.8    | 39.2         |
| 120-12-7  | Anthracene                 | U         | 39.2   | ug/kg | 7.84    | 39.2         |
| 84-74-2   | Di-n-butylphthalate        | U         | 392    | ug/kg | 78.4    | 392          |
| 206-44-0  | Fluoranthene               | U         | 39.2   | ug/kg | 11.8    | 39.2         |
| 85-68-7   | Butylbenzylphthalate       | U         | 392    | ug/kg | 78.4    | 392          |
| 56-55-3   | Benzo(a)anthracene         | U         | 39.2   | ug/kg | 11.8    | 39.2         |
| 91-94-1   | 3,3'-Dichlorobenzidine     | U         | 392    | ug/kg | 118     | 392          |
| 218-01-9  | Chrysene                   | U         | 39.2   | ug/kg | 11.8    | 39.2         |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | U         | 392    | ug/kg | 78.4    | 392          |
| 117-84-0  | Di-n-octylphthalate        | U         | 392    | ug/kg | 78.4    | 392          |
| 205-99-2  | Benzo(b)fluoranthene       | U         | 39.2   | ug/kg | 11.8    | 39.2         |
| 207-08-9  | Benzo(k)fluoranthene       | U         | 39.2   | ug/kg | 11.8    | 39.2         |
| 50-32-8   | Benzo(a)pyrene             | U         | 39.2   | ug/kg | 11.8    | 39.2         |
| 193-39-5  | Indeno(1,2,3-cd)pyrene     | U         | 39.2   | ug/kg | 11.8    | 39.2 UJ,SV7c |
| 53-70-3   | Dibenzo(a,h)anthracene     | U         | 39.2   | ug/kg | 11.8    | 39.2 UJ,SV7c |
| 191-24-2  | Benzo(ghi)perylene         | U         | 39.2   | ug/kg | 11.8    | 39.2         |
| 120-82-1  | 1,2,4-Trichlorobenzene     | U         | 392    | ug/kg | 78.4    | 392          |

## Tentatively Identified Compound Summary

| CAS No.   | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|-----------|---------------------------------------|------|-----------|-------|-----|------|
| 7785-70-8 | 1R- $\alpha$ -Pinene                  | 4.2  | 15600     | ug/kg | 96  | NJ   |
|           | Unknown                               | 6.06 | 1160      | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114003    | Date Received: 01/20/2010 08:45  | %Moisture: 15.4      |
|                             | Client: LANL010                  | Project: LANL01004   |
| Client ID: RE15-10-8411     | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Batch ID: 944874            | Inst: MSD3.1                     | Dilution: 1          |
| Run Date: 01/27/2010 15:52  | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Prep Date: 01/25/2010 21:06 | Aliquot: 30.14 g                 | Final Volume: 1 mL   |
| Data File: s3a2717.d        | Column: J&W DB-5MS               | Level: LOW           |

| CAS No. | Parname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|---------|-----------|--------|-------|---------|---------|
|---------|---------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |  |       |           |       |     |      |
|---|--|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC)    | RT    | Estimated | Units | Fit | Qual |
| 629-74-3                                | 1-Hexadecyne                             | 10.93 | 2990      | ug/kg | 94  | NJ   |
| 112-80-1                                | Oleic Acid                               | 10.95 | 2560      | ug/kg | 98  | NJ   |
|   | Unknown                                  | 11.65 | 245       | ug/kg |     | J    |
|   | Unknown                                  | 11.76 | 1140      | ug/kg |     | J    |
|   | Unknown                                  | 11.79 | 253       | ug/kg |     | J    |
|   | Unknown                                  | 11.88 | 238       | ug/kg |     | J    |
|   | Unknown                                  | 11.91 | 325       | ug/kg |     | J    |
|   | Unknown                                  | 12.07 | 445       | ug/kg |     | J    |
|   | Unknown                                  | 12.11 | 446       | ug/kg |     | J    |
|   | Unknown                                  | 12.33 | 3690      | ug/kg |     | J    |
| 1740-19-8                               | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 12.49 | 2190      | ug/kg | 99  | NJ   |
| 514-10-3                                | Abietic acid                             | 12.76 | 1640      | ug/kg | 91  | NJ   |
|   | Unknown                                  | 12.79 | 292       | ug/kg |     | J    |
| 848-62-4                                | Pregnan-20-one, (5.alpha.)-              | 12.83 | 449       | ug/kg | 80  | NJ   |
| 1000268-22-7                            | Benzaldehyde, 4-methoxy-, (4-bicyclo[2.2 | 12.87 | 860       | ug/kg | 91  | NJ   |
|   | Unknown                                  | 13.01 | 691       | ug/kg |     | J    |
|   | Unknown                                  | 13.14 | 251       | ug/kg |     | J    |
|   | Unknown                                  | 13.31 | 224       | ug/kg |     | J    |
| 34444-37-6                              | (-)-Nortrachelogenin                     | 16.51 | 3800      | ug/kg | 90  | NJ   |
| 83-46-5                                 | .beta.-Sitosterol                        | 17.68 | 3150      | ug/kg | 98  | NJ   |

CLL  
2/23/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114004

Client ID: RE15-10-8412  
Batch ID: 944874  
Run Date: 01/27/2010 16:18  
Prep Date: 01/25/2010 21:06  
Data File: s3a2718.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 7.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|------------|-------------------------------|-----------|--------|-------|---------|-------------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 360    | ug/kg | 72.1    | 360 UJ,SV7c |
| 108-95-2   | Phenol                        | U         | 360    | ug/kg | 72.1    | 360         |
| 95-57-8    | 2-Chlorophenol                | U         | 360    | ug/kg | 72.1    | 360         |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 360    | ug/kg | 72.1    | 360         |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 360    | ug/kg | 72.1    | 360         |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 360    | ug/kg | 72.1    | 360         |
| 83-32-9    | Acenaphthene                  | U         | 36.0   | ug/kg | 11.9    | 36.0        |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 360    | ug/kg | 36.0    | 360         |
| 100-02-7   | 4-Nitrophenol                 | U         | 360    | ug/kg | 119     | 360         |
| 87-86-5    | Pentachlorophenol             | U         | 360    | ug/kg | 90.1    | 360         |
| 129-00-0   | Pyrene                        |           | 114    | ug/kg | 10.8    | 36.0        |
| 110-86-1   | Pyridine                      | U         | 360    | ug/kg | 72.1    | 360 UJ,SV7c |
| 62-53-3    | Aniline                       | U         | 360    | ug/kg | 108     | 360         |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 360    | ug/kg | 72.1    | 360 UJ,SV7c |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 360    | ug/kg | 72.1    | 360         |
| 100-51-6   | Benzyl alcohol                | U         | 360    | ug/kg | 108     | 360         |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 360    | ug/kg | 72.1    | 360         |
| 108-60-1   | bis(2-Chloroisopropyl) ether  | U         | 360    | ug/kg | 72.1    | 360 UJ,SV7c |
| 95-48-7    | o-Cresol                      | U         | 360    | ug/kg | 72.1    | 360         |
| 65794-96-9 | m,p-Cresols                   | U         | 360    | ug/kg | 108     | 360         |
| 67-72-1    | Hexachloroethane              | U         | 360    | ug/kg | 72.1    | 360         |
| 98-95-3    | Nitrobenzene                  | U         | 360    | ug/kg | 72.1    | 360         |
| 78-59-1    | Isophorone                    | U         | 360    | ug/kg | 72.1    | 360         |
| 88-75-5    | 2-Nitrophenol                 | U         | 360    | ug/kg | 72.1    | 360         |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 360    | ug/kg | 126     | 360         |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 360    | ug/kg | 72.1    | 360         |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 360    | ug/kg | 72.1    | 360         |
| 65-85-0    | Benzoic acid                  | U         | 721    | ug/kg | 180     | 721         |
| 91-20-3    | Naphthalene                   | U         | 36.0   | ug/kg | 10.8    | 36.0        |
| 106-47-8   | 4-Chloroaniline               | U         | 360    | ug/kg | 72.1    | 360         |
| 87-68-3    | Hexachlorobutadiene           | U         | 360    | ug/kg | 72.1    | 360         |
| 91-57-6    | 2-Methylnaphthalene           | U         | 36.0   | ug/kg | 7.21    | 36.0        |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 360    | ug/kg | 72.1    | 360         |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 360    | ug/kg | 72.1    | 360         |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 360    | ug/kg | 72.1    | 360         |
| 91-58-7    | 2-Chloronaphthalene           | U         | 36.0   | ug/kg | 11.9    | 36.0        |
| 88-74-4    | 2-Nitroaniline                | U         | 360    | ug/kg | 72.1    | 360         |
|            | o-Nitroaniline                |           |        |       |         |             |
| 99-09-2    | 3-Nitroaniline                | U         | 360    | ug/kg | 72.1    | 360         |

CLL  
2/23/10



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

Page 2 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114004

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 7.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8412  
Batch ID: 944874  
Run Date: 01/27/2010 16:18  
Prep Date: 01/25/2010 21:06  
Data File: s3a2718.d

| CAS No.   | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ      |
|-----------|----------------------------|-----------|--------|-------|---------|--------------|
| 131-11-3  | <i>m</i> -Nitroaniline     |           |        |       |         |              |
|           | Dimethylphthalate          | U         | 360    | ug/kg | 72.1    | 360          |
| 606-20-2  | 2,6-Dinitrotoluene         | U         | 360    | ug/kg | 36.0    | 360          |
| 208-96-8  | Acenaphthylene             | U         | 36.0   | ug/kg | 10.8    | 36.0         |
| 51-28-5   | 2,4-Dinitrophenol          | U         | 721    | ug/kg | 137     | 721          |
| 132-64-9  | Dibenzofuran               | U         | 360    | ug/kg | 72.1    | 360          |
| 84-66-2   | Diethylphthalate           | U         | 360    | ug/kg | 72.1    | 360          |
| 86-73-7   | Fluorene                   | U         | 36.0   | ug/kg | 10.8    | 36.0         |
| 7005-72-3 | 4-Chlorophenylphenylether  | U         | 360    | ug/kg | 72.1    | 360          |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol | U         | 360    | ug/kg | 72.1    | 360 UJ,SV7c  |
| 100-01-6  | 4-Nitroaniline             | U         | 360    | ug/kg | 108     | 360          |
|           | <i>p</i> -Nitroaniline     |           |        |       |         |              |
| 122-39-4  | Diphenylamine              | U         | 360    | ug/kg | 72.1    | 360          |
| 122-66-7  | Azobenzene                 | U         | 360    | ug/kg | 72.1    | 360          |
|           | 1,2-Diphenylhydrazine      |           |        |       |         |              |
| 101-55-3  | 4-Bromophenylphenylether   | U         | 360    | ug/kg | 72.1    | 360          |
| 118-74-1  | Hexachlorobenzene          | U         | 360    | ug/kg | 72.1    | 360          |
| 85-01-8   | Phenanthrene               |           | 92.3   | ug/kg | 10.8    | 36.0         |
| 120-12-7  | Anthracene                 | U         | 36.0   | ug/kg | 7.21    | 36.0         |
| 84-74-2   | Di-n-butylphthalate        |           | 3640   | ug/kg | 72.1    | 360          |
| 206-44-0  | Fluoranthene               |           | 65.5   | ug/kg | 10.8    | 36.0         |
| 85-68-7   | Butylbenzylphthalate       | U         | 360    | ug/kg | 72.1    | 360          |
| 56-55-3   | Benzo(a)anthracene         | J         | 25.2   | ug/kg | 10.8    | 36.0         |
| 91-94-1   | 3,3'-Dichlorobenzidine     | U         | 360    | ug/kg | 108     | 360          |
| 218-01-9  | Chrysene                   |           | 40.2   | ug/kg | 10.8    | 36.0         |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | U         | 360    | ug/kg | 72.1    | 360          |
| 117-84-0  | Di-n-octylphthalate        | U         | 360    | ug/kg | 72.1    | 360          |
| 205-99-2  | Benzo(b)fluoranthene       |           | 36.2   | ug/kg | 10.8    | 36.0         |
| 207-08-9  | Benzo(k)fluoranthene       | J         | 13.2   | ug/kg | 10.8    | 36.0         |
| 50-32-8   | Benzo(a)pyrene             | J         | 31.3   | ug/kg | 10.8    | 36.0         |
| 193-39-5  | Indeno(1,2,3-cd)pyrene     | U         | 36.0   | ug/kg | 10.8    | 36.0 UJ,SV7c |
| 53-70-3   | Dibenzo(a,h)anthracene     | U         | 36.0   | ug/kg | 10.8    | 36.0 UJ,SV7c |
| 191-24-2  | Benzo(ghi)perylene         | U         | 36.0   | ug/kg | 10.8    | 36.0         |
| 120-82-1  | 1,2,4-Trichlorobenzene     | U         | 360    | ug/kg | 72.1    | 360          |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.1  | 1440      | ug/kg |     | J    |
|         | Unknown                               | 2.28 | 178       | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

|                                    |   |                             |
|------------------------------------|---|-----------------------------|
| <b>SDG Number:</b> 10-1324         | <b>Date Collected:</b> 01/14/2010 12:00 | <b>Matrix:</b> R            |
| <b>Lab Sample ID:</b> 245114004    | <b>Date Received:</b> 01/20/2010 08:45  | <b>%Moisture:</b> 7.6       |
| <b>Client ID:</b> RE15-10-8412     | <b>Client:</b> LANL010                  | <b>Project:</b> LANL01004   |
| <b>Batch ID:</b> 944874            | <b>Method:</b> SW846 8270C              | <b>SOP Ref:</b> GL-OA-E-009 |
| <b>Run Date:</b> 01/27/2010 16:18  | <b>Inst:</b> MSD3.1                     | <b>Dilution:</b> 1          |
| <b>Prep Date:</b> 01/25/2010 21:06 | <b>Analyst:</b> JLD1                    | <b>Inj. Vol:</b> .5 uL      |
| <b>Data File:</b> s3a2718.d        | <b>Aliquot:</b> 30.03 g                 | <b>Final Volume:</b> 1 mL   |
|                                    | <b>Column:</b> J&W DB-5MS               | <b>Level:</b> LOW           |

| CAS No. | Parname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|---------|-----------|--------|-------|---------|---------|
|---------|---------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |                                       |       |           |       |     |      |
|---|---------------------------------------|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|   | Unknown Aldol Condensate              | 3.4   | 186       | ug/kg |     | JA   |
|   | Unknown                               | 12.01 | 1060      | ug/kg |     | J    |
|   | Unknown                               | 12.05 | 1810      | ug/kg |     | J    |
|   | Unknown                               | 15.18 | 3560      | ug/kg |     | J    |
|   | Unknown                               | 15.51 | 1300      | ug/kg |     | J    |
|   | Unknown                               | 16.03 | 5480      | ug/kg |     | J    |
|   | Unknown                               | 16.17 | 498       | ug/kg |     | J    |
|   | Unknown                               | 16.55 | 174       | ug/kg |     | J    |
|   | Unknown                               | 16.79 | 249       | ug/kg |     | J    |
|   | Unknown                               | 16.81 | 247       | ug/kg |     | J    |
|   | Unknown                               | 17.52 | 244       | ug/kg |     | J    |
|   | Unknown                               | 17.66 | 263       | ug/kg |     | J    |
|   | Unknown                               | 18.03 | 370       | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114006

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.04 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8413  
Batch ID: 944874  
Run Date: 01/29/2010 00:54  
Prep Date: 01/25/2010 21:06  
Data File: s3a2835.d

| CAS No.    | Parname                       | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |         |
|------------|-------------------------------|-----------|--------|-------|---------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 372    | ug/kg | 74.5    | 372     |         |
| 108-95-2   | Phenol                        | U         | 372    | ug/kg | 74.5    | 372     |         |
| 95-57-8    | 2-Chlorophenol                | U         | 372    | ug/kg | 74.5    | 372     |         |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 372    | ug/kg | 74.5    | 372     |         |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 372    | ug/kg | 74.5    | 372     |         |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 372    | ug/kg | 74.5    | 372     |         |
| 83-32-9    | Acenaphthene                  | U         | 37.2   | ug/kg | 12.3    | 37.2    |         |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 372    | ug/kg | 37.2    | 372     |         |
| 100-02-7   | 4-Nitrophenol                 | U         | 372    | ug/kg | 123     | 372     |         |
| 87-86-5    | Pentachlorophenol             | U         | 372    | ug/kg | 93.1    | 372     |         |
| 129-00-0   | Pyrene                        | J         | 22.2   | ug/kg | 11.2    | 37.2    |         |
| 110-86-1   | Pyridine                      | U         | 372    | ug/kg | 74.5    | 372     |         |
| 62-53-3    | Aniline                       | U         | 372    | ug/kg | 112     | 372     |         |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 372    | ug/kg | 74.5    | 372     | UJ,SV7c |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 372    | ug/kg | 74.5    | 372     |         |
| 100-51-6   | Benzyl alcohol                | U         | 372    | ug/kg | 112     | 372     |         |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 372    | ug/kg | 74.5    | 372     |         |
| 108-60-1   | bis(2-Chloroisopropyl) ether  | U         | 372    | ug/kg | 74.5    | 372     | UJ,SV7c |
| 95-48-7    | o-Cresol                      | U         | 372    | ug/kg | 74.5    | 372     |         |
| 65794-96-9 | m,p-Cresols                   | U         | 372    | ug/kg | 112     | 372     |         |
| 67-72-1    | Hexachloroethane              | U         | 372    | ug/kg | 74.5    | 372     |         |
| 98-95-3    | Nitrobenzene                  | U         | 372    | ug/kg | 74.5    | 372     |         |
| 78-59-1    | Isophorone                    | U         | 372    | ug/kg | 74.5    | 372     |         |
| 88-75-5    | 2-Nitrophenol                 | U         | 372    | ug/kg | 74.5    | 372     |         |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 372    | ug/kg | 130     | 372     |         |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 372    | ug/kg | 74.5    | 372     |         |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 372    | ug/kg | 74.5    | 372     |         |
| 65-85-0    | Benzoic acid                  | U         | 745    | ug/kg | 186     | 745     | UJ,SV7c |
| 91-20-3    | Naphthalene                   | U         | 37.2   | ug/kg | 11.2    | 37.2    |         |
| 106-47-8   | 4-Chloroaniline               | U         | 372    | ug/kg | 74.5    | 372     |         |
| 87-68-3    | Hexachlorobutadiene           | U         | 372    | ug/kg | 74.5    | 372     |         |
| 91-57-6    | 2-Methylnaphthalene           | U         | 37.2   | ug/kg | 7.45    | 37.2    |         |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 372    | ug/kg | 74.5    | 372     |         |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 372    | ug/kg | 74.5    | 372     |         |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 372    | ug/kg | 74.5    | 372     |         |
| 91-58-7    | 2-Chloronaphthalene           | U         | 37.2   | ug/kg | 12.3    | 37.2    |         |
| 88-74-4    | 2-Nitroaniline                | U         | 372    | ug/kg | 74.5    | 372     |         |
| 99-09-2    | o-Nitroaniline                |           |        |       |         |         |         |
|            | 3-Nitroaniline                | U         | 372    | ug/kg | 74.5    | 372     |         |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114006

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Allquot: 30.04 g  
Column: J&W DB-SMS

Matrix: R  
%Moisture: 10.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ      |
|-----------|----------------------------|-----------|--------|-------|---------|--------------|
| 131-11-3  | <i>m</i> -Nitroaniline     |           |        |       |         |              |
|           | Dimethylphthalate          | U         | 372    | ug/kg | 74.5    | 372          |
| 606-20-2  | 2,6-Dinitrotoluene         | U         | 372    | ug/kg | 37.2    | 372          |
| 208-96-8  | Acenaphthylene             | U         | 37.2   | ug/kg | 11.2    | 37.2         |
| 51-28-5   | 2,4-Dinitrophenol          | U         | 745    | ug/kg | 142     | 745          |
| 132-64-9  | Dibenzofuran               | U         | 372    | ug/kg | 74.5    | 372          |
| 84-66-2   | Diethylphthalate           | U         | 372    | ug/kg | 74.5    | 372          |
| 86-73-7   | Fluorene                   | U         | 37.2   | ug/kg | 11.2    | 37.2         |
| 7005-72-3 | 4-Chlorophenylphenylether  | U         | 372    | ug/kg | 74.5    | 372          |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol | U         | 372    | ug/kg | 74.5    | 372 UJ,SV7c  |
| 100-01-6  | 4-Nitroaniline             | U         | 372    | ug/kg | 112     | 372          |
|           | <i>p</i> -Nitroaniline     |           |        |       |         |              |
| 122-39-4  | Diphenylamine              | U         | 372    | ug/kg | 74.5    | 372          |
| 122-66-7  | Azobenzene                 | U         | 372    | ug/kg | 74.5    | 372          |
|           | 1,2-Diphenylhydrazine      |           |        |       |         |              |
| 101-55-3  | 4-Bromophenylphenylether   | U         | 372    | ug/kg | 74.5    | 372          |
| 118-74-1  | Hexachlorobenzene          | U         | 372    | ug/kg | 74.5    | 372          |
| 85-01-8   | Phenanthrene               | U         | 37.2   | ug/kg | 11.2    | 37.2         |
| 120-12-7  | Anthracene                 | U         | 37.2   | ug/kg | 7.45    | 37.2         |
| 84-74-2   | Di-n-butylphthalate        | J         | 353    | ug/kg | 74.5    | 372          |
| 206-44-0  | Fluoranthene               | U         | 37.2   | ug/kg | 11.2    | 37.2         |
| 85-68-7   | Butylbenzylphthalate       | U         | 372    | ug/kg | 74.5    | 372          |
| 56-55-3   | Benzo(a)anthracene         | U         | 37.2   | ug/kg | 11.2    | 37.2         |
| 91-94-1   | 3,3'-Dichlorobenzidine     | U         | 372    | ug/kg | 112     | 372          |
| 218-01-9  | Chrysene                   | U         | 37.2   | ug/kg | 11.2    | 37.2         |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | U         | 372    | ug/kg | 74.5    | 372          |
| 117-84-0  | Di-n-octylphthalate        | U         | 372    | ug/kg | 74.5    | 372          |
| 205-99-2  | Benzo(b)fluoranthene       | U         | 37.2   | ug/kg | 11.2    | 37.2         |
| 207-08-9  | Benzo(k)fluoranthene       | U         | 37.2   | ug/kg | 11.2    | 37.2         |
| 50-32-8   | Benzo(a)pyrene             | U         | 37.2   | ug/kg | 11.2    | 37.2         |
| 193-39-5  | Indeno(1,2,3-cd)pyrene     | U         | 37.2   | ug/kg | 11.2    | 37.2 UJ,SV7c |
| 53-70-3   | Dibenzo(a,h)anthracene     | U         | 37.2   | ug/kg | 11.2    | 37.2 UJ,SV7c |
| 191-24-2  | Benzo(ghi)perylene         | U         | 37.2   | ug/kg | 11.2    | 37.2         |
| 120-82-1  | 1,2,4-Trichlorobenzene     | U         | 372    | ug/kg | 74.5    | 372          |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.07 | 5380      | ug/kg |     | J    |
|         | Unknown Aldol Condensate              | 3.32 | 198       | ug/kg |     | JA   |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114006    | Date Received: 01/20/2010 08:45  | %Moisture: 10.6      |
|                             | Client: LANL010                  | Project: LANL01004   |
| Client ID: RE15-10-8413     | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Batch ID: 944874            | Inst: MSD3.I                     | Dilution: 1          |
| Run Date: 01/29/2010 00:54  | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Prep Date: 01/25/2010 21:06 | Aliquot: 30.04 g                 | Final Volume: 1 mL   |
| Data File: s3a2835.d        | Column: J&W DB-5MS               | Level: LOW           |

| CAS No. | Parname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|---------|-----------|--------|-------|---------|---------|
|---------|---------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |  |       |           |       |     |      |
|---|--|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC)    | RT    | Estimated | Units | Flt | Qual |
| 7785-70-8                               | 1R-.alpha.-Pinene                        | 4.1   | 1520      | ug/kg | 97  | NJ   |
| 498-15-7                                | Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy | 4.67  | 901       | ug/kg | 97  | NJ   |
| 138-86-3                                | Limonene                                 | 4.81  | 194       | ug/kg | 95  | NJ   |
|   | Unknown                                  | 10.87 | 234       | ug/kg |     | J    |
|   | Unknown                                  | 11.42 | 307       | ug/kg |     | J    |
|   | Unknown                                  | 11.65 | 683       | ug/kg |     | J    |
| 1235-74-1                               | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.76 | 560       | ug/kg | 99  | NJ   |
|   | Unknown                                  | 11.86 | 158       | ug/kg |     | J    |
|   | Unknown                                  | 11.91 | 163       | ug/kg |     | J    |
| 127-25-3                                | Methyl abietate                          | 11.99 | 753       | ug/kg | 98  | NJ   |
|   | Unknown                                  | 12.1  | 287       | ug/kg |     | J    |
|   | Unknown                                  | 12.13 | 245       | ug/kg |     | J    |
|   | Unknown                                  | 12.17 | 243       | ug/kg |     | J    |
|   | Unknown                                  | 12.22 | 430       | ug/kg |     | J    |
|   | Unknown                                  | 12.33 | 403       | ug/kg |     | J    |
|   | Unknown                                  | 12.38 | 170       | ug/kg |     | J    |
|   | Unknown                                  | 12.41 | 249       | ug/kg |     | J    |
|   | Unknown                                  | 12.59 | 150       | ug/kg |     | J    |
| 309735-29-3                             | 1,2-Benzisothiazole, 3-(hexahydro-1H-aze | 12.69 | 341       | ug/kg | 90  | NJ   |
|   | Unknown                                  | 12.84 | 221       | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114011

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.1  
Analyst: JLD1  
Allquot: 30.17 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8416  
Batch ID: 944874  
Run Date: 01/29/2010 17:36  
Prep Date: 01/25/2010 21:06  
Data File: s3a2915.d

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |         |
|------------|-------------------------------|-----------|--------|-------|---------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 367    | ug/kg | 73.3    | 367     |         |
| 108-95-2   | Phenol                        | U         | 367    | ug/kg | 73.3    | 367     |         |
| 95-57-8    | 2-Chlorophenol                | U         | 367    | ug/kg | 73.3    | 367     |         |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 367    | ug/kg | 73.3    | 367     |         |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 367    | ug/kg | 73.3    | 367     |         |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 367    | ug/kg | 73.3    | 367     |         |
| 83-32-9    | Acenaphthene                  | U         | 36.7   | ug/kg | 12.1    | 36.7    |         |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 367    | ug/kg | 36.7    | 367     |         |
| 100-02-7   | 4-Nitrophenol                 | U         | 367    | ug/kg | 121     | 367     |         |
| 87-86-5    | Pentachlorophenol             | U         | 367    | ug/kg | 91.6    | 367     |         |
| 129-00-0   | Pyrene                        | U         | 36.7   | ug/kg | 11.0    | 36.7    |         |
| 110-86-1   | Pyridine                      | U         | 367    | ug/kg | 73.3    | 367     |         |
| 62-53-3    | Aniline                       | U         | 367    | ug/kg | 110     | 367     |         |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 367    | ug/kg | 73.3    | 367     |         |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 367    | ug/kg | 73.3    | 367     |         |
| 100-51-6   | Benzyl alcohol                | U         | 367    | ug/kg | 110     | 367     |         |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 367    | ug/kg | 73.3    | 367     |         |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 367    | ug/kg | 73.3    | 367     |         |
| 95-48-7    | o-Cresol                      | U         | 367    | ug/kg | 73.3    | 367     |         |
| 65794-96-9 | m,p-Cresols                   | U         | 367    | ug/kg | 110     | 367     |         |
| 67-72-1    | Hexachloroethane              | U         | 367    | ug/kg | 73.3    | 367     |         |
| 98-95-3    | Nitrobenzene                  | U         | 367    | ug/kg | 73.3    | 367     |         |
| 78-59-1    | Isophorone                    | U         | 367    | ug/kg | 73.3    | 367     |         |
| 88-75-5    | 2-Nitrophenol                 | U         | 367    | ug/kg | 73.3    | 367     |         |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 367    | ug/kg | 128     | 367     |         |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 367    | ug/kg | 73.3    | 367     |         |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 367    | ug/kg | 73.3    | 367     |         |
| 65-85-0    | Benzoic acid                  | U         | 733    | ug/kg | 183     | 733     | UJ,SV7c |
| 91-20-3    | Naphthalene                   | U         | 36.7   | ug/kg | 11.0    | 36.7    |         |
| 106-47-8   | 4-Chloroaniline               | U         | 367    | ug/kg | 73.3    | 367     |         |
| 87-68-3    | Hexachlorobutadiene           | U         | 367    | ug/kg | 73.3    | 367     |         |
| 91-57-6    | 2-Methylnaphthalene           | U         | 36.7   | ug/kg | 7.33    | 36.7    |         |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 367    | ug/kg | 73.3    | 367     |         |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 367    | ug/kg | 73.3    | 367     |         |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 367    | ug/kg | 73.3    | 367     |         |
| 91-58-7    | 2-Chloronaphthalene           | U         | 36.7   | ug/kg | 12.1    | 36.7    |         |
| 88-74-4    | 2-Nitroaniline                | U         | 367    | ug/kg | 73.3    | 367     |         |
| 99-09-2    | o-Nitroaniline                |           |        |       |         |         |         |
|            | 3-Nitroaniline                | U         | 367    | ug/kg | 73.3    | 367     |         |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114011

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.17 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8416  
Batch ID: 944874  
Run Date: 01/29/2010 17:36  
Prep Date: 01/25/2010 21:06  
Data File: s3a2915.d

| CAS No.   | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ      |
|-----------|----------------------------|-----------|--------|-------|---------|--------------|
| 131-11-3  | <i>m</i> -Nitroaniline     |           |        |       |         |              |
|           | Dimethylphthalate          | U         | 367    | ug/kg | 73.3    | 367          |
| 606-20-2  | 2,6-Dinitrotoluene         | U         | 367    | ug/kg | 36.7    | 367          |
| 208-96-8  | Acenaphthylene             | U         | 36.7   | ug/kg | 11.0    | 36.7         |
| 51-28-5   | 2,4-Dinitrophenol          | U         | 733    | ug/kg | 139     | 733          |
| 132-64-9  | Dibenzofuran               | U         | 367    | ug/kg | 73.3    | 367          |
| 84-66-2   | Diethylphthalate           | U         | 367    | ug/kg | 73.3    | 367          |
| 86-73-7   | Fluorene                   | U         | 36.7   | ug/kg | 11.0    | 36.7         |
| 7005-72-3 | 4-Chlorophenylphenylether  | U         | 367    | ug/kg | 73.3    | 367          |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol | U         | 367    | ug/kg | 73.3    | 367 UJ,SV7c  |
| 100-01-6  | 4-Nitroaniline             | U         | 367    | ug/kg | 110     | 367          |
|           | <i>p</i> -Nitroaniline     |           |        |       |         |              |
| 122-39-4  | Diphenylamine              | U         | 367    | ug/kg | 73.3    | 367          |
| 122-66-7  | Azobenzene                 | U         | 367    | ug/kg | 73.3    | 367          |
|           | 1,2-Diphenylhydrazine      |           |        |       |         |              |
| 101-55-3  | 4-Bromophenylphenylether   | U         | 367    | ug/kg | 73.3    | 367          |
| 118-74-1  | Hexachlorobenzene          | U         | 367    | ug/kg | 73.3    | 367          |
| 85-01-8   | Phenanthrene               | U         | 36.7   | ug/kg | 11.0    | 36.7         |
| 120-12-7  | Anthracene                 | U         | 36.7   | ug/kg | 7.33    | 36.7         |
| 84-74-2   | Di-n-butylphthalate        | U         | 367    | ug/kg | 73.3    | 367          |
| 206-44-0  | Fluoranthene               | U         | 36.7   | ug/kg | 11.0    | 36.7         |
| 85-68-7   | Butylbenzylphthalate       | U         | 367    | ug/kg | 73.3    | 367          |
| 56-55-3   | Benzo(a)anthracene         | U         | 36.7   | ug/kg | 11.0    | 36.7         |
| 91-94-1   | 3,3'-Dichlorobenzidine     | U         | 367    | ug/kg | 110     | 367          |
| 218-01-9  | Chrysene                   | U         | 36.7   | ug/kg | 11.0    | 36.7         |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | U         | 367    | ug/kg | 73.3    | 367          |
| 117-84-0  | Di-n-octylphthalate        | U         | 367    | ug/kg | 73.3    | 367          |
| 205-99-2  | Benzo(b)fluoranthene       | U         | 36.7   | ug/kg | 11.0    | 36.7         |
| 207-08-9  | Benzo(k)fluoranthene       | U         | 36.7   | ug/kg | 11.0    | 36.7         |
| 50-32-8   | Benzo(a)pyrene             | U         | 36.7   | ug/kg | 11.0    | 36.7         |
| 193-39-5  | Indeno(1,2,3-cd)pyrene     | U         | 36.7   | ug/kg | 11.0    | 36.7 UJ,SV7c |
| 53-70-3   | Dibenzo(a,h)anthracene     | U         | 36.7   | ug/kg | 11.0    | 36.7 UJ,SV7c |
| 191-24-2  | Benzo(ghi)perylene         | U         | 36.7   | ug/kg | 11.0    | 36.7         |
| 120-82-1  | 1,2,4-Trichlorobenzene     | U         | 367    | ug/kg | 73.3    | 367          |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.04 | 3140      | ug/kg |     | J    |
|         | Unknown                               | 2.2  | 266       | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114011    | Date Received: 01/20/2010 08:45  | %Moisture: 9.6       |
| Client ID: RE15-10-8416     | Client: LANL010                  | Project: LANL01004   |
| Batch ID: 944874            | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Run Date: 01/29/2010 17:36  | Inst: MSD3.I                     | Dilution: 1          |
| Prep Date: 01/25/2010 21:06 | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Data File: s3a2915.d        | Aliquot: 30.17 g                 | Final Volume: 1 mL   |
|                             | Column: J&W DB-5MS               | Level: LOW           |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |  |       | Estimated |       |     |      |
|---|--|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC)    | RT    |           | Units | Fit | Qual |
| 498-15-7                                | Unknown Aldol Condensate                 | 3.26  | 182       | ug/kg |     | JA   |
|   | Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy | 4.59  | 152       | ug/kg | 97  | NJ   |
|   | Unknown                                  | 11.29 | 152       | ug/kg |     | J    |
|   | Unknown                                  | 11.33 | 241       | ug/kg |     | J    |
| 1235-74-1                               | Unknown                                  | 11.55 | 185       | ug/kg |     | J    |
|   | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.67 | 222       | ug/kg | 99  | NJ   |
|   | Unknown                                  | 11.89 | 163       | ug/kg |     | J    |
|   | Unknown                                  | 13.71 | 154       | ug/kg |     | J    |
|   | Unknown                                  | 14.15 | 191       | ug/kg |     | J    |
|   | Unknown                                  | 15.22 | 3090      | ug/kg |     | J    |
|   | Unknown                                  | 15.52 | 152       | ug/kg |     | J    |
|   | Unknown                                  | 16.03 | 3180      | ug/kg |     | J    |
|   | Unknown                                  | 16.17 | 235       | ug/kg |     | J    |
|   | Unknown                                  | 16.49 | 178       | ug/kg |     | J    |
|   | .beta.-Sitosterol                        | 17.27 | 733       | ug/kg | 95  | NJ   |
|   | Unknown                                  | 17.36 | 275       | ug/kg |     | J    |
| 83-46-5                                 | Unknown                                  | 17.37 | 390       | ug/kg |     | J    |



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114009

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8417  
Batch ID: 944874  
Run Date: 01/29/2010 01:44  
Prep Date: 01/25/2010 21:06  
Data File: s3a2837.d

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|------------|-------------------------------|-----------|--------|-------|---------|-------------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 350    | ug/kg | 70.1    | 350         |
| 108-95-2   | Phenol                        | U         | 350    | ug/kg | 70.1    | 350         |
| 95-57-8    | 2-Chlorophenol                | U         | 350    | ug/kg | 70.1    | 350         |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 350    | ug/kg | 70.1    | 350         |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 350    | ug/kg | 70.1    | 350         |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 350    | ug/kg | 70.1    | 350         |
| 83-32-9    | Acenaphthene                  | U         | 35.0   | ug/kg | 11.6    | 35.0        |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 350    | ug/kg | 35.0    | 350         |
| 100-02-7   | 4-Nitrophenol                 | U         | 350    | ug/kg | 116     | 350         |
| 87-86-5    | Pentachlorophenol             | U         | 350    | ug/kg | 87.6    | 350         |
| 129-00-0   | Pyrene                        | U         | 35.0   | ug/kg | 10.5    | 35.0        |
| 110-86-1   | Pyridine                      | U         | 350    | ug/kg | 70.1    | 350         |
| 62-53-3    | Aniline                       | U         | 350    | ug/kg | 105     | 350         |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 350    | ug/kg | 70.1    | 350 UJ,SV7c |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 350    | ug/kg | 70.1    | 350         |
| 100-51-6   | Benzyl alcohol                | U         | 350    | ug/kg | 105     | 350         |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 350    | ug/kg | 70.1    | 350         |
| 108-60-1   | bis(2-Chloroisopropyl) ether  | U         | 350    | ug/kg | 70.1    | 350 UJ,SV7c |
| 95-48-7    | o-Cresol                      | U         | 350    | ug/kg | 70.1    | 350         |
| 65794-96-9 | m,p-Cresols                   | U         | 350    | ug/kg | 105     | 350         |
| 67-72-1    | Hexachloroethane              | U         | 350    | ug/kg | 70.1    | 350         |
| 98-95-3    | Nitrobenzene                  | U         | 350    | ug/kg | 70.1    | 350         |
| 78-59-1    | Isophorone                    | U         | 350    | ug/kg | 70.1    | 350         |
| 88-75-5    | 2-Nitrophenol                 | U         | 350    | ug/kg | 70.1    | 350         |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 350    | ug/kg | 123     | 350         |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 350    | ug/kg | 70.1    | 350         |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 350    | ug/kg | 70.1    | 350         |
| 65-85-0    | Benzoic acid                  | U         | 701    | ug/kg | 175     | 701 UJ,SV7c |
| 91-20-3    | Naphthalene                   | U         | 35.0   | ug/kg | 10.5    | 35.0        |
| 106-47-8   | 4-Chloroaniline               | U         | 350    | ug/kg | 70.1    | 350         |
| 87-68-3    | Hexachlorobutadiene           | U         | 350    | ug/kg | 70.1    | 350         |
| 91-57-6    | 2-Methylnaphthalene           | U         | 35.0   | ug/kg | 7.01    | 35.0        |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 350    | ug/kg | 70.1    | 350         |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 350    | ug/kg | 70.1    | 350         |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 350    | ug/kg | 70.1    | 350         |
| 91-58-7    | 2-Chloronaphthalene           | U         | 35.0   | ug/kg | 11.6    | 35.0        |
| 88-74-4    | 2-Nitroaniline                | U         | 350    | ug/kg | 70.1    | 350         |
| 99-09-2    | o-Nitroaniline                |           |        |       |         |             |
|            | 3-Nitroaniline                | U         | 350    | ug/kg | 70.1    | 350         |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114009

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ      |
|-----------|----------------------------|-----------|--------|-------|---------|--------------|
| 131-11-3  | <i>m</i> -Nitroaniline     |           |        |       |         |              |
|           | Dimethylphthalate          | U         | 350    | ug/kg | 70.1    | 350          |
| 606-20-2  | 2,6-Dinitrotoluene         | U         | 350    | ug/kg | 35.0    | 350          |
| 208-96-8  | Acenaphthylene             | U         | 35.0   | ug/kg | 10.5    | 35.0         |
| 51-28-5   | 2,4-Dinitrophenol          | U         | 701    | ug/kg | 133     | 701          |
| 132-64-9  | Dibenzofuran               | U         | 350    | ug/kg | 70.1    | 350          |
| 84-66-2   | Diethylphthalate           | U         | 350    | ug/kg | 70.1    | 350          |
| 86-73-7   | Fluorene                   | U         | 35.0   | ug/kg | 10.5    | 35.0         |
| 7005-72-3 | 4-Chlorophenylphenylether  | U         | 350    | ug/kg | 70.1    | 350          |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol | U         | 350    | ug/kg | 70.1    | 350 UJ,SV7c  |
| 100-01-6  | 4-Nitroaniline             | U         | 350    | ug/kg | 105     | 350          |
|           | <i>p</i> -Nitroaniline     |           |        |       |         |              |
| 122-39-4  | Diphenylamine              | U         | 350    | ug/kg | 70.1    | 350          |
| 122-66-7  | Azobenzene                 | U         | 350    | ug/kg | 70.1    | 350          |
|           | 1,2-Diphenylhydrazine      |           |        |       |         |              |
| 101-55-3  | 4-Bromophenylphenylether   | U         | 350    | ug/kg | 70.1    | 350          |
| 118-74-1  | Hexachlorobenzene          | U         | 350    | ug/kg | 70.1    | 350          |
| 85-01-8   | Phenanthrene               | U         | 35.0   | ug/kg | 10.5    | 35.0         |
| 120-12-7  | Anthracene                 | U         | 35.0   | ug/kg | 7.01    | 35.0         |
| 84-74-2   | Di-n-butylphthalate        | U         | 350    | ug/kg | 70.1    | 350          |
| 206-44-0  | Fluoranthene               | U         | 35.0   | ug/kg | 10.5    | 35.0         |
| 85-68-7   | Butylbenzylphthalate       | U         | 350    | ug/kg | 70.1    | 350          |
| 56-55-3   | Benzo(a)anthracene         | U         | 35.0   | ug/kg | 10.5    | 35.0         |
| 91-94-1   | 3,3'-Dichlorobenzidine     | U         | 350    | ug/kg | 105     | 350          |
| 218-01-9  | Chrysene                   | U         | 35.0   | ug/kg | 10.5    | 35.0         |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | U         | 350    | ug/kg | 70.1    | 350          |
| 117-84-0  | Di-n-octylphthalate        | U         | 350    | ug/kg | 70.1    | 350          |
| 205-99-2  | Benzo(b)fluoranthene       | U         | 35.0   | ug/kg | 10.5    | 35.0         |
| 207-08-9  | Benzo(k)fluoranthene       | U         | 35.0   | ug/kg | 10.5    | 35.0         |
| 50-32-8   | Benzo(a)pyrene             | U         | 35.0   | ug/kg | 10.5    | 35.0         |
| 193-39-5  | Indeno(1,2,3-cd)pyrene     | U         | 35.0   | ug/kg | 10.5    | 35.0 UJ,SV7c |
| 53-70-3   | Dibenzo(a,h)anthracene     | U         | 35.0   | ug/kg | 10.5    | 35.0 UJ,SV7c |
| 191-24-2  | Benzo(ghi)perylene         | U         | 35.0   | ug/kg | 10.5    | 35.0         |
| 120-82-1  | 1,2,4-Trichlorobenzene     | U         | 350    | ug/kg | 70.1    | 350          |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.08 | 4030      | ug/kg |     | J    |
|         | Unknown Aldol Condensate              | 3.33 | 200       | ug/kg |     | JA   |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114009

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |  |       |           |       |     |      |
|---|--|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC)    | RT    | Estimated | Units | Fit | Qual |
| 7785-70-8                               | 1R-.alpha.-Pinene                        | 4.1   | 683       | ug/kg | 98  | NJ   |
| 13466-78-9                              | 3-Carene                                 | 4.66  | 1500      | ug/kg | 97  | NJ   |
|   | Unknown                                  | 11.42 | 279       | ug/kg |     | J    |
|   | Unknown                                  | 11.65 | 180       | ug/kg |     | J    |
| 1235-74-1                               | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.76 | 208       | ug/kg | 98  | NJ   |
|   | Unknown                                  | 11.82 | 160       | ug/kg |     | J    |
|   | Unknown                                  | 11.98 | 195       | ug/kg |     | J    |
|   | Unknown                                  | 12.96 | 438       | ug/kg |     | J    |
|   | Unknown                                  | 15.65 | 1200      | ug/kg |     | J    |
|   | Unknown                                  | 15.67 | 1460      | ug/kg |     | J    |
|   | Unknown                                  | 16.44 | 2910      | ug/kg |     | J    |
|   | Unknown                                  | 16.56 | 247       | ug/kg |     | J    |
|   | Unknown                                  | 17.65 | 199       | ug/kg |     | J    |
|   | Unknown                                  | 17.78 | 621       | ug/kg |     | J    |

CLL  
2/23/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114012

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.06 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 11.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8418  
Batch ID: 944874  
Run Date: 01/29/2010 02:59  
Prep Date: 01/25/2010 21:06  
Data File: s3a2840.d

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |         |
|------------|-------------------------------|-----------|--------|-------|---------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 375    | ug/kg | 75.0    | 375     |         |
| 108-95-2   | Phenol                        | U         | 375    | ug/kg | 75.0    | 375     |         |
| 95-57-8    | 2-Chlorophenol                | U         | 375    | ug/kg | 75.0    | 375     |         |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 375    | ug/kg | 75.0    | 375     |         |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 375    | ug/kg | 75.0    | 375     |         |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 375    | ug/kg | 75.0    | 375     |         |
| 83-32-9    | Acenaphthene                  | U         | 37.5   | ug/kg | 12.4    | 37.5    |         |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 375    | ug/kg | 37.5    | 375     |         |
| 100-02-7   | 4-Nitrophenol                 | U         | 375    | ug/kg | 124     | 375     |         |
| 87-86-5    | Pentachlorophenol             | U         | 375    | ug/kg | 93.7    | 375     |         |
| 129-00-0   | Pyrene                        | U         | 37.5   | ug/kg | 11.2    | 37.5    |         |
| 110-86-1   | Pyridine                      | U         | 375    | ug/kg | 75.0    | 375     |         |
| 62-53-3    | Aniline                       | U         | 375    | ug/kg | 112     | 375     |         |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 375    | ug/kg | 75.0    | 375     | UJ,SV7c |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 375    | ug/kg | 75.0    | 375     |         |
| 100-51-6   | Benzyl alcohol                | U         | 375    | ug/kg | 112     | 375     |         |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 375    | ug/kg | 75.0    | 375     |         |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 375    | ug/kg | 75.0    | 375     | UJ,SV7c |
| 95-48-7    | o-Cresol                      | U         | 375    | ug/kg | 75.0    | 375     |         |
| 63794-96-9 | m,p-Cresols                   | U         | 375    | ug/kg | 112     | 375     |         |
| 67-72-1    | Hexachloroethane              | U         | 375    | ug/kg | 75.0    | 375     |         |
| 98-95-3    | Nitrobenzene                  | U         | 375    | ug/kg | 75.0    | 375     |         |
| 78-59-1    | Isophorone                    | U         | 375    | ug/kg | 75.0    | 375     |         |
| 88-75-5    | 2-Nitrophenol                 | U         | 375    | ug/kg | 75.0    | 375     |         |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 375    | ug/kg | 131     | 375     |         |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 375    | ug/kg | 75.0    | 375     |         |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 375    | ug/kg | 75.0    | 375     |         |
| 65-85-0    | Benzoic acid                  | U         | 750    | ug/kg | 187     | 750     | UJ,SV7c |
| 91-20-3    | Naphthalene                   | U         | 37.5   | ug/kg | 11.2    | 37.5    |         |
| 106-47-8   | 4-Chloroaniline               | U         | 375    | ug/kg | 75.0    | 375     |         |
| 87-68-3    | Hexachlorobutadiene           | U         | 375    | ug/kg | 75.0    | 375     |         |
| 91-57-6    | 2-Methylnaphthalene           | U         | 37.5   | ug/kg | 7.50    | 37.5    |         |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 375    | ug/kg | 75.0    | 375     |         |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 375    | ug/kg | 75.0    | 375     |         |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 375    | ug/kg | 75.0    | 375     |         |
| 91-58-7    | 2-Chloronaphthalene           | U         | 37.5   | ug/kg | 12.4    | 37.5    |         |
| 88-74-4    | 2-Nitroaniline                | U         | 375    | ug/kg | 75.0    | 375     |         |
| 99-09-2    | o-Nitroaniline                |           |        |       |         |         |         |
|            | 3-Nitroaniline                | U         | 375    | ug/kg | 75.0    | 375     |         |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

Page 2 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114012

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.06 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 11.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ      |
|-----------|----------------------------|-----------|--------|-------|---------|--------------|
| 131-11-3  | <i>m</i> -Nitroaniline     |           |        |       |         |              |
|           | Dimethylphthalate          | U         | 375    | ug/kg | 75.0    | 375          |
| 606-20-2  | 2,6-Dinitrotoluene         | U         | 375    | ug/kg | 37.5    | 375          |
| 208-96-8  | Acenaphthylene             | U         | 37.5   | ug/kg | 11.2    | 37.5         |
| 51-28-5   | 2,4-Dinitrophenol          | U         | 750    | ug/kg | 142     | 750          |
| 132-64-9  | Dibenzofuran               | U         | 375    | ug/kg | 75.0    | 375          |
| 84-66-2   | Diethylphthalate           | U         | 375    | ug/kg | 75.0    | 375          |
| 86-73-7   | Fluorene                   | U         | 37.5   | ug/kg | 11.2    | 37.5         |
| 7005-72-3 | 4-Chlorophenylphenylether  | U         | 375    | ug/kg | 75.0    | 375          |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol | U         | 375    | ug/kg | 75.0    | 375 UJ,SV7c  |
| 100-01-6  | 4-Nitroaniline             | U         | 375    | ug/kg | 112     | 375          |
|           | <i>p</i> -Nitroaniline     |           |        |       |         |              |
| 122-39-4  | Diphenylamine              | U         | 375    | ug/kg | 75.0    | 375          |
| 122-66-7  | Azobenzene                 | U         | 375    | ug/kg | 75.0    | 375          |
|           | 1,2-Diphenylhydrazine      |           |        |       |         |              |
| 101-55-3  | 4-Bromophenylphenylether   | U         | 375    | ug/kg | 75.0    | 375          |
| 118-74-1  | Hexachlorobenzene          | U         | 375    | ug/kg | 75.0    | 375          |
| 85-01-8   | Phenanthrene               | U         | 37.5   | ug/kg | 11.2    | 37.5         |
| 120-12-7  | Anthracene                 | U         | 37.5   | ug/kg | 7.50    | 37.5         |
| 84-74-2   | Di-n-butylphthalate        | U         | 375    | ug/kg | 75.0    | 375          |
| 206-44-0  | Fluoranthene               | U         | 37.5   | ug/kg | 11.2    | 37.5         |
| 85-68-7   | Butylbenzylphthalate       | U         | 375    | ug/kg | 75.0    | 375          |
| 56-55-3   | Benzo(a)anthracene         | U         | 37.5   | ug/kg | 11.2    | 37.5         |
| 91-94-1   | 3,3'-Dichlorobenzidine     | U         | 375    | ug/kg | 112     | 375          |
| 218-01-9  | Chrysene                   | U         | 37.5   | ug/kg | 11.2    | 37.5         |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | U         | 375    | ug/kg | 75.0    | 375          |
| 117-84-0  | Di-n-octylphthalate        | U         | 375    | ug/kg | 75.0    | 375          |
| 205-99-2  | Benzo(b)fluoranthene       | U         | 37.5   | ug/kg | 11.2    | 37.5         |
| 207-08-9  | Benzo(k)fluoranthene       | U         | 37.5   | ug/kg | 11.2    | 37.5         |
| 50-32-8   | Benzo(a)pyrene             | U         | 37.5   | ug/kg | 11.2    | 37.5         |
| 193-39-5  | Indeno(1,2,3-cd)pyrene     | U         | 37.5   | ug/kg | 11.2    | 37.5 UJ,SV7c |
| 53-70-3   | Dibenzo(a,h)anthracene     | U         | 37.5   | ug/kg | 11.2    | 37.5 UJ,SV7c |
| 191-24-2  | Benzo(ghi)perylene         | U         | 37.5   | ug/kg | 11.2    | 37.5         |
| 120-82-1  | 1,2,4-Trichlorobenzene     | U         | 375    | ug/kg | 75.0    | 375          |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.08 | 1390      | ug/kg |     | J    |
|         | Unknown                               | 2.25 | 204       | ug/kg |     | J    |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114012    | Date Received: 01/20/2010 08:45  | %Moisture: 11.3      |
|                             | Client: LANL010                  | Project: LANL01004   |
| Client ID: RE15-10-8418     | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Batch ID: 944874            | Inst: MSD3.I                     | Dilution: 1          |
| Run Date: 01/29/2010 02:59  | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Prep Date: 01/25/2010 21:06 | Aliquot: 30.06 g                 | Final Volume: 1 mL   |
| Data File: s3a2840.d        | Column: J&W DB-5MS               | Level: LOW           |

| CAS No.                                 | Parmname                              | Qualifier | Result | Units     | MDL/LOD | PQL/LOQ  |
|---|---------------------------------------|-----------|--------|-----------|---------|----------|
| Tentatively Identified Compound Summary |                                       |           |        |           |         |          |
| CAS No.                                 | Tentatively Identified Compound (TIC) |           | RT     | Estimated | Units   | Fit Qual |
|   | Unknown Aldol Condensate              |           | 3.33   | 232       | ug/kg   | JA       |
|   | Unknown                               |           | 15.65  | 1050      | ug/kg   | J        |
|   | Unknown                               |           | 16.43  | 1640      | ug/kg   | J        |
|   | Unknown                               |           | 17.59  | 235       | ug/kg   | J        |
|   | Unknown                               |           | 17.6   | 310       | ug/kg   | J        |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114015

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.18 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 30.1  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8420  
Batch ID: 944874  
Run Date: 01/29/2010 04:14  
Prep Date: 01/25/2010 21:06  
Data File: s3a2843.d

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |         |
|------------|-------------------------------|-----------|--------|-------|---------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 474    | ug/kg | 94.9    | 474     |         |
| 108-95-2   | Phenol                        | U         | 474    | ug/kg | 94.9    | 474     |         |
| 95-57-8    | 2-Chlorophenol                | U         | 474    | ug/kg | 94.9    | 474     |         |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 474    | ug/kg | 94.9    | 474     |         |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 474    | ug/kg | 94.9    | 474     |         |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 474    | ug/kg | 94.9    | 474     |         |
| 83-32-9    | Acenaphthene                  | U         | 47.4   | ug/kg | 15.7    | 47.4    |         |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 474    | ug/kg | 47.4    | 474     |         |
| 100-02-7   | 4-Nitrophenol                 | U         | 474    | ug/kg | 157     | 474     |         |
| 87-86-5    | Pentachlorophenol             | U         | 474    | ug/kg | 119     | 474     |         |
| 129-00-0   | Pyrene                        | J         | 16.5   | ug/kg | 14.2    | 47.4    |         |
| 110-86-1   | Pyridine                      | U         | 474    | ug/kg | 94.9    | 474     |         |
| 62-53-3    | Aniline                       | U         | 474    | ug/kg | 142     | 474     |         |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 474    | ug/kg | 94.9    | 474     | UJ,SV7c |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 474    | ug/kg | 94.9    | 474     |         |
| 100-51-6   | Benzyl alcohol                | U         | 474    | ug/kg | 142     | 474     |         |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 474    | ug/kg | 94.9    | 474     |         |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 474    | ug/kg | 94.9    | 474     | UJ,SV7c |
| 95-48-7    | o-Cresol                      | U         | 474    | ug/kg | 94.9    | 474     |         |
| 65794-96-9 | m,p-Cresols                   | U         | 474    | ug/kg | 142     | 474     |         |
| 67-72-1    | Hexachloroethane              | U         | 474    | ug/kg | 94.9    | 474     |         |
| 98-95-3    | Nitrobenzene                  | U         | 474    | ug/kg | 94.9    | 474     |         |
| 78-59-1    | Isophorone                    | U         | 474    | ug/kg | 94.9    | 474     |         |
| 88-75-5    | 2-Nitrophenol                 | U         | 474    | ug/kg | 94.9    | 474     |         |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 474    | ug/kg | 166     | 474     |         |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 474    | ug/kg | 94.9    | 474     |         |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 474    | ug/kg | 94.9    | 474     |         |
| 65-85-0    | Benzoic acid                  | U         | 949    | ug/kg | 237     | 949     | UJ,SV7c |
| 91-20-3    | Naphthalene                   | U         | 47.4   | ug/kg | 14.2    | 47.4    |         |
| 106-47-8   | 4-Chloroaniline               | U         | 474    | ug/kg | 94.9    | 474     |         |
| 87-68-3    | Hexachlorobutadiene           | U         | 474    | ug/kg | 94.9    | 474     |         |
| 91-57-6    | 2-Methylnaphthalene           | U         | 47.4   | ug/kg | 9.49    | 47.4    |         |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 474    | ug/kg | 94.9    | 474     |         |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 474    | ug/kg | 94.9    | 474     |         |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 474    | ug/kg | 94.9    | 474     |         |
| 91-58-7    | 2-Chloronaphthalene           | U         | 47.4   | ug/kg | 15.7    | 47.4    |         |
| 88-74-4    | 2-Nitroaniline                | U         | 474    | ug/kg | 94.9    | 474     |         |
| 99-09-2    | o-Nitroaniline                |           |        |       |         |         |         |
|            | 3-Nitroaniline                | U         | 474    | ug/kg | 94.9    | 474     |         |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

Page 2 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114015

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.18 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 30.1  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8420  
Batch ID: 944874  
Run Date: 01/29/2010 04:14  
Prep Date: 01/25/2010 21:06  
Data File: s3a2843.d

| CAS No.   | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ      |
|-----------|----------------------------|-----------|--------|-------|---------|--------------|
| 131-11-3  | <i>m</i> -Nitroaniline     |           |        |       |         |              |
|           | Dimethylphthalate          | U         | 474    | ug/kg | 94.9    | 474          |
| 606-20-2  | 2,6-Dinitrotoluene         | U         | 474    | ug/kg | 47.4    | 474          |
| 208-96-8  | Acenaphthylene             | U         | 47.4   | ug/kg | 14.2    | 47.4         |
| 51-28-5   | 2,4-Dinitrophenol          | U         | 949    | ug/kg | 180     | 949          |
| 132-64-9  | Dibenzofuran               | U         | 474    | ug/kg | 94.9    | 474          |
| 84-66-2   | Diethylphthalate           | U         | 474    | ug/kg | 94.9    | 474          |
| 86-73-7   | Fluorene                   | U         | 47.4   | ug/kg | 14.2    | 47.4         |
| 7005-72-3 | 4-Chlorophenylphenylether  | U         | 474    | ug/kg | 94.9    | 474          |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol | U         | 474    | ug/kg | 94.9    | 474 UJ,SV7c  |
| 100-01-6  | 4-Nitroaniline             | U         | 474    | ug/kg | 142     | 474          |
|           | <i>p</i> -Nitroaniline     |           |        |       |         |              |
| 122-39-4  | Diphenylamine              | U         | 474    | ug/kg | 94.9    | 474          |
| 122-66-7  | Azobenzene                 | U         | 474    | ug/kg | 94.9    | 474          |
|           | 1,2-Diphenylhydrazine      |           |        |       |         |              |
| 101-55-3  | 4-Bromophenylphenylether   | U         | 474    | ug/kg | 94.9    | 474          |
| 118-74-1  | Hexachlorobenzene          | U         | 474    | ug/kg | 94.9    | 474          |
| 85-01-8   | Phenanthrene               | U         | 47.4   | ug/kg | 14.2    | 47.4         |
| 120-12-7  | Anthracene                 | U         | 47.4   | ug/kg | 9.49    | 47.4         |
| 84-74-2   | Di-n-butylphthalate        | U         | 474    | ug/kg | 94.9    | 474          |
| 206-44-0  | Fluoranthene               | U         | 47.4   | ug/kg | 14.2    | 47.4         |
| 85-68-7   | Butylbenzylphthalate       | U         | 474    | ug/kg | 94.9    | 474          |
| 56-55-3   | Benzo(a)anthracene         | U         | 47.4   | ug/kg | 14.2    | 47.4         |
| 91-94-1   | 3,3'-Dichlorobenzidine     | U         | 474    | ug/kg | 142     | 474          |
| 218-01-9  | Chrysene                   | U         | 47.4   | ug/kg | 14.2    | 47.4         |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | U         | 474    | ug/kg | 94.9    | 474          |
| 117-84-0  | Di-n-octylphthalate        | U         | 474    | ug/kg | 94.9    | 474          |
| 205-99-2  | Benzo(b)fluoranthene       | U         | 47.4   | ug/kg | 14.2    | 47.4         |
| 207-08-9  | Benzo(k)fluoranthene       | U         | 47.4   | ug/kg | 14.2    | 47.4         |
| 50-32-8   | Benzo(a)pyrene             | U         | 47.4   | ug/kg | 14.2    | 47.4         |
| 193-39-5  | Indeno(1,2,3-cd)pyrene     | U         | 47.4   | ug/kg | 14.2    | 47.4 UJ,SV7c |
| 53-70-3   | Dibenzo(a,h)anthracene     | U         | 47.4   | ug/kg | 14.2    | 47.4 UJ,SV7c |
| 191-24-2  | Benzo(ghi)perylene         | U         | 47.4   | ug/kg | 14.2    | 47.4         |
| 120-82-1  | 1,2,4-Trichlorobenzene     | U         | 474    | ug/kg | 94.9    | 474          |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.07 | 694       | ug/kg |     | J    |
|         | Unknown                               | 2.24 | 343       | ug/kg |     | J    |

CLL  
2/23/10



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114015    | Date Received: 01/20/2010 08:45  | %Moisture: 30.1      |
| Client ID: RE15-10-8420     | Client: LANL010                  | Project: LANL01004   |
| Batch ID: 944874            | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Run Date: 01/29/2010 04:14  | Inst: MSD3.I                     | Dilution: 1          |
| Prep Date: 01/25/2010 21:06 | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Data File: s3a2843.d        | Aliquot: 30.18 g                 | Final Volume: 1 mL   |
|                             | Column: J&W DB-5MS               | Level: LOW           |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |   |       | Estimated |       |     |      |
|---|---|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC)                   | RT    |           | Units | Fit | Qual |
|   | Unknown Aldol Condensate                                | 3.33  | 257       | ug/kg |     | JA   |
| 7785-70-8                               | 1R- $\alpha$ -Pinene                                    | 4.1   | 629       | ug/kg | 98  | NJ   |
| 79-92-5                                 | Camphene  | 4.24  | 280       | ug/kg | 97  | NJ   |
|   | Unknown   | 5.69  | 198       | ug/kg |     | J    |
| 5655-61-8                               | Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimeth                | 6.58  | 285       | ug/kg | 98  | NJ   |
| 475-20-7                                | 1,4-Methanoazulene, decahydro-4,8,8-trim                | 7.47  | 193       | ug/kg | 98  | NJ   |
| 87-44-5                                 | Caryophyllene   | 7.49  | 275       | ug/kg | 96  | NJ   |
| 23986-74-5                              | 1,6-Cyclodecadiene, 1-methyl-5-methylene                | 7.83  | 346       | ug/kg | 96  | NJ   |
| 483-76-1                                | Naphthalene, 1,2,3,5,6,8a-hexahydro-4,7-                | 7.99  | 341       | ug/kg | 98  | NJ   |
| 1000156-12-8                            | Alloaromadendrene oxide-(1)                             | 11.3  | 292       | ug/kg | 84  | NJ   |
| 24174-25-2                              | 5. $\alpha$ .,14. $\beta$ .-Androstane, 16. $\alpha$ ., | 11.65 | 247       | ug/kg | 93  | NJ   |
| 1235-74-1                               | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4                | 11.76 | 597       | ug/kg | 95  | NJ   |
|   | Unknown   | 11.79 | 372       | ug/kg |     | J    |
|   | Unknown   | 11.98 | 222       | ug/kg |     | J    |
|   | Unknown   | 12.32 | 207       | ug/kg |     | J    |
|   | Unknown   | 12.64 | 233       | ug/kg |     | J    |
| 559-74-0                                | Friedelan-3-one   | 13.01 | 3230      | ug/kg | 91  | NJ   |
| 62016-76-6                              | Nonadecane, 1-chloro-                                   | 13.19 | 227       | ug/kg | 95  | NJ   |
|   | Unknown   | 13.23 | 247       | ug/kg |     | J    |
| 309735-29-3                             | 1,2-Benzisothiazole, 3-(hexahydro-1H-aze                | 13.31 | 312       | ug/kg | 91  | NJ   |
| 62600-05-9                              | Cedran-diol, 8S,14-                                     | 13.37 | 248       | ug/kg | 83  | NJ   |
| 504-57-4                                | 10-Nonadecanone   | 15.5  | 441       | ug/kg | 81  | NJ   |
|   | Unknown   | 15.7  | 3460      | ug/kg |     | J    |
|   | Unknown   | 16.44 | 1530      | ug/kg |     | J    |
| 83-47-6                                 | .gamma.-Sitosterol                                      | 17.54 | 2310      | ug/kg | 93  | NJ   |

CLL  
2/23/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114014

Client ID: RE15-10-8421  
Batch ID: 944874  
Run Date: 01/29/2010 03:49  
Prep Date: 01/25/2010 21:06  
Data File: s3a2842.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 12.5  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|------------|-------------------------------|-----------|--------|-------|---------|-------------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 380    | ug/kg | 76.1    | 380         |
| 108-95-2   | Phenol                        | U         | 380    | ug/kg | 76.1    | 380         |
| 95-57-8    | 2-Chlorophenol                | U         | 380    | ug/kg | 76.1    | 380         |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 380    | ug/kg | 76.1    | 380         |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 380    | ug/kg | 76.1    | 380         |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 380    | ug/kg | 76.1    | 380         |
| 83-32-9    | Acenaphthene                  | U         | 38.0   | ug/kg | 12.6    | 38.0        |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 380    | ug/kg | 38.0    | 380         |
| 100-02-7   | 4-Nitrophenol                 | U         | 380    | ug/kg | 126     | 380         |
| 87-86-5    | Pentachlorophenol             | U         | 380    | ug/kg | 95.1    | 380         |
| 129-00-0   | Pyrene                        | U         | 38.0   | ug/kg | 11.4    | 38.0        |
| 110-86-1   | Pyridine                      | U         | 380    | ug/kg | 76.1    | 380         |
| 62-53-3    | Aniline                       | U         | 380    | ug/kg | 114     | 380         |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 380    | ug/kg | 76.1    | 380 UJ,SV7c |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 380    | ug/kg | 76.1    | 380         |
| 100-51-6   | Benzyl alcohol                | U         | 380    | ug/kg | 114     | 380         |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 380    | ug/kg | 76.1    | 380         |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 380    | ug/kg | 76.1    | 380 UJ,SV7c |
| 95-48-7    | o-Cresol                      | U         | 380    | ug/kg | 76.1    | 380         |
| 65794-96-9 | m,p-Cresols                   | U         | 380    | ug/kg | 114     | 380         |
| 67-72-1    | Hexachloroethane              | U         | 380    | ug/kg | 76.1    | 380         |
| 98-95-3    | Nitrobenzene                  | U         | 380    | ug/kg | 76.1    | 380         |
| 78-59-1    | Isophorone                    | U         | 380    | ug/kg | 76.1    | 380         |
| 88-75-5    | 2-Nitrophenol                 | U         | 380    | ug/kg | 76.1    | 380         |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 380    | ug/kg | 133     | 380         |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 380    | ug/kg | 76.1    | 380         |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 380    | ug/kg | 76.1    | 380         |
| 65-85-0    | Benzoic acid                  | U         | 761    | ug/kg | 190     | 761 UJ,SV7c |
| 91-20-3    | Naphthalene                   | U         | 38.0   | ug/kg | 11.4    | 38.0        |
| 106-47-8   | 4-Chloroaniline               | U         | 380    | ug/kg | 76.1    | 380         |
| 87-68-3    | Hexachlorobutadiene           | U         | 380    | ug/kg | 76.1    | 380         |
| 91-57-6    | 2-Methylnaphthalene           | U         | 38.0   | ug/kg | 7.61    | 38.0        |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 380    | ug/kg | 76.1    | 380         |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 380    | ug/kg | 76.1    | 380         |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 380    | ug/kg | 76.1    | 380         |
| 91-58-7    | 2-Chloronaphthalene           | U         | 38.0   | ug/kg | 12.6    | 38.0        |
| 88-74-4    | 2-Nitroaniline                | U         | 380    | ug/kg | 76.1    | 380         |
| 99-09-2    | <i>o</i> -Nitroaniline        |           |        |       |         |             |
|            | 3-Nitroaniline                | U         | 380    | ug/kg | 76.1    | 380         |

CLL  
2/23/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114014

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Allquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 12.5  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ      |
|-----------|----------------------------|-----------|--------|-------|---------|--------------|
| 131-11-3  | <i>m</i> -Nitroaniline     |           |        |       |         |              |
|           | Dimethylphthalate          | U         | 380    | ug/kg | 76.1    | 380          |
| 606-20-2  | 2,6-Dinitrotoluene         | U         | 380    | ug/kg | 38.0    | 380          |
| 208-96-8  | Acenaphthylene             | U         | 38.0   | ug/kg | 11.4    | 38.0         |
| 51-28-5   | 2,4-Dinitrophenol          | U         | 761    | ug/kg | 145     | 761          |
| 132-64-9  | Dibenzofuran               | U         | 380    | ug/kg | 76.1    | 380          |
| 84-66-2   | Diethylphthalate           | U         | 380    | ug/kg | 76.1    | 380          |
| 86-73-7   | Fluorene                   | U         | 38.0   | ug/kg | 11.4    | 38.0         |
| 7005-72-3 | 4-Chlorophenylphenylether  | U         | 380    | ug/kg | 76.1    | 380          |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol | U         | 380    | ug/kg | 76.1    | 380 UJ,SV7c  |
| 100-01-6  | 4-Nitroaniline             | U         | 380    | ug/kg | 114     | 380          |
|           | <i>p</i> -Nitroaniline     |           |        |       |         |              |
| 122-39-4  | Diphenylamine              | U         | 380    | ug/kg | 76.1    | 380          |
| 122-66-7  | Azobenzene                 | U         | 380    | ug/kg | 76.1    | 380          |
|           | 1,2-Diphenylhydrazine      |           |        |       |         |              |
| 101-55-3  | 4-Bromophenylphenylether   | U         | 380    | ug/kg | 76.1    | 380          |
| 118-74-1  | Hexachlorobenzene          | U         | 380    | ug/kg | 76.1    | 380          |
| 85-01-8   | Phenanthrene               | U         | 38.0   | ug/kg | 11.4    | 38.0         |
| 120-12-7  | Anthracene                 | U         | 38.0   | ug/kg | 7.61    | 38.0         |
| 84-74-2   | Di-n-butylphthalate        | U         | 380    | ug/kg | 76.1    | 380          |
| 206-44-0  | Fluoranthene               | U         | 38.0   | ug/kg | 11.4    | 38.0         |
| 85-68-7   | Butylbenzylphthalate       | U         | 380    | ug/kg | 76.1    | 380          |
| 56-55-3   | Benzo(a)anthracene         | U         | 38.0   | ug/kg | 11.4    | 38.0         |
| 91-94-1   | 3,3'-Dichlorobenzidine     | U         | 380    | ug/kg | 114     | 380          |
| 218-01-9  | Chrysene                   | U         | 38.0   | ug/kg | 11.4    | 38.0         |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | U         | 380    | ug/kg | 76.1    | 380          |
| 117-84-0  | Di-n-octylphthalate        | U         | 380    | ug/kg | 76.1    | 380          |
| 205-99-2  | Benzo(b)fluoranthene       | U         | 38.0   | ug/kg | 11.4    | 38.0         |
| 207-08-9  | Benzo(k)fluoranthene       | U         | 38.0   | ug/kg | 11.4    | 38.0         |
| 50-32-8   | Benzo(a)pyrene             | U         | 38.0   | ug/kg | 11.4    | 38.0         |
| 193-39-5  | Indeno(1,2,3-cd)pyrene     | U         | 38.0   | ug/kg | 11.4    | 38.0 UJ,SV7c |
| 53-70-3   | Dibenzo(a,h)anthracene     | U         | 38.0   | ug/kg | 11.4    | 38.0 UJ,SV7c |
| 191-24-2  | Benzo(ghi)perylene         | U         | 38.0   | ug/kg | 11.4    | 38.0         |
| 120-82-1  | 1,2,4-Trichlorobenzene     | U         | 380    | ug/kg | 76.1    | 380          |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.07 | 2110      | ug/kg |     | J    |
|         | Unknown                               | 2.24 | 242       | ug/kg |     | J    |

CLL  
2/23/10

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1324  
Lab Sample ID: 245114014

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 12.5  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.                                 | Parmname                              | Qualifier | Result    | Units | MDL/LOD | PQL/LOQ |
|---|---------------------------------------|-----------|-----------|-------|---------|---------|
| Tentatively Identified Compound Summary |                                       |           |           |       |         |         |
| CAS No.                                 | Tentatively Identified Compound (TIC) | RT        | Estimated | Units | Fit     | Qual    |
|   | Unknown Aldol Condensate              | 3.32      | 195       | ug/kg |         | JA      |
|   | Unknown                               | 15.66     | 2000      | ug/kg |         | J       |
|   | Unknown                               | 16.43     | 1920      | ug/kg |         | J       |
|   | Unknown                               | 16.95     | 220       | ug/kg |         | J       |
|   | Unknown                               | 17.6      | 498       | ug/kg |         | J       |
|   | Unknown                               | 17.64     | 285       | ug/kg |         | J       |
|   | Unknown                               | 18.06     | 341       | ug/kg |         | J       |

CLL  
2/23/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114008

Date Collected: 01/14/2010 12:00  
Date Received: 01/23/2010 09:20  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.1 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8422  
Batch ID: 944874  
Run Date: 01/29/2010 01:19  
Prep Date: 01/25/2010 21:06  
Data File: s3a2836.d

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|------------|-------------------------------|-----------|--------|-------|---------|-------------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 373    | ug/kg | 74.6    | 373         |
| 108-95-2   | Phenol                        | U         | 373    | ug/kg | 74.6    | 373         |
| 95-57-8    | 2-Chlorophenol                | U         | 373    | ug/kg | 74.6    | 373         |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 373    | ug/kg | 74.6    | 373         |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 373    | ug/kg | 74.6    | 373         |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 373    | ug/kg | 74.6    | 373         |
| 83-32-9    | Acenaphthene                  | U         | 37.3   | ug/kg | 12.3    | 37.3        |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 373    | ug/kg | 37.3    | 373         |
| 100-02-7   | 4-Nitrophenol                 | U         | 373    | ug/kg | 123     | 373         |
| 87-86-5    | Pentachlorophenol             | U         | 373    | ug/kg | 93.3    | 373         |
| 129-00-0   | Pyrene                        |           | 51.4   | ug/kg | 11.2    | 37.3        |
| 110-86-1   | Pyridine                      | U         | 373    | ug/kg | 74.6    | 373         |
| 62-53-3    | Aniline                       | U         | 373    | ug/kg | 112     | 373         |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 373    | ug/kg | 74.6    | 373 UJ,SV7c |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 373    | ug/kg | 74.6    | 373         |
| 100-51-6   | Benzyl alcohol                | U         | 373    | ug/kg | 112     | 373         |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 373    | ug/kg | 74.6    | 373         |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 373    | ug/kg | 74.6    | 373 UJ,SV7c |
| 95-48-7    | o-Cresol                      | U         | 373    | ug/kg | 74.6    | 373         |
| 65794-96-9 | m,p-Cresols                   | U         | 373    | ug/kg | 112     | 373         |
| 67-72-1    | Hexachloroethane              | U         | 373    | ug/kg | 74.6    | 373         |
| 98-95-3    | Nitrobenzene                  | U         | 373    | ug/kg | 74.6    | 373         |
| 78-59-1    | Isophorone                    | U         | 373    | ug/kg | 74.6    | 373         |
| 88-75-5    | 2-Nitrophenol                 | U         | 373    | ug/kg | 74.6    | 373         |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 373    | ug/kg | 131     | 373         |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 373    | ug/kg | 74.6    | 373         |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 373    | ug/kg | 74.6    | 373         |
| 65-85-0    | Benzoic acid                  | U         | 746    | ug/kg | 187     | 746 UJ,SV7c |
| 91-20-3    | Naphthalene                   | U         | 37.3   | ug/kg | 11.2    | 37.3        |
| 106-47-8   | 4-Chloroaniline               | U         | 373    | ug/kg | 74.6    | 373         |
| 87-68-3    | Hexachlorobutadiene           | U         | 373    | ug/kg | 74.6    | 373         |
| 91-57-6    | 2-Methylnaphthalene           | U         | 37.3   | ug/kg | 7.46    | 37.3        |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 373    | ug/kg | 74.6    | 373         |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 373    | ug/kg | 74.6    | 373         |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 373    | ug/kg | 74.6    | 373         |
| 91-58-7    | 2-Chloronaphthalene           | U         | 37.3   | ug/kg | 12.3    | 37.3        |
| 88-74-4    | 2-Nitroaniline                | U         | 373    | ug/kg | 74.6    | 373         |
| 99-09-2    | o-Nitroaniline                |           |        |       |         |             |
|            | 3-Nitroaniline                | U         | 373    | ug/kg | 74.6    | 373         |

CLL  
2/23/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114008

Date Collected: 01/14/2010 12:00  
Date Received: 01/23/2010 09:20  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.1 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ      |
|-----------|----------------------------|-----------|--------|-------|---------|--------------|
| 131-11-3  | <i>m</i> -Nitroaniline     |           |        |       |         |              |
|           | Dimethylphthalate          | U         | 373    | ug/kg | 74.6    | 373          |
| 606-20-2  | 2,6-Dinitrotoluene         | U         | 373    | ug/kg | 37.3    | 373          |
| 208-96-8  | Acenaphthylene             | U         | 37.3   | ug/kg | 11.2    | 37.3         |
| 51-28-5   | 2,4-Dinitrophenol          | U         | 746    | ug/kg | 142     | 746          |
| 132-64-9  | Dibenzofuran               | U         | 373    | ug/kg | 74.6    | 373          |
| 84-66-2   | Diethylphthalate           | U         | 373    | ug/kg | 74.6    | 373          |
| 86-73-7   | Fluorene                   | U         | 37.3   | ug/kg | 11.2    | 37.3         |
| 7005-72-3 | 4-Chlorophenylphenylether  | U         | 373    | ug/kg | 74.6    | 373          |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol | U         | 373    | ug/kg | 74.6    | 373 UJ,SV7c  |
| 100-01-6  | 4-Nitroaniline             | U         | 373    | ug/kg | 112     | 373          |
|           | <i>p</i> -Nitroaniline     |           |        |       |         |              |
| 122-39-4  | Diphenylamine              | U         | 373    | ug/kg | 74.6    | 373          |
| 122-66-7  | Azobenzene                 | U         | 373    | ug/kg | 74.6    | 373          |
|           | 1,2-Diphenylhydrazine      |           |        |       |         |              |
| 101-55-3  | 4-Bromophenylphenylether   | U         | 373    | ug/kg | 74.6    | 373          |
| 118-74-1  | Hexachlorobenzene          | U         | 373    | ug/kg | 74.6    | 373          |
| 85-01-8   | Phenanthrene               | J         | 15.8   | ug/kg | 11.2    | 37.3         |
| 120-12-7  | Anthracene                 | U         | 37.3   | ug/kg | 7.46    | 37.3         |
| 84-74-2   | Di-n-butylphthalate        | J         | 206    | ug/kg | 74.6    | 373          |
| 206-44-0  | Fluoranthene               | J         | 20.1   | ug/kg | 11.2    | 37.3         |
| 85-68-7   | Butylbenzylphthalate       | U         | 373    | ug/kg | 74.6    | 373          |
| 56-55-3   | Benzo(a)anthracene         | J         | 21.3   | ug/kg | 11.2    | 37.3         |
| 91-94-1   | 3,3'-Dichlorobenzidine     | U         | 373    | ug/kg | 112     | 373          |
| 218-01-9  | Chrysene                   | J         | 17.4   | ug/kg | 11.2    | 37.3         |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | U         | 373    | ug/kg | 74.6    | 373          |
| 117-84-0  | Di-n-octylphthalate        | U         | 373    | ug/kg | 74.6    | 373          |
| 205-99-2  | Benzo(h)fluoranthene       | U         | 37.3   | ug/kg | 11.2    | 37.3         |
| 207-08-9  | Benzo(k)fluoranthene       | U         | 37.3   | ug/kg | 11.2    | 37.3         |
| 50-32-8   | Benzo(a)pyrene             | J         | 19.4   | ug/kg | 11.2    | 37.3         |
| 193-39-5  | Indeno(1,2,3-cd)pyrene     | U         | 37.3   | ug/kg | 11.2    | 37.3 UJ,SV7c |
| 53-70-3   | Dibenzo(a,h)anthracene     | U         | 37.3   | ug/kg | 11.2    | 37.3 UJ,SV7c |
| 191-24-2  | Benzo(ghi)perylene         | U         | 37.3   | ug/kg | 11.2    | 37.3         |
| 120-82-1  | 1,2,4-Trichlorobenzene     | U         | 373    | ug/kg | 74.6    | 373          |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.07 | 3080      | ug/kg |     | J    |
|         | Unknown                               | 2.24 | 179       | ug/kg |     | J    |

CLL  
2/23/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114008    | Date Received: 01/23/2010 09:20  | %Moisture: 10.9      |
| Client ID: RE15-10-8422     | Client: LANL010                  | Project: LANL01004   |
| Batch ID: 944874            | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Run Date: 01/29/2010 01:19  | Inst: MSD3.I                     | Dilution: 1          |
| Prep Date: 01/25/2010 21:06 | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Data File: s3a2836.d        | Allquot: 30.1 g                  | Final Volume: 1 mL   |
|                             | Column: J&W DB-5MS               | Level: LOW           |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |  |       | Estimated |       |     |      |
|---|--|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC)    | RT    |           | Units | Fit | Qual |
|   | Unknown Aldol Condensate                 | 3.32  | 207       | ug/kg |     | JA   |
| 7785-70-8                               | 1R- $\alpha$ -Pinene                     | 4.09  | 152       | ug/kg | 98  | NJ   |
| 498-15-7                                | Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy | 4.66  | 184       | ug/kg | 97  | NJ   |
|   | Unknown                                  | 6.69  | 358       | ug/kg |     | J    |
| 1117-52-8                               | 5,9,13-Pentadecatrien-2-one, 6,10,14-tri | 9.86  | 301       | ug/kg | 91  | NJ   |
|   | Unknown                                  | 11.42 | 236       | ug/kg |     | J    |
|   | Unknown                                  | 11.51 | 208       | ug/kg |     | J    |
|   | Unknown                                  | 11.65 | 377       | ug/kg |     | J    |
| 1235-74-1                               | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.76 | 436       | ug/kg | 98  | NJ   |
|   | Unknown                                  | 11.87 | 155       | ug/kg |     | J    |
| 309735-29-3                             | 1,2-Benzisothiazole, 3-(hexahydro-1H-aze | 11.98 | 399       | ug/kg | 90  | NJ   |
|   | Unknown                                  | 12.83 | 263       | ug/kg |     | J    |
|   | Unknown                                  | 12.91 | 280       | ug/kg |     | J    |
|   | Unknown                                  | 12.94 | 447       | ug/kg |     | J    |
|   | Unknown                                  | 15    | 364       | ug/kg |     | J    |
|   | Unknown                                  | 15.66 | 4840      | ug/kg |     | J    |
|   | Unknown                                  | 16.44 | 4890      | ug/kg |     | J    |
|   | Unknown                                  | 16.57 | 511       | ug/kg |     | J    |
|   | Unknown                                  | 17.61 | 1510      | ug/kg |     | J    |
|   | Unknown                                  | 17.77 | 2020      | ug/kg |     | J    |

CLL  
2/23/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114010

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.1  
Analyst: JLD1  
Aliquot: 30.02 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8423  
Batch ID: 944874  
Run Date: 01/27/2010 20:10  
Prep Date: 01/25/2010 21:06  
Data File: s3a2727.d

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|------------|-------------------------------|-----------|--------|-------|---------|-------------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 368    | ug/kg | 73.5    | 368 UJ,SV7c |
| 108-95-2   | Phenol                        | U         | 368    | ug/kg | 73.5    | 368         |
| 95-57-8    | 2-Chlorophenol                | U         | 368    | ug/kg | 73.5    | 368         |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 368    | ug/kg | 73.5    | 368         |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 368    | ug/kg | 73.5    | 368         |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 368    | ug/kg | 73.5    | 368         |
| 83-32-9    | Acenaphthene                  | U         | 36.8   | ug/kg | 12.1    | 36.8        |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 368    | ug/kg | 36.8    | 368         |
| 100-02-7   | 4-Nitrophenol                 | U         | 368    | ug/kg | 121     | 368         |
| 87-86-5    | Pentachlorophenol             | U         | 368    | ug/kg | 91.9    | 368         |
| 129-00-0   | Pyrene                        |           | 38.4   | ug/kg | 11.0    | 36.8        |
| 110-86-1   | Pyridine                      | U         | 368    | ug/kg | 73.5    | 368 UJ,SV7c |
| 62-53-3    | Aniline                       | U         | 368    | ug/kg | 110     | 368         |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 368    | ug/kg | 73.5    | 368 UJ,SV7c |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 368    | ug/kg | 73.5    | 368         |
| 100-51-6   | Benzyl alcohol                | U         | 368    | ug/kg | 110     | 368         |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 368    | ug/kg | 73.5    | 368         |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 368    | ug/kg | 73.5    | 368 UJ,SV7c |
| 95-48-7    | o-Cresol                      | U         | 368    | ug/kg | 73.5    | 368         |
| 65794-96-9 | m,p-Cresols                   | U         | 368    | ug/kg | 110     | 368         |
| 67-72-1    | Hexachloroethane              | U         | 368    | ug/kg | 73.5    | 368         |
| 98-95-3    | Nitrobenzene                  | U         | 368    | ug/kg | 73.5    | 368         |
| 78-59-1    | Isophorone                    | U         | 368    | ug/kg | 73.5    | 368         |
| 88-75-5    | 2-Nitrophenol                 | U         | 368    | ug/kg | 73.5    | 368         |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 368    | ug/kg | 129     | 368         |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 368    | ug/kg | 73.5    | 368         |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 368    | ug/kg | 73.5    | 368         |
| 65-85-0    | Benzoic acid                  | U         | 735    | ug/kg | 184     | 735         |
| 91-20-3    | Naphthalene                   | U         | 36.8   | ug/kg | 11.0    | 36.8        |
| 106-47-8   | 4-Chloroaniline               | U         | 368    | ug/kg | 73.5    | 368         |
| 87-68-3    | Hexachlorobutadiene           | U         | 368    | ug/kg | 73.5    | 368         |
| 91-57-6    | 2-Methylnaphthalene           | U         | 36.8   | ug/kg | 7.35    | 36.8        |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 368    | ug/kg | 73.5    | 368         |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 368    | ug/kg | 73.5    | 368         |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 368    | ug/kg | 73.5    | 368         |
| 91-58-7    | 2-Chloronaphthalene           | U         | 36.8   | ug/kg | 12.1    | 36.8        |
| 88-74-4    | 2-Nitroaniline                | U         | 368    | ug/kg | 73.5    | 368         |
|            | <i>o</i> -Nitroaniline        |           |        |       |         |             |
| 99-09-2    | 3-Nitroaniline                | U         | 368    | ug/kg | 73.5    | 368         |

CLL  
2/23/10



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114010

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.02 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8423  
Batch ID: 944874  
Run Date: 01/27/2010 20:10  
Prep Date: 01/25/2010 21:06  
Data File: s3a2727.d

| CAS No.   | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ      |
|-----------|----------------------------|-----------|--------|-------|---------|--------------|
| 131-11-3  | <i>m</i> -Nitroaniline     |           |        |       |         |              |
|           | Dimethylphthalate          | U         | 368    | ug/kg | 73.5    | 368          |
| 606-20-2  | 2,6-Dinitrotoluene         | U         | 368    | ug/kg | 36.8    | 368          |
| 208-96-8  | Acenaphthylene             | U         | 36.8   | ug/kg | 11.0    | 36.8         |
| 51-28-5   | 2,4-Dinitrophenol          | U         | 735    | ug/kg | 140     | 735          |
| 132-64-9  | Dibenzofuran               | U         | 368    | ug/kg | 73.5    | 368          |
| 84-66-2   | Diethylphthalate           | U         | 368    | ug/kg | 73.5    | 368          |
| 86-73-7   | Fluorene                   | U         | 36.8   | ug/kg | 11.0    | 36.8         |
| 7005-72-3 | 4-Chlorophenylphenylether  | U         | 368    | ug/kg | 73.5    | 368          |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol | U         | 368    | ug/kg | 73.5    | 368 UJ,SV7c  |
| 100-01-6  | 4-Nitroaniline             | U         | 368    | ug/kg | 110     | 368          |
|           | <i>p</i> -Nitroaniline     |           |        |       |         |              |
| 122-39-4  | Diphenylamine              | U         | 368    | ug/kg | 73.5    | 368          |
| 122-66-7  | Azobenzene                 | U         | 368    | ug/kg | 73.5    | 368          |
|           | 1,2-Diphenylhydrazine      |           |        |       |         |              |
| 101-55-3  | 4-Bromophenylphenylether   | U         | 368    | ug/kg | 73.5    | 368          |
| 118-74-1  | Hexachlorobenzene          | U         | 368    | ug/kg | 73.5    | 368          |
| 85-01-8   | Phenanthrene               | J         | 14.9   | ug/kg | 11.0    | 36.8         |
| 120-12-7  | Anthracene                 | U         | 36.8   | ug/kg | 7.35    | 36.8         |
| 84-74-2   | Di-n-butylphthalate        | J         | 244    | ug/kg | 73.5    | 368          |
| 206-44-0  | Fluoranthene               | J         | 18.2   | ug/kg | 11.0    | 36.8         |
| 85-68-7   | Butylbenzylphthalate       | U         | 368    | ug/kg | 73.5    | 368          |
| 56-55-3   | Benzo(a)anthracene         | J         | 14.4   | ug/kg | 11.0    | 36.8         |
| 91-94-1   | 3,3'-Dichlorobenzidine     | U         | 368    | ug/kg | 110     | 368          |
| 218-01-9  | Chrysene                   | J         | 12.4   | ug/kg | 11.0    | 36.8         |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | U         | 368    | ug/kg | 73.5    | 368          |
| 117-84-0  | Di-n-octylphthalate        | U         | 368    | ug/kg | 73.5    | 368          |
| 205-99-2  | Benzo(b)fluoranthene       | U         | 36.8   | ug/kg | 11.0    | 36.8         |
| 207-08-9  | Benzo(k)fluoranthene       | U         | 36.8   | ug/kg | 11.0    | 36.8         |
| 50-32-8   | Benzo(a)pyrene             | J         | 12.8   | ug/kg | 11.0    | 36.8         |
| 193-39-5  | Indeno(1,2,3-cd)pyrene     | U         | 36.8   | ug/kg | 11.0    | 36.8 UJ,SV7c |
| 53-70-3   | Dibenzo(a,h)anthracene     | U         | 36.8   | ug/kg | 11.0    | 36.8 UJ,SV7c |
| 191-24-2  | Benzo(ghi)perylene         | U         | 36.8   | ug/kg | 11.0    | 36.8         |
| 120-82-1  | 1,2,4-Trichlorobenzene     | U         | 368    | ug/kg | 73.5    | 368          |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.11 | 3700      | ug/kg |     | J    |
|         | Unknown                               | 2.29 | 247       | ug/kg |     | J    |

CLL  
2/23/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114010    | Date Received: 01/20/2010 08:45  | %Moisture: 9.4       |
|                             | Client: LANL010                  | Project: LANL01004   |
| Client ID: RE15-10-8423     | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Batch ID: 944874            | Inst: MSD3.1                     | Dilution: 1          |
| Run Date: 01/27/2010 20:10  | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Prep Date: 01/25/2010 21:06 | Aliquot: 30.02 g                 | Final Volume: 1 mL   |
| Data File: s3a2727.d        | Column: J&W DB-5MS               | Level: LOW           |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |  |       | Estimated |       |     |      |
|---|--|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC)    | RT    |           | Units | Fit | Qual |
|   | Unknown Aldol Condensate                 | 3.4   | 192       | ug/kg |     | JA   |
| 3387-41-5                               | Bicyclo[3.1.0]hexane, 4-methylene-1-(1-m | 4.48  | 277       | ug/kg | 83  | NJ   |
| 127-91-3                                | .beta.-Pinene                            | 4.55  | 206       | ug/kg | 97  | NJ   |
| 498-15-7                                | Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy | 4.76  | 1300      | ug/kg | 97  | NJ   |
| 138-86-3                                | Linonene                                 | 4.9   | 251       | ug/kg | 95  | NJ   |
| 1117-52-8                               | 5,9,13-Pentadecatrien-2-one, 6,10,14-tri | 9.96  | 262       | ug/kg | 83  | NJ   |
|   | Unknown                                  | 11.09 | 164       | ug/kg |     | J    |
| 118-65-0                                | Bicyclo[7.2.0]undec-4-ene, 4,11,11-trime | 11.46 | 537       | ug/kg | 92  | NJ   |
|   | Unknown                                  | 11.53 | 485       | ug/kg |     | J    |
| 1686-62-0                               | 1-Phenanthrenecarboxylic acid, 7-ethenyl | 11.75 | 506       | ug/kg | 95  | NJ   |
|   | Unknown                                  | 11.79 | 180       | ug/kg |     | J    |
| 1235-74-1                               | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.87 | 427       | ug/kg | 98  | NJ   |
| 17974-57-1                              | (3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1 | 11.9  | 378       | ug/kg | 90  | NJ   |
|   | Unknown                                  | 12.1  | 191       | ug/kg |     | J    |
|   | Unknown                                  | 12.11 | 249       | ug/kg |     | J    |
|   | Unknown                                  | 12.36 | 309       | ug/kg |     | J    |
|   | Unknown                                  | 12.78 | 227       | ug/kg |     | J    |
| 309735-29-3                             | 1,2-Benzisothiazole, 3-(hexahydro-1H-aze | 13.34 | 269       | ug/kg | 91  | NJ   |
|   | Unknown                                  | 15.09 | 491       | ug/kg |     | J    |
|   | Unknown                                  | 15.19 | 560       | ug/kg |     | J    |
|   | Unknown                                  | 15.82 | 630       | ug/kg |     | J    |
|   | Unknown                                  | 15.89 | 520       | ug/kg |     | J    |
|   | Unknown                                  | 15.98 | 1330      | ug/kg |     | J    |
|   | Unknown                                  | 16.84 | 557       | ug/kg |     | J    |
|   | Unknown                                  | 17.17 | 620       | ug/kg |     | J    |
| 83-47-6                                 | .gamma.-Sitosterol                       | 17.67 | 2010      | ug/kg | 97  | NJ   |
| 1058-61-3                               | Stigmast-4-en-3-one                      | 18.81 | 1310      | ug/kg | 89  | NJ   |

CLL  
2/23/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114013

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Allquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8424  
Batch ID: 944874  
Run Date: 01/29/2010 03:24  
Prep Date: 01/25/2010 21:06  
Data File: s3a2841.d

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|------------|-------------------------------|-----------|--------|-------|---------|-------------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 369    | ug/kg | 73.8    | 369         |
| 108-95-2   | Phenol                        | U         | 369    | ug/kg | 73.8    | 369         |
| 95-57-8    | 2-Chlorophenol                | U         | 369    | ug/kg | 73.8    | 369         |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 369    | ug/kg | 73.8    | 369         |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 369    | ug/kg | 73.8    | 369         |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 369    | ug/kg | 73.8    | 369         |
| 83-32-9    | Acenaphthene                  | U         | 36.9   | ug/kg | 12.2    | 36.9        |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 369    | ug/kg | 36.9    | 369         |
| 100-02-7   | 4-Nitrophenol                 | U         | 369    | ug/kg | 122     | 369         |
| 87-86-5    | Pentachlorophenol             | U         | 369    | ug/kg | 92.2    | 369         |
| 129-00-0   | Pyrene                        | U         | 36.9   | ug/kg | 11.1    | 36.9        |
| 110-86-1   | Pyridine                      | U         | 369    | ug/kg | 73.8    | 369         |
| 62-53-3    | Aniline                       | U         | 369    | ug/kg | 111     | 369         |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 369    | ug/kg | 73.8    | 369 UJ,SV7c |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 369    | ug/kg | 73.8    | 369         |
| 100-51-6   | Benzyl alcohol                | U         | 369    | ug/kg | 111     | 369         |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 369    | ug/kg | 73.8    | 369         |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 369    | ug/kg | 73.8    | 369 UJ,SV7c |
| 95-48-7    | o-Cresol                      | U         | 369    | ug/kg | 73.8    | 369         |
| 65794-96-9 | m,p-Cresols                   | U         | 369    | ug/kg | 111     | 369         |
| 67-72-1    | Hexachloroethane              | U         | 369    | ug/kg | 73.8    | 369         |
| 98-95-3    | Nitrobenzene                  | U         | 369    | ug/kg | 73.8    | 369         |
| 78-59-1    | Isophorone                    | U         | 369    | ug/kg | 73.8    | 369         |
| 88-75-5    | 2-Nitrophenol                 | U         | 369    | ug/kg | 73.8    | 369         |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 369    | ug/kg | 129     | 369         |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 369    | ug/kg | 73.8    | 369         |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 369    | ug/kg | 73.8    | 369         |
| 65-85-0    | Benzoic acid                  | U         | 738    | ug/kg | 184     | 738 UJ,SV7c |
| 91-20-3    | Naphthalene                   | U         | 36.9   | ug/kg | 11.1    | 36.9        |
| 106-47-8   | 4-Chloroaniline               | U         | 369    | ug/kg | 73.8    | 369         |
| 87-68-3    | Hexachlorobutadiene           | U         | 369    | ug/kg | 73.8    | 369         |
| 91-57-6    | 2-Methylnaphthalene           | U         | 36.9   | ug/kg | 7.38    | 36.9        |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 369    | ug/kg | 73.8    | 369         |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 369    | ug/kg | 73.8    | 369         |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 369    | ug/kg | 73.8    | 369         |
| 91-58-7    | 2-Chloronaphthalene           | U         | 36.9   | ug/kg | 12.2    | 36.9        |
| 88-74-4    | 2-Nitroaniline                | U         | 369    | ug/kg | 73.8    | 369         |
| 99-09-2    | o-Nitroaniline                |           |        |       |         |             |
|            | 3-Nitroaniline                | U         | 369    | ug/kg | 73.8    | 369         |

CLL  
2/23/10

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1324  
Lab Sample ID: 245114013

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ      |
|-----------|----------------------------|-----------|--------|-------|---------|--------------|
| 131-11-3  | <i>m</i> -Nitroaniline     |           |        |       |         |              |
|           | Dimethylphthalate          | U         | 369    | ug/kg | 73.8    | 369          |
| 606-20-2  | 2,6-Dinitrotoluene         | U         | 369    | ug/kg | 36.9    | 369          |
| 208-96-8  | Acenaphthylene             | U         | 36.9   | ug/kg | 11.1    | 36.9         |
| 51-28-5   | 2,4-Dinitrophenol          | U         | 738    | ug/kg | 140     | 738          |
| 132-64-9  | Dibenzofuran               | U         | 369    | ug/kg | 73.8    | 369          |
| 84-66-2   | Diethylphthalate           | U         | 369    | ug/kg | 73.8    | 369          |
| 86-73-7   | Fluorene                   | U         | 36.9   | ug/kg | 11.1    | 36.9         |
| 7005-72-3 | 4-Chlorophenylphenylether  | U         | 369    | ug/kg | 73.8    | 369          |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol | U         | 369    | ug/kg | 73.8    | 369 UJ,SV7c  |
| 100-01-6  | 4-Nitroaniline             | U         | 369    | ug/kg | 111     | 369          |
|           | <i>p</i> -Nitroaniline     |           |        |       |         |              |
| 122-39-4  | Diphenylamine              | U         | 369    | ug/kg | 73.8    | 369          |
| 122-66-7  | Azobenzene                 | U         | 369    | ug/kg | 73.8    | 369          |
|           | 1,2-Diphenylhydrazine      |           |        |       |         |              |
| 101-55-3  | 4-Bromophenylphenylether   | U         | 369    | ug/kg | 73.8    | 369          |
| 118-74-1  | Hexachlorobenzene          | U         | 369    | ug/kg | 73.8    | 369          |
| 85-01-8   | Phenanthrene               | U         | 36.9   | ug/kg | 11.1    | 36.9         |
| 120-12-7  | Anthracene                 | U         | 36.9   | ug/kg | 7.38    | 36.9         |
| 84-74-2   | Di-n-butylphthalate        | U         | 369    | ug/kg | 73.8    | 369          |
| 206-44-0  | Fluoranthene               | U         | 36.9   | ug/kg | 11.1    | 36.9         |
| 85-68-7   | Butylbenzylphthalate       | U         | 369    | ug/kg | 73.8    | 369          |
| 56-55-3   | Benzo(a)anthracene         | U         | 36.9   | ug/kg | 11.1    | 36.9         |
| 91-94-1   | 3,3'-Dichlorobenzidine     | U         | 369    | ug/kg | 111     | 369          |
| 218-01-9  | Chrysene                   | U         | 36.9   | ug/kg | 11.1    | 36.9         |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | J         | 170    | ug/kg | 73.8    | 369          |
| 117-84-0  | Di-n-octylphthalate        | U         | 369    | ug/kg | 73.8    | 369          |
| 205-99-2  | Benzo(b)fluoranthene       | U         | 36.9   | ug/kg | 11.1    | 36.9         |
| 207-08-9  | Benzo(k)fluoranthene       | U         | 36.9   | ug/kg | 11.1    | 36.9         |
| 50-32-8   | Benzo(a)pyrene             | U         | 36.9   | ug/kg | 11.1    | 36.9         |
| 193-39-5  | Indeno(1,2,3-cd)pyrene     | U         | 36.9   | ug/kg | 11.1    | 36.9 UJ,SV7c |
| 53-70-3   | Dibenzo(a,h)anthracene     | U         | 36.9   | ug/kg | 11.1    | 36.9 UJ,SV7c |
| 191-24-2  | Benzo(ghi)perylene         | U         | 36.9   | ug/kg | 11.1    | 36.9         |
| 120-82-1  | 1,2,4-Trichlorobenzene     | U         | 369    | ug/kg | 73.8    | 369          |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.09 | 2120      | ug/kg |     | J    |
|         | Unknown                               | 2.26 | 209       | ug/kg |     | J    |

CLL  
2/23/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114013    | Date Received: 01/20/2010 08:45  | %Moisture: 10        |
| Client ID: RE15-10-8424     | Client: LANL010                  | Project: LANL01004   |
| Batch ID: 944874            | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Run Date: 01/29/2010 03:24  | Inst: MSD3.I                     | Dilution: 1          |
| Prep Date: 01/25/2010 21:06 | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Data File: s3a2841.d        | Aliquot: 30.14 g                 | Final Volume: 1 mL   |
|                             | Column: J&W DB-5MS               | Level: LOW           |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |  |       |           |       |     |      |
|---|--|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC)    | RT    | Estimated | Units | Fit | Qual |
|   | Unknown Aldol Condensate                 | 3.33  | 184       | ug/kg |     | JA   |
| 7785-70-8                               | 1R-.alpha.-Pinene                        | 4.1   | 231       | ug/kg | 98  | NJ   |
| 498-15-7                                | Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy | 4.66  | 211       | ug/kg | 97  | NJ   |
|   | Unknown                                  | 11.42 | 415       | ug/kg |     | J    |
|   | Unknown                                  | 11.45 | 158       | ug/kg |     | J    |
| 1686-62-0                               | 1-Phenanthrenecarboxylic acid, 7-ethenyl | 11.64 | 405       | ug/kg | 95  | NJ   |
| 1235-74-1                               | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.76 | 228       | ug/kg | 99  | NJ   |
| 127-25-3                                | Methyl abietate                          | 11.99 | 329       | ug/kg | 86  | NJ   |
|   | Unknown                                  | 15.65 | 1410      | ug/kg |     | J    |
|   | Unknown                                  | 16.42 | 2340      | ug/kg |     | J    |
|   | Unknown                                  | 17.6  | 609       | ug/kg |     | J    |

CLL  
2/23/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114007

Client ID: RE15-10-8425  
Batch ID: 944874  
Run Date: 01/27/2010 18:53  
Prep Date: 01/25/2010 21:06  
Data File: s3a2724.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/23/2010 09:20  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.05 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parm name                     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |         |
|------------|-------------------------------|-----------|--------|-------|---------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 371    | ug/kg | 74.3    | 371     | UJ,SV7c |
| 108-95-2   | Phenol                        | U         | 371    | ug/kg | 74.3    | 371     |         |
| 95-57-8    | 2-Chlorophenol                | U         | 371    | ug/kg | 74.3    | 371     |         |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 371    | ug/kg | 74.3    | 371     |         |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 371    | ug/kg | 74.3    | 371     |         |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 371    | ug/kg | 74.3    | 371     |         |
| 83-32-9    | Acenaphthene                  | U         | 37.1   | ug/kg | 12.3    | 37.1    |         |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 371    | ug/kg | 37.1    | 371     |         |
| 100-02-7   | 4-Nitrophenol                 | U         | 371    | ug/kg | 123     | 371     |         |
| 87-86-5    | Pentachlorophenol             | U         | 371    | ug/kg | 92.9    | 371     |         |
| 129-00-0   | Pyrene                        | U         | 37.1   | ug/kg | 11.1    | 37.1    |         |
| 110-86-1   | Pyridine                      | U         | 371    | ug/kg | 74.3    | 371     | UJ,SV7c |
| 62-53-3    | Aniline                       | U         | 371    | ug/kg | 111     | 371     |         |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 371    | ug/kg | 74.3    | 371     | UJ,SV7c |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 371    | ug/kg | 74.3    | 371     |         |
| 100-51-6   | Benzyl alcohol                | U         | 371    | ug/kg | 111     | 371     |         |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 371    | ug/kg | 74.3    | 371     |         |
| 108-60-1   | bis(2-Chloroisopropyl) ether  | U         | 371    | ug/kg | 74.3    | 371     | UJ,SV7c |
| 95-48-7    | o-Cresol                      | U         | 371    | ug/kg | 74.3    | 371     |         |
| 65794-96-9 | m,p-Cresols                   | U         | 371    | ug/kg | 111     | 371     |         |
| 67-72-1    | Hexachloroethane              | U         | 371    | ug/kg | 74.3    | 371     |         |
| 98-95-3    | Nitrobenzene                  | U         | 371    | ug/kg | 74.3    | 371     |         |
| 78-59-1    | Isophorone                    | U         | 371    | ug/kg | 74.3    | 371     |         |
| 88-75-5    | 2-Nitrophenol                 | U         | 371    | ug/kg | 74.3    | 371     |         |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 371    | ug/kg | 130     | 371     |         |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 371    | ug/kg | 74.3    | 371     |         |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 371    | ug/kg | 74.3    | 371     |         |
| 65-85-0    | Benzoic acid                  | U         | 743    | ug/kg | 186     | 743     |         |
| 91-20-3    | Naphthalene                   | U         | 37.1   | ug/kg | 11.1    | 37.1    |         |
| 106-47-8   | 4-Chloroaniline               | U         | 371    | ug/kg | 74.3    | 371     |         |
| 87-68-3    | Hexachlorobutadiene           | U         | 371    | ug/kg | 74.3    | 371     |         |
| 91-57-6    | 2-Methylnaphthalene           | U         | 37.1   | ug/kg | 7.43    | 37.1    |         |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 371    | ug/kg | 74.3    | 371     |         |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 371    | ug/kg | 74.3    | 371     |         |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 371    | ug/kg | 74.3    | 371     |         |
| 91-58-7    | 2-Chloronaphthalene           | U         | 37.1   | ug/kg | 12.3    | 37.1    |         |
| 88-74-4    | 2-Nitroaniline                | U         | 371    | ug/kg | 74.3    | 371     |         |
| 99-09-2    | o-Nitroaniline                |           |        |       |         |         |         |
|            | 3-Nitroaniline                | U         | 371    | ug/kg | 74.3    | 371     |         |

CLL  
2/23/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114007

Client ID: RE15-10-8425  
Batch ID: 944874  
Run Date: 01/27/2010 18:53  
Prep Date: 01/25/2010 21:06  
Data File: s3a2724.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/23/2010 09:20  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.1  
Analyst: JLD1  
Aliquot: 30.05 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ      |
|-----------|----------------------------|-----------|--------|-------|---------|--------------|
| 131-11-3  | <i>m</i> -Nitroaniline     |           |        |       |         |              |
|           | Dimethylphthalate          | U         | 371    | ug/kg | 74.3    | 371          |
| 606-20-2  | 2,6-Dinitrotoluene         | U         | 371    | ug/kg | 37.1    | 371          |
| 208-96-8  | Acenaphthylene             | U         | 37.1   | ug/kg | 11.1    | 37.1         |
| 51-28-5   | 2,4-Dinitrophenol          | U         | 743    | ug/kg | 141     | 743          |
| 132-64-9  | Dibenzofuran               | U         | 371    | ug/kg | 74.3    | 371          |
| 84-66-2   | Diethylphthalate           | U         | 371    | ug/kg | 74.3    | 371          |
| 86-73-7   | Fluorene                   | U         | 37.1   | ug/kg | 11.1    | 37.1         |
| 7005-72-3 | 4-Chlorophenylphenylether  | U         | 371    | ug/kg | 74.3    | 371          |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol | U         | 371    | ug/kg | 74.3    | 371 UJ,SV7c  |
| 100-01-6  | 4-Nitroaniline             | U         | 371    | ug/kg | 111     | 371          |
|           | <i>p</i> -Nitroaniline     |           |        |       |         |              |
| 122-39-4  | Diphenylamine              | U         | 371    | ug/kg | 74.3    | 371          |
| 122-66-7  | Azobenzene                 | U         | 371    | ug/kg | 74.3    | 371          |
|           | 1,2-Diphenylhydrazine      |           |        |       |         |              |
| 101-55-3  | 4-Bromophenylphenylether   | U         | 371    | ug/kg | 74.3    | 371          |
| 118-74-1  | Hexachlorobenzene          | U         | 371    | ug/kg | 74.3    | 371          |
| 85-01-8   | Phenanthrene               | U         | 37.1   | ug/kg | 11.1    | 37.1         |
| 120-12-7  | Anthracene                 | U         | 37.1   | ug/kg | 7.43    | 37.1         |
| 84-74-2   | Di-n-butylphthalate        | U         | 371    | ug/kg | 74.3    | 371          |
| 206-44-0  | Fluoranthene               | U         | 37.1   | ug/kg | 11.1    | 37.1         |
| 85-68-7   | Butylbenzylphthalate       | U         | 371    | ug/kg | 74.3    | 371          |
| 56-55-3   | Benzo(a)anthracene         | U         | 37.1   | ug/kg | 11.1    | 37.1         |
| 91-94-1   | 3,3'-Dichlorobenzidine     | U         | 371    | ug/kg | 111     | 371          |
| 218-01-9  | Chrysene                   | U         | 37.1   | ug/kg | 11.1    | 37.1         |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | U         | 371    | ug/kg | 74.3    | 371          |
| 117-84-0  | Di-n-octylphthalate        | U         | 371    | ug/kg | 74.3    | 371          |
| 205-99-2  | Benzo(b)fluoranthene       | U         | 37.1   | ug/kg | 11.1    | 37.1         |
| 207-08-9  | Benzo(k)fluoranthene       | U         | 37.1   | ug/kg | 11.1    | 37.1         |
| 50-32-8   | Benzo(a)pyrene             | U         | 37.1   | ug/kg | 11.1    | 37.1         |
| 193-39-5  | Indeno(1,2,3-cd)pyrene     | U         | 37.1   | ug/kg | 11.1    | 37.1 UJ,SV7c |
| 53-70-3   | Dibenzo(a,h)anthracene     | U         | 37.1   | ug/kg | 11.1    | 37.1 UJ,SV7c |
| 191-24-2  | Benzo(ghi)perylene         | U         | 37.1   | ug/kg | 11.1    | 37.1         |
| 120-82-1  | 1,2,4-Trichlorobenzene     | U         | 371    | ug/kg | 74.3    | 371          |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT  | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|-----|-----------|-------|-----|------|
|         | Unknown                               | 2.1 | 2270      | ug/kg |     | J    |
|         | Unknown Aldol Condensate              | 3.4 | 180       | ug/kg |     | JA   |

CLL  
2/23/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114007    | Date Received: 01/23/2010 09:20  | %Moisture: 10.4      |
| Client ID: RE15-10-8425     | Client: LANL010                  | Project: LANL01004   |
| Batch ID: 944874            | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Run Date: 01/27/2010 18:53  | Inst: MSD3.I                     | Dilution: 1          |
| Prep Date: 01/25/2010 21:06 | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Data File: s3a2724.d        | Aliquot: 30.05 g                 | Final Volume: 1 mL   |
|                             | Column: J&W DB-5MS               | Level: LOW           |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |   |       | Estimated |       |     |      |
|---|---|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC)     | RT    |           | Units | Fit | Qual |
|   | Unknown                                   | 11.53 | 163       | ug/kg |     | J    |
|   | Unknown                                   | 11.65 | 177       | ug/kg |     | J    |
| 1686-62-0                               | 1-Phenanthrenecarboxylic acid, 7-ethenyl  | 11.75 | 195       | ug/kg | 90  | NJ   |
| 1235-74-1                               | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4  | 11.87 | 157       | ug/kg | 98  | NJ   |
| 17974-57-1                              | (3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1  | 11.9  | 227       | ug/kg | 90  | NJ   |
|   | Unknown                                   | 11.99 | 169       | ug/kg |     | J    |
|   | Unknown                                   | 15.12 | 3270      | ug/kg |     | J    |
| 70038-20-9                              | 7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimeth | 16    | 3360      | ug/kg | 91  | NJ   |
|   | Unknown                                   | 16.14 | 171       | ug/kg |     | J    |
|   | Unknown                                   | 17.47 | 706       | ug/kg |     | J    |
| 83-47-6                                 | .gamma.-Sitosterol                        | 17.66 | 711       | ug/kg | 91  | NJ   |
|   | Unknown                                   | 18.16 | 157       | ug/kg |     | J    |

CLL  
2/23/10



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114005

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.12 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8441  
Batch ID: 944874  
Run Date: 01/27/2010 16:44  
Prep Date: 01/25/2010 21:06  
Data File: s3a2719.d

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ     |
|------------|-------------------------------|-----------|--------|-------|---------|-------------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 367    | ug/kg | 73.4    | 367 UJ,SV7c |
| 108-95-2   | Phenol                        | U         | 367    | ug/kg | 73.4    | 367         |
| 95-57-8    | 2-Chlorophenol                | U         | 367    | ug/kg | 73.4    | 367         |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 367    | ug/kg | 73.4    | 367         |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 367    | ug/kg | 73.4    | 367         |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 367    | ug/kg | 73.4    | 367         |
| 83-32-9    | Acenaphthene                  | U         | 36.7   | ug/kg | 12.1    | 36.7        |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 367    | ug/kg | 36.7    | 367         |
| 100-02-7   | 4-Nitrophenol                 | U         | 367    | ug/kg | 121     | 367         |
| 87-86-5    | Pentachlorophenol             | U         | 367    | ug/kg | 91.8    | 367         |
| 129-00-0   | Pyrene                        | U         | 36.7   | ug/kg | 11.0    | 36.7        |
| 110-86-1   | Pyridine                      | U         | 367    | ug/kg | 73.4    | 367 UJ,SV7c |
| 62-53-3    | Aniline                       | U         | 367    | ug/kg | 110     | 367         |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 367    | ug/kg | 73.4    | 367 UJ,SV7c |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 367    | ug/kg | 73.4    | 367         |
| 100-51-6   | Benzyl alcohol                | U         | 367    | ug/kg | 110     | 367         |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 367    | ug/kg | 73.4    | 367         |
| 108-60-1   | bis(2-Chloroisopropyl) ether  | U         | 367    | ug/kg | 73.4    | 367 UJ,SV7c |
| 95-48-7    | o-Cresol                      | U         | 367    | ug/kg | 73.4    | 367         |
| 65794-96-9 | m,p-Cresols                   | U         | 367    | ug/kg | 110     | 367         |
| 67-72-1    | Hexachloroethane              | U         | 367    | ug/kg | 73.4    | 367         |
| 98-95-3    | Nitrobenzene                  | U         | 367    | ug/kg | 73.4    | 367         |
| 78-59-1    | Isophorone                    | U         | 367    | ug/kg | 73.4    | 367         |
| 88-75-5    | 2-Nitrophenol                 | U         | 367    | ug/kg | 73.4    | 367         |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 367    | ug/kg | 129     | 367         |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 367    | ug/kg | 73.4    | 367         |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 367    | ug/kg | 73.4    | 367         |
| 65-85-0    | Benzoic acid                  | U         | 734    | ug/kg | 184     | 734         |
| 91-20-3    | Naphthalene                   | U         | 36.7   | ug/kg | 11.0    | 36.7        |
| 106-47-8   | 4-Chloroaniline               | U         | 367    | ug/kg | 73.4    | 367         |
| 87-68-3    | Hexachlorobutadiene           | U         | 367    | ug/kg | 73.4    | 367         |
| 91-57-6    | 2-Methylnaphthalene           | U         | 36.7   | ug/kg | 7.34    | 36.7        |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 367    | ug/kg | 73.4    | 367         |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 367    | ug/kg | 73.4    | 367         |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 367    | ug/kg | 73.4    | 367         |
| 91-58-7    | 2-Chloronaphthalene           | U         | 36.7   | ug/kg | 12.1    | 36.7        |
| 88-74-4    | 2-Nitroaniline                | U         | 367    | ug/kg | 73.4    | 367         |
| 99-09-2    | o-Nitroaniline                |           |        |       |         |             |
|            | 3-Nitroaniline                | U         | 367    | ug/kg | 73.4    | 367         |

CLL  
2/23/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114005

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.12 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8441  
Batch ID: 944874  
Run Date: 01/27/2010 16:44  
Prep Date: 01/25/2010 21:06  
Data File: s3a2719.d

| CAS No.   | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ      |
|-----------|----------------------------|-----------|--------|-------|---------|--------------|
| 131-11-3  | <i>m</i> -Nitroaniline     |           |        |       |         |              |
|           | Dimethylphthalate          | U         | 367    | ug/kg | 73.4    | 367          |
| 606-20-2  | 2,6-Dinitrotoluene         | U         | 367    | ug/kg | 36.7    | 367          |
| 208-96-8  | Acenaphthylene             | U         | 36.7   | ug/kg | 11.0    | 36.7         |
| 51-28-5   | 2,4-Dinitrophenol          | U         | 734    | ug/kg | 140     | 734          |
| 132-64-9  | Dibenzofuran               | U         | 367    | ug/kg | 73.4    | 367          |
| 84-66-2   | Diethylphthalate           | U         | 367    | ug/kg | 73.4    | 367          |
| 86-73-7   | Fluorene                   | U         | 36.7   | ug/kg | 11.0    | 36.7         |
| 7005-72-3 | 4-Chlorophenylphenylether  | U         | 367    | ug/kg | 73.4    | 367          |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol | U         | 367    | ug/kg | 73.4    | 367 UJ,SV7c  |
| 100-01-6  | 4-Nitroaniline             | U         | 367    | ug/kg | 110     | 367          |
|           | <i>p</i> -Nitroaniline     |           |        |       |         |              |
| 122-39-4  | Diphenylamine              | U         | 367    | ug/kg | 73.4    | 367          |
| 122-66-7  | Azobenzene                 | U         | 367    | ug/kg | 73.4    | 367          |
|           | 1,2-Diphenylhydrazine      |           |        |       |         |              |
| 101-55-3  | 4-Bromophenylphenylether   | U         | 367    | ug/kg | 73.4    | 367          |
| 118-74-1  | Hexachlorobenzene          | U         | 367    | ug/kg | 73.4    | 367          |
| 85-01-8   | Phenanthrene               | U         | 36.7   | ug/kg | 11.0    | 36.7         |
| 120-12-7  | Anthracene                 | U         | 36.7   | ug/kg | 7.34    | 36.7         |
| 84-74-2   | Di-n-butylphthalate        | U         | 367    | ug/kg | 73.4    | 367          |
| 206-44-0  | Fluoranthene               | U         | 36.7   | ug/kg | 11.0    | 36.7         |
| 85-68-7   | Butylbenzylphthalate       | U         | 367    | ug/kg | 73.4    | 367          |
| 56-55-3   | Benzo(a)anthracene         | U         | 36.7   | ug/kg | 11.0    | 36.7         |
| 91-94-1   | 3,3'-Dichlorobenzidine     | U         | 367    | ug/kg | 110     | 367          |
| 218-01-9  | Chrysene                   | U         | 36.7   | ug/kg | 11.0    | 36.7         |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | U         | 367    | ug/kg | 73.4    | 367          |
| 117-84-0  | Di-n-octylphthalate        | U         | 367    | ug/kg | 73.4    | 367          |
| 205-99-2  | Benzo(b)fluoranthene       | U         | 36.7   | ug/kg | 11.0    | 36.7         |
| 207-08-9  | Benzo(k)fluoranthene       | U         | 36.7   | ug/kg | 11.0    | 36.7         |
| 50-32-8   | Benzo(a)pyrene             | U         | 36.7   | ug/kg | 11.0    | 36.7         |
| 193-39-5  | Indeno(1,2,3-cd)pyrene     | U         | 36.7   | ug/kg | 11.0    | 36.7 UJ,SV7c |
| 53-70-3   | Dibenzo(a,h)anthracene     | U         | 36.7   | ug/kg | 11.0    | 36.7 UJ,SV7c |
| 191-24-2  | Benzo(ghi)perylene         | U         | 36.7   | ug/kg | 11.0    | 36.7         |
| 120-82-1  | 1,2,4-Trichlorobenzene     | U         | 367    | ug/kg | 73.4    | 367          |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.12 | 1540      | ug/kg |     | J    |
|         | Unknown                               | 2.3  | 150       | ug/kg |     | J    |


CLL  
2/23/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114005    | Date Received: 01/20/2010 08:45  | %Moisture: 9.6       |
| Client ID: RE15-10-8441     | Client: LANL010                  | Project: LANL01004   |
| Batch ID: 944874            | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Run Date: 01/27/2010 16:44  | Inst: MSD3.I                     | Dilution: 1          |
| Prep Date: 01/25/2010 21:06 | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Data File: s3a2719.d        | Aliquot: 30.12 g                 | Final Volume: 1 mL   |
|                             | Column: J&W DB-5MS               | Level: LOW           |

| CAS No.                                 | Parmaame                              | Qualifier | Result    | Units | MDL/LOD | PQL/LOQ |
|---|---------------------------------------|-----------|-----------|-------|---------|---------|
| Tentatively Identified Compound Summary |                                       |           |           |       |         |         |
| CAS No.                                 | Tentatively Identified Compound (TIC) | RT        | Estimated | Units | Fit     | Qual    |
| 7785-70-8                               | Unknown Aldol Condensate              | 3.41      | 180       | ug/kg |         | JA      |
|   | IR-.alpha.-Pinene                     | 4.18      | 200       | ug/kg | 98      | NJ      |
|   | Unknown                               | 5.77      | 184       | ug/kg |         | J       |
|   | Unknown                               | 15.81     | 166       | ug/kg |         | J       |
|   | Unknown                               | 15.99     | 255       | ug/kg |         | J       |

CLL  
2/23/10

| DATA VALIDATION COVER SHEET  |   |
|--|---|
| <b>5122-1</b><br><br><div style="text-align: center; font-weight: bold;">Data Validation Cover Sheet</div> | <div style="text-align: center; font-size: small;">Records Use only</div> <div style="text-align: center;"> <br/> <b>Los Alamos</b><br/> <small>NATIONAL LABORATORY</small><br/> <small>EST. 1945</small> </div> |

| Section I.  |  |  |
|---|--|--|
| REQUEST NUMBER: <u>10-1324</u>  | VALIDATION DATE: <u>2/24/10</u>          | LAB CODE: <u>GEL</u>   |
| CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u>                                     |  |  |
| VALIDATOR: <u>Charissa Lewis</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 type="checkbox"/> GENERAL CHEMISTRY  | <input type="checkbox"/> RADIOCHEMISTRY  | <input checked="" type="checkbox"/> LCMSMS HIGH EXPLOSIVES                   |
|   |  | <input type="checkbox"/> LCMSMS PERCHLORATES                                 |
|   |  | <input type="checkbox"/> ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS |
| <input type="checkbox"/> OTHER (DESCRIBE): _____  |  |  |


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

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


1. It should be noted that the raw ICAL data from the instrument used for the secondary HE analysis were not reported in the data package. Thus, the surrogate RT criteria could not be evaluated. No sample data were qualified as a result.

Reviewed by: Monica Dymerski Level I Date: 02/25/10


VALIDATOR'S SIGNATURE: Charissa Lewis DATE: 2/24/10

| LC/MS/MS HIGH EXPLOSIVE ANALYTICAL DATA VALIDATION CHECKLIST                             |   |
|--|---|
| <b>5122-2</b><br><br><b>LC/MS/MS High Explosive Analytical Data Validation Checklist</b> | Records Use only<br><br> |


| Yes No N/A               |                                     |                                     |   | Assign Qualifier Listed Below If Criterion = Yes |                  |
|--------------------------|-------------------------------------|-------------------------------------|---|--|------------------|
| (Check One)              |                                     |                                     |   | Non-detected Analyte                             | Detected Analyte |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1. The IS retention time has shifted by more than 30 seconds.   | R, UJ, HE0                                       | J, HE0           |
| <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, HE0b  | R, HE0b          |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 3. The quantitating IS area count is <25% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow the method-specific windows. | R, HE1a  | J, HE1a          |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 4. The IS area count for the quantitating IS is <70% but >25% of the average of that obtained from the calibration standards.   | UJ, HE1b   | J+, HE1b         |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 5. The IS area count for the quantitating IS is >130% of the average of that obtained from the calibration standards.   | UJ, HE1c   | J-, HE1c         |
| <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, HE1d  | R, HE1d          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 7. The surrogate is <10%R. Follow the external laboratory limits.   | R, HE3   | J-, HE3          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 8. The surrogate is < the Lower Acceptance Limit but ≥10% recovery. Follow the external laboratory limits.  | UJ, HE3a   | J-, HE3a         |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 9. The surrogate %R value is > the Upper Acceptance Limit. Follow the external laboratory limits.   | N/A  | J+, HE3b         |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 10. At least one surrogate is > the Upper Acceptance Limit and one surrogate is < the Lower Acceptance Limit. Follow the external laboratory limits.  | UJ, HE3c   | J, HE3c          |

| LC/MS/MS HIGH EXPLOSIVE ANALYTICAL DATA VALIDATION CHECKLIST                             |   |
|--|---|
| <b>5122-2</b><br><br><b>LC/MS/MS High Explosive Analytical Data Validation Checklist</b> | Records Use only<br><br> |

| Yes No N/A               |                                     |                                     |   | Assign Qualifier Listed Below If Criterion = Yes |                  |
|--------------------------|-------------------------------------|-------------------------------------|---|--|------------------|
| (Check One)              |                                     |                                     |   | Non-detected Analyte                             | Detected Analyte |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 11. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.  | R, HE3d  | R, HE3d          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 12. The sample result is $\leq 5$ times the concentration of the related analyte in the method blank.   | U, HE4   | N/A              |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $> 5x$ .   | N/A  | J, HE4a          |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 14. The sample result is $\leq 5$ times the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.  | U, HE4d  | N/A              |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.   | R, HE4e  | R, HE4e          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 16. The absence of sample carry-over must be determined and verified.   | N/A  | R, N, HE4f       |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 17. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.   | UJ, HE7  | J, HE7           |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 18. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is less $< 0.99$ . | UJ, R, HE7a                                      | J, HE7a          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 19. The affected analytes were analyzed with a RRF of $< 0.05$ in the initial calibration and/or CCV.   | UJ, R, HE7b                                      | J, HE7b          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 20. The ICV and/or CCV were recovered outside the method limits.  | UJ, R, HE7c                                      | J, HE7c          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 21. The ICV and/or CCV were not analyzed at the appropriate method frequency.   | UJ, R, HE7d                                      | J, HE7d          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 22. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.                                       | R, HE7f  | R, HE7f          |

| LC/MS/MS HIGH EXPLOSIVE ANALYTICAL DATA VALIDATION CHECKLIST                             |   |
|--|---|
| <b>5122-2</b><br><br><b>LC/MS/MS High Explosive Analytical Data Validation Checklist</b> | Records Use only<br><br> |

| Yes No N/A               |                                     |                                     |   | Assign Qualifier Listed Below If Criterion = Yes |                  |
|--------------------------|-------------------------------------|-------------------------------------|---|--|------------------|
| (Check One)              |                                     |                                     |   | Non-detected Analyte                             | Detected Analyte |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 23. The mass spectral documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.   | R, HE8a  | R, HE8a          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 24. The holding time was >1 and ≤2 times the applicable holding time requirement.   | UJ, HE9  | J-, HE9          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 25. The holding time was >2 times the applicable holding time requirement.  | R, HE9a  | J-, HE9a         |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 26. The LCS percent recovery was <10%. Follow the external laboratory limits.   | R, HE12  | J-, HE12         |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 27. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.  | UJ, HE12a  | J-, HE12a        |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 28. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.   | N/A  | J+, HE12b        |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 29. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.   | R, HE12c   | R, HE12c         |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 30. The MS/MSD percent recovery was <10%.   | R, HE12d   | R, HE12d         |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 31. The MS/MSD percent recovery was >10% but <70%.  | UJ, HE12e  | J, HE12e         |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 32. The MS/MSD percent recover was >70%.  | N/A  | J+, HE12f        |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 33. The MS/MSD relative percent difference was >30%.  | UJ, HE12g  | J, HE12g         |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 34. 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, HE15                                      | R, HE15          |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 35. The sample was diluted because target analytes were > the initial verification calibration.   | UJ, HE15a  | J, HE15a         |

| LC/MS/MS HIGH EXPLOSIVE ANALYTICAL DATA VALIDATION CHECKLIST                             |   |
|--|---|
| <b>5122-2</b><br><br><b>LC/MS/MS High Explosive Analytical Data Validation Checklist</b> | Records Use only<br><br> |

| Yes No N/A<br><br>(Check One) |                                     |                                     |  | Assign Qualifier Listed Below If<br>Criterion = Yes |                     |
|-------------------------------|-------------------------------------|-------------------------------------|--|---|---------------------|
|                               |                                     |                                     |  | Non-detected<br>Analyte                             | Detected<br>Analyte |
| <input type="checkbox"/>      | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 36. The Contract Required Detection Limit Check Standard (CRI) sample did not pass method acceptance criteria.   | UJ, R, HE16   | J, HE16             |
| <input type="checkbox"/>      | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 37. The required CRI sample information is missing. Contact the SMO or external laboratory for information.  | R, HE16c  | R, HE16c            |
| <input type="checkbox"/>      | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 38. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist. | UJ, R, HE19   | J, R, HE19          |
| <input type="checkbox"/>      | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 39. Duplicate, dilution, or reanalysis.  | UJ, HE88  | J, HE88             |



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8410

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114002

Sample Amount 2

Moisture: 24.9

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208041a

Date Analyzed: 09-FEB-10 10:24

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8410

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114002

Sample Amount 2

Moisture: 24.9

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100016.wiff

Date Analyzed: 10-FEB-10 12:23

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8411

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114003

Sample Amount 2

Moisture: 15.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208044a

Date Analyzed: 09-FEB-10 11:53

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

|                  |   |                             |   |                 |
|------------------|---|-----------------------------|---|-----------------|
| Instrument Value | X | Concentrated Extract Volume | X | Dilution Factor |
|                  |   | Sample Amount               |   |                 |

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8411

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114003

Sample Amount 2

Moisture: 15.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100019.wiff

Date Analyzed: 10-FEB-10 13:10

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8412

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114004

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208045a

Date Analyzed: 09-FEB-10 12:22

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

|                  |   |                             |   |                 |
|------------------|---|-----------------------------|---|-----------------|
| Instrument Value | X | Concentrated Extract Volume | X | Dilution Factor |
|                  |   | Sample Amount               |   |                 |

CLL  
2/24/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8412

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114004

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100020.wiff

Date Analyzed: 10-FEB-10 13:25

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8441

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114005

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208046a

Date Analyzed: 09-FEB-10 12:52

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8441

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114005

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100021.wiff

Date Analyzed: 10-FEB-10 13:41

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

|                  |   |                             |   |                 |
|------------------|---|-----------------------------|---|-----------------|
| Instrument Value | X | Concentrated Extract Volume | X | Dilution Factor |
|                  |   | Sample Amount               |   |                 |

CLL  
2/24/10



High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8413

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114006

Sample Amount 2

Moisture: 10.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208047a

Date Analyzed: 09-FEB-10 13:21

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8413

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114006

Sample Amount 2

Moisture: 10.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100022.wiff

Date Analyzed: 10-FEB-10 13:57

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8425

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114007

Sample Amount 2

Moisture: 10.4

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208048a

Date Analyzed: 09-FEB-10 13:51

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8425

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114007

Sample Amount 2

Moisture: 10.4

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100023.wiff

Date Analyzed: 10-FEB-10 14:12

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8422

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114008

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208052a

Date Analyzed: 09-FEB-10 15:49

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8422

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114008

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100027.wiff

Date Analyzed: 10-FEB-10 15:15

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8417

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114009

Sample Amount 2

Moisture: 5.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208053a

Date Analyzed: 09-FEB-10 16:18

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8417

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114009

Sample Amount 2

Moisture: 5.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100028.wiff

Date Analyzed: 10-FEB-10 15:31

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument X Concentrated Extract Volume X Dilution  
Value Sample Amount Factor

CLL  
2/24/10



High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8423

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114010

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208054a

Date Analyzed: 09-FEB-10 16:48

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8423

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114010

Sample Amount 2

Molsture: 9.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100029.wiff

Date Analyzed: 10-FEB-10 15:47

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8416

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114011

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208055a

Date Analyzed: 09-FEB-10 17:17

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8416

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114011

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100030.wiff

Date Analyzed: 10-FEB-10 16:02

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8418

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114012

Sample Amount 2

Moisture: 11.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208056a

Date Analyzed: 09-FEB-10 17:47

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8418

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114012

Sample Amount 2

Moisture: 11.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100031.wiff

Date Analyzed: 10-FEB-10 16:18

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8424

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114013

Sample Amount 2

Moisture: 10.0

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 244249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208057a

Date Analyzed: 09-FEB-10 18:16

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8424

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114013

Sample Amount 2

Moisture: 10.0

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100032.wiff

Date Analyzed: 10-FEB-10 16:34

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8421

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114014

Sample Amount 2

Moisture: 12.5

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208058a

Date Analyzed: 09-FEB-10 18:46

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8421

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114014

Sample Amount 2

Moisture: 12.5

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100033.wiff

Date Analyzed: 10-FEB-10 16:50

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8420

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114015

Sample Amount 2

Moisture: 30.1

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208059a

Date Analyzed: 09-FEB-10 19:15

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8420

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114015

Sample Amount 2

Moisture: 30.1

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100034.wiff

Date Analyzed: 10-FEB-10 17:05


Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

CLL  
2/24/10

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

**Section I.**

REQUEST NUMBER: 10-1324      VALIDATION DATE: 2/25/10      LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Charissa Lewis      ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

None

**Reviewed by:** Monica Dymerski      **Level I**      **Date:** 02/25/10

VALIDATOR'S SIGNATURE: \_\_\_\_\_

*Charissa Lewis*

DATE: 2/25/10

# **ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST**

5116-2

## **Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist**

Records Use only



| Yes No N/A<br>(Check One) |                                     |                                     |  | Assign Qualifier Listed Below If<br>Criterion = Yes |                     |
|---------------------------|-------------------------------------|-------------------------------------|--|---|---------------------|
|                           |                                     |                                     |  | Non-detected<br>Analyte                             | Detected<br>Analyte |
| <input type="checkbox"/>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1. The holding time was >1 and ≤2 times the applicable holding time requirement.   | UJ, P9  | J-, P9              |
| <input type="checkbox"/>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 2. The holding time was >2 times the applicable holding time requirement.  | R, P9   | J-, P9a             |
| <input type="checkbox"/>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.  | R, P9b  | R, P9b              |
| <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, P7   | J, P7               |
| <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, P7a   | J, P7a              |
| <input type="checkbox"/>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.  | UJ, P7c   | J, P7c              |
| <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, P7d   | J, P7d              |
| <input type="checkbox"/>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.   | R, P7e  | J, P7e              |
| <input type="checkbox"/>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.   | R, P7f  | R, P7f              |
| <input type="checkbox"/>  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin). | UJ, R, P13  | J-, P13             |

# **ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST**


5116-2

## **Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist**

Records Use only



| Yes No N/A<br>(Check One) |                                     |                                     |   | Assign Qualifier Listed Below If<br>Criterion = Yes |                     |
|---------------------------|-------------------------------------|-------------------------------------|---|---|---------------------|
|                           |                                     |                                     |   | Non-detected<br>Analyte                             | Detected<br>Analyte |
| <input type="checkbox"/>  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE. | UJ, P13a  | J+, P13a            |
| <input type="checkbox"/>  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.   | R, P13b   | R, P13b             |
| <input type="checkbox"/>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 13. The sample result is $\leq 5X$ the concentration of the related analyte in the method blank.  | U, P4   | N/A                 |
| <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 greater than 5X.   | N/A   | J, P4a              |
| <input type="checkbox"/>  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 15. The sample result is $\leq 5X$ the concentration of the related analyte in the instrument blank and continuing calibration blank.   | UJ, P4b   | N/A                 |
| <input type="checkbox"/>  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 16. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.   | UJ, P4d   | N/A                 |
| <input type="checkbox"/>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.   | R, P4e  | R, P4e              |
| <input type="checkbox"/>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.  | R, P0   | J, P0               |
| <input type="checkbox"/>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.   | R, P0b  | R, P0b              |
| <input type="checkbox"/>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 20. The surrogate is $<10\%R$ . Follow the external laboratory limits located within the associated data package.   | R, P3   | J-, P3              |

| ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB)<br>ANALYTICAL DATA VALIDATION CHECKLIST                          |   |
|---|---|
| <b>5116-2</b><br><br><b>Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist</b> | Records Use only<br><br> |

| Yes No N/A               |                                     |                          | Assign Qualifier Listed Below If<br>Criterion = Yes  | Non-detected<br>Analyte | Detected<br>Analyte |
|--------------------------|-------------------------------------|--------------------------|--|-------------------------|---------------------|
| (Check One)              |                                     |                          |  |                         |                     |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.                               | UJ, P3a                 | J-, P3a             |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.   | N/A                     | J+, P3b             |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package. | UJ, P3c                 | J, P3c              |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.   | R, P3d                  | R, P3d              |
| <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, P12                  | J-, P12             |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.   | UJ, P12a                | J-, P12a            |
| <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+, P12b            |
| <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.  | R, P12c                 | R, P12c             |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 29. The analyte was not confirmed on a second dissimilar column.   | N/A                     | R, P8               |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.                             | R, P8a                  | R, P8a              |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 31. Duplicate, Dilution, or reanalysis.  | UJ, P88                 | J, P88              |



**ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB)  
ANALYTICAL DATA VALIDATION CHECKLIST**

5116-2

**Organochlorine Pesticide (PEST) and Polychlorinated  
Biphenyl (PCB) Analytical Data Validation Checklist**

Records Use only



| Yes No N/A                          |                                     |                                     |   | Assign Qualifier Listed Below If<br>Criterion = Yes |                     |
|-------------------------------------|-------------------------------------|-------------------------------------|---|---|---------------------|
| (Check One)                         |                                     |                                     |   | Non-detected<br>Analyte                             | Detected<br>Analyte |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 32. The affected analytes have elevated detection limits and may not meet project DQOs 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, P15  | R, P15              |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | 33. 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,<br>NQ |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.  | UJ, R, P19  | J, R, P19           |

## PCB

Page 1 of 1

Certificate of Analysis  
Sample SummarySDG Number: 10-1324  
Lab Sample ID: 245114002Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.J  
Analyst: YS1  
Aliquot: 30.04 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
%Moisture: 24.9  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parname      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ | Column |
|------------|--------------|-----------|--------|-------|---------|---------|--------|
| 12674-11-2 | Aroclor-1016 | U         | 4.43   | ug/kg | 1.48    | 4.43    | 1      |
| 11104-28-2 | Aroclor-1221 | U         | 4.43   | ug/kg | 1.48    | 4.43    | 1      |
| 11141-16-5 | Aroclor-1232 | U         | 4.43   | ug/kg | 1.48    | 4.43    | 1      |
| 53469-21-9 | Aroclor-1242 | U         | 4.43   | ug/kg | 1.48    | 4.43    | 1      |
| 12672-29-6 | Aroclor-1248 | U         | 4.43   | ug/kg | 1.48    | 4.43    | 1      |
| 11097-69-1 | Aroclor-1254 | U         | 4.43   | ug/kg | 1.48    | 4.43    | 1      |
| 11096-82-5 | Aroclor-1260 | U         | 4.43   | ug/kg | 1.48    | 4.43    | 1      |

CLL  
2/25/10

## PCB

Page 1 of 1

Certificate of Analysis  
Sample SummarySDG Number: 10-1324  
Lab Sample ID: 245114003Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.J  
Analyst: YS1  
Aliquot: 30.07 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
% Moisture: 15.4  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ | Column |
|------------|--------------|-----------|--------|-------|---------|---------|--------|
| 12674-11-2 | Aroclor-1016 | U         | 3.93   | ug/kg | 1.31    | 3.93    | 1      |
| 11104-28-2 | Aroclor-1221 | U         | 3.93   | ug/kg | 1.31    | 3.93    | 1      |
| 11141-16-5 | Aroclor-1232 | U         | 3.93   | ug/kg | 1.31    | 3.93    | 1      |
| 53469-21-9 | Aroclor-1242 | U         | 3.93   | ug/kg | 1.31    | 3.93    | 1      |
| 12672-29-6 | Aroclor-1248 | U         | 3.93   | ug/kg | 1.31    | 3.93    | 1      |
| 11097-69-1 | Aroclor-1254 | U         | 3.93   | ug/kg | 1.31    | 3.93    | 1      |
| 11096-82-5 | Aroclor-1260 | U         | 3.93   | ug/kg | 1.31    | 3.93    | 1      |

CLL  
2/25/10

**PCB**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114004

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.15 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
% Moisture: 7.6  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8412  
Batch ID: 944883  
Run Date: 01/28/2010 18:11  
Prep Date: 01/25/2010 20:44  
Data File: 049f4901.d  
049b4901.d

| CAS No.    | Parname      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ | Column |
|------------|--------------|-----------|--------|-------|---------|---------|--------|
| 12674-11-2 | Aroclor-1016 | U         | 3.59   | ug/kg | 1.20    | 3.59    | 1      |
| 11104-28-2 | Aroclor-1221 | U         | 3.59   | ug/kg | 1.20    | 3.59    | 1      |
| 11141-16-5 | Aroclor-1232 | U         | 3.59   | ug/kg | 1.20    | 3.59    | 1      |
| 53469-21-9 | Aroclor-1242 | U         | 3.59   | ug/kg | 1.20    | 3.59    | 1      |
| 12672-29-6 | Aroclor-1248 | U         | 3.59   | ug/kg | 1.20    | 3.59    | 1      |
| 11097-69-1 | Aroclor-1254 | P         | 4.60   | ug/kg | 1.20    | 3.59    | 1      |
| 11096-82-5 | Aroclor-1260 | J         | 2.50   | ug/kg | 1.20    | 3.59    | 1      |

## PCB

Page 1 of 1

Certificate of Analysis  
Sample SummarySDG Number: 10-1324  
Lab Sample ID: 245114006Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.J  
Analyst: YS1  
Aliquot: 30.17 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
%Moisture: 10.6  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOWClient ID: RE15-10-8413  
Batch ID: 944883  
Run Date: 01/28/2010 19:03  
Prep Date: 01/25/2010 20:44  
Data File: 053f5301.d  
053b5301.d

| CAS No.    | Parmname     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ | Column |
|------------|--------------|-----------|--------|-------|---------|---------|--------|
| 12674-11-2 | Aroclor-1016 | U         | 3.71   | ug/kg | 1.23    | 3.71    | 1      |
| 11104-28-2 | Aroclor-1221 | U         | 3.71   | ug/kg | 1.23    | 3.71    | 1      |
| 11141-16-5 | Aroclor-1232 | U         | 3.71   | ug/kg | 1.23    | 3.71    | 1      |
| 53469-21-9 | Aroclor-1242 | U         | 3.71   | ug/kg | 1.23    | 3.71    | 1      |
| 12672-29-6 | Aroclor-1248 | U         | 3.71   | ug/kg | 1.23    | 3.71    | 1      |
| 11097-69-1 | Aroclor-1254 | P         | 6.50   | ug/kg | 1.23    | 3.71    | 1      |
| 11096-82-5 | Aroclor-1260 | U         | 3.71   | ug/kg | 1.23    | 3.71    | 1      |

CLL  
2/25/10

## PCB

Page 1 of 1

Certificate of Analysis  
Sample Summary

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114005    | Date Received: 01/20/2010 08:45  | %Moisture: 9.6       |
| Client ID: RE15-10-8441     | Client: LANL010                  | Project: LANL01004   |
| Batch ID: 944883            | Method: SW846 8082               | SOP Ref: GL-OA-E-040 |
| Run Date: 01/28/2010 18:23  | Inst: ECD1A.I                    | Dilution: 1          |
| Prep Date: 01/25/2010 20:44 | Analyst: YS1                     | Inj. Vol: 1 uL       |
| Data File: 050f5001.d       | Aliquot: 30.18 g                 | Final Volume: 1 mL   |
| 050b5001.d                  | Column: 1 CLP1                   | Level: LOW           |
|                             | 2 CLP2                           |                      |

| CAS No.    | Parmname     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ | Column |
|------------|--------------|-----------|--------|-------|---------|---------|--------|
| 12674-11-2 | Aroclor-1016 | U         | 3.66   | ug/kg | 1.22    | 3.66    | 1      |
| 11104-28-2 | Aroclor-1221 | U         | 3.66   | ug/kg | 1.22    | 3.66    | 1      |
| 11141-16-5 | Aroclor-1232 | U         | 3.66   | ug/kg | 1.22    | 3.66    | 1      |
| 53469-21-9 | Aroclor-1242 | U         | 3.66   | ug/kg | 1.22    | 3.66    | 1      |
| 12672-29-6 | Aroclor-1248 | U         | 3.66   | ug/kg | 1.22    | 3.66    | 1      |
| 11097-69-1 | Aroclor-1254 | P         | 5.00   | ug/kg | 1.22    | 3.66    | 1      |
| 11096-82-5 | Aroclor-1260 | U         | 3.66   | ug/kg | 1.22    | 3.66    | 1      |

Tuesday, January 19, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1324

LOS ALAMOS

REQUEST NUMBER: 10-1324

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/18/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

2451141

| SAMPLE ID    | CTNR | CTNR DESC          | ORDER              | PRESERV | MATRIX |
|--------------|------|--------------------|--------------------|---------|--------|
| RE15-10-8447 | 1    | SEPTUM AMBER GLASS | 8260B Trip Blank   | Ice     | S      |
| RE15-10-8410 | 1    | AMBER GLASS        | 8082+8270+NMED-EXP | Ice     | R      |
| RE15-10-8410 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8411 | 1    | AMBER GLASS        | 8082+8270+NMED-EXP | Ice     | R      |
| RE15-10-8411 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8412 | 1    | AMBER GLASS        | 8082+8270+NMED-EXP | Ice     | R      |
| RE15-10-8412 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8441 | 1    | AMBER GLASS        | 8082+8270+NMED-EXP | Ice     | R      |
| RE15-10-8441 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8413 | 1    | AMBER GLASS        | 8082+8270+NMED-EXP | Ice     | R      |
| RE15-10-8413 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8425 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8425 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8422 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8422 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8417 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8417 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8423 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8423 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8416 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8416 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8418 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8418 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8424 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8424 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8421 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8421 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8420 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8420 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |

Relinquished By:

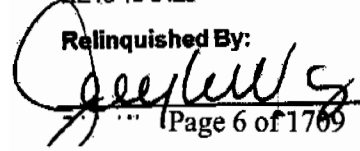
Date

Time

Received By:

Date

Time


  
 Jeep Williams

1/19/10 1400

 Patricia Dore-Dent P. Williams
   
 1-20-10 08:45

Tuesday, January 19, 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: 10-1324  
Per Agreement Number: 126310011  
Project Cost Code: MR3A05529E00

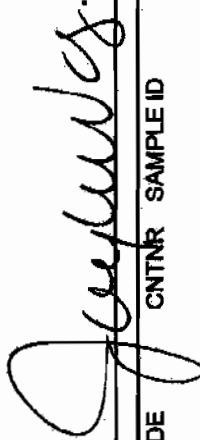
Please analyse the enclosed samples  
according to the schedule indicated:

SHIP DATE: 1/19/2010  
TURNAROUND/REPORT DUE: 2/18/2010  
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-846-8082  | 1     | RE15-10-8410 | R             | 1/14/2010    |                      |
|          |              | 1     | RE15-10-8411 | R             | 1/14/2010    |                      |
|          |              | 1     | RE15-10-8412 | R             | 1/14/2010    |                      |
|          |              | 1     | RE15-10-8413 | R             | 1/14/2010    |                      |
|          |              | 1     | RE15-10-8441 | R             | 1/14/2010    |                      |
|          | SW-846-8260B | 1     | RE15-10-8410 | R             | 1/14/2010    |                      |
|          |              | 1     | RE15-10-8411 | R             | 1/14/2010    |                      |
|          |              | 1     | RE15-10-8412 | R             | 1/14/2010    |                      |
|          |              | 1     | RE15-10-8413 | R             | 1/14/2010    |                      |



Tuesday, January 19, 2010

REQUEST NUMBER: 10-1324

| PRIORITY | METHOD CODE      | CNTNR | SAMPLE ID    | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|----------|------------------|-------|--------------|---------------|--------------|----------------------|
|          | SW-846-8280B     | 1     | RE15-10-8416 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8417 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8418 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8420 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8421 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8422 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8423 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8424 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8425 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8441 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8447 | S             | 1/14/2010    |                      |
|          | SW-846-8270C     | 1     | RE15-10-8410 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8411 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8412 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8413 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8416 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8417 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8418 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8420 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8421 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8422 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8423 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8424 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8425 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8441 | R             | 1/14/2010    |                      |
|          | SW-846-8321A_MOD | 1     | RE15-10-8410 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8411 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8412 | R             | 1/14/2010    |                      |

REQUEST NUMBER: 10-1324

Tuesday, January 19, 2010

| PRIORITY | METHOD CODE      | CNTNR | SAMPLE ID    | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|----------|------------------|-------|--------------|---------------|--------------|----------------------|
|          | SW-846:9321A_MOD | 1     | RE15-10-8413 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8416 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8417 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8418 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8420 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8421 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8422 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8423 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8424 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8425 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8441 | R             | 1/14/2010    |                      |

Final Page of REQUEST NUMBER 10-1324



January 22, 2010

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

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

Re: LANL ER Project  
Work Order: 245114  
SDG: 10-1324

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on January 20, 2010, and analyzed for Explosives by LCMSMS, GC Semivolatile PCB, GC/MS Semivolatile and GC/MS Volatile. 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: 10-1324  
Enclosures

**Los Alamos National Laboratory (72733-001-09)**  
**LANL ER Project**  
**Work Order #: 245114**  
**SDG: 10-1324**

## TABLE OF CONTENTS

|  |      |
|--|------|
| Case Narrative.....                                | 1    |
| Chain of Custody and Supporting Documentation..... | 5    |
| Data Review Qualifier Flag Definition Sheet.....   | 19   |
| GC/MS Volatile Analysis.....                       | 21   |
| Case Narrative.....                                | 22   |
| Sample Data Summary.....                           | 28   |
| Quality Control Summary.....                       | 62   |
| Sample Data.....                                   | 88   |
| Standards.....                                     | 289  |
| Quality Control Data.....                          | 338  |
| Miscellaneous.....                                 | 407  |
| GC/MS Semivolatile Analysis.....                   | 413  |
| Sample Data Summary.....                           | 421  |
| QC Summary.....                                    | 464  |
| Sample Data.....                                   | 489  |
| Standard Data.....                                 | 907  |
| QC Data.....                                       | 998  |
| Miscellaneous Data.....                            | 1048 |
| LC/MS/MS Explosives Analysis.....                  | 1107 |
| Sample Data Summary.....                           | 1113 |
| Quality Control Summary.....                       | 1142 |
| Sample Data.....                                   | 1206 |
| Standards Data.....                                | 1305 |
| Quality Control Data.....                          | 1397 |
| Miscellaneous Data.....                            | 1428 |
| GC Semivolatile PCB Analysis.....                  | 1437 |

|                              |      |
|------------------------------|------|
| Sample Data Summary.....     | 1444 |
| Quality Control Summary..... | 1450 |
| Sample Data.....             | 1456 |
| Standards Data.....          | 1492 |
| Quality Control Data.....    | 1659 |
| Miscellaneous Data.....      | 1690 |

# **Case Narrative**

**Case Narrative for  
Los Alamos National Laboratory (72733-001-09)  
LANL ER Project  
Workorder #: 245114  
SDG # : 10-1324**

**January 22, 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 January 20, 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. Please see attached e-mail for discrepancies. 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:

| <b><u>Laboratory ID</u></b> | <b><u>Client ID</u></b> |
|-----------------------------|-------------------------|
| 245114001                   | RE15-10-8447            |
| 245114002                   | RE15-10-8410            |
| 245114003                   | RE15-10-8411            |
| 245114004                   | RE15-10-8412            |
| 245114005                   | RE15-10-8441            |
| 245114006                   | RE15-10-8413            |
| 245114007                   | RE15-10-8425            |
| 245114008                   | RE15-10-8422            |
| 245114009                   | RE15-10-8417            |
| 245114010                   | RE15-10-8423            |
| 245114011                   | RE15-10-8416            |
| 245114012                   | RE15-10-8418            |
| 245114013                   | RE15-10-8424            |
| 245114014                   | RE15-10-8421            |
| 245114015                   | RE15-10-8420            |

**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: Explosives by LCMSMS, GC Semivolatile PCB, GC/MS Semivolatile and GC/MS Volatile.

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



Valerie Davis

Project Manager

**List of current GEL Certifications as of 22 January 2010**

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

# **Chain of Custody and Supporting Documentation**

Tuesday, January 19, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1324

LOS ALAMOS

REQUEST NUMBER: 10-1324

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/18/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

2451141

| SAMPLE ID    | CTNR | CTNR DESC          | ORDER              | PRESERV | MATRIX |
|--------------|------|--------------------|--------------------|---------|--------|
| RE15-10-8447 | 1    | SEPTUM AMBER GLASS | 8260B Trip Blank   | Ice     | S      |
| RE15-10-8410 | 1    | AMBER GLASS        | 8082+8270+NMED-EXP | Ice     | R      |
| RE15-10-8410 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8411 | 1    | AMBER GLASS        | 8082+8270+NMED-EXP | Ice     | R      |
| RE15-10-8411 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8412 | 1    | AMBER GLASS        | 8082+8270+NMED-EXP | Ice     | R      |
| RE15-10-8412 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8441 | 1    | AMBER GLASS        | 8082+8270+NMED-EXP | Ice     | R      |
| RE15-10-8441 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8413 | 1    | AMBER GLASS        | 8082+8270+NMED-EXP | Ice     | R      |
| RE15-10-8413 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8425 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8425 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8422 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8422 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8417 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8417 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8423 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8423 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8416 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8416 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8418 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8418 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8424 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8424 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8421 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8421 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |
| RE15-10-8420 | 1    | SEPTUM AMBER GLASS | 8260B              | Ice     | R      |
| RE15-10-8420 | 1    | AMBER GLASS        | 8270C+NMED Exp     | Ice     | R      |

Relinquished By:

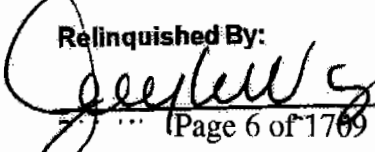
Date

Time

Received By:

Date

Time


 1/19/10 1400 Patricia Dover-Dent P. W. Dent 1-20-10 08:45

Tuesday, January 19, 2010

**LOS ALAMOS**  
NATIONAL LABORATORY

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

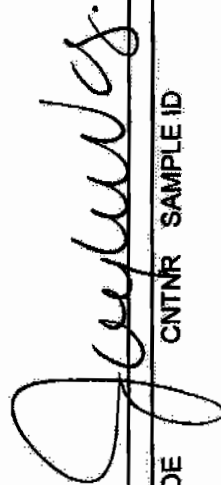
Please analyse the enclosed samples  
according to the schedule indicated:

SHIP DATE: 1/19/2010  
TURNAROUND/REPORT DUE: 2/18/2010  
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-846-8082  | 1     | RE15-10-8410 | R             | 1/14/2010    |                      |
|          |              | 1     | RE15-10-8411 | R             | 1/14/2010    |                      |
|          |              | 1     | RE15-10-8412 | R             | 1/14/2010    |                      |
|          |              | 1     | RE15-10-8413 | R             | 1/14/2010    |                      |
|          |              | 1     | RE15-10-8441 | R             | 1/14/2010    |                      |
|          | SW-846-8260B | 1     | RE15-10-8410 | R             | 1/14/2010    |                      |
|          |              | 1     | RE15-10-8411 | R             | 1/14/2010    |                      |
|          |              | 1     | RE15-10-8412 | R             | 1/14/2010    |                      |
|          |              | 1     | RE15-10-8413 | R             | 1/14/2010    |                      |

Tuesday, January 19, 2010

Page 2 of 3

REQUEST NUMBER: 10-1324

| PRIORITY | METHOD CODE      | CNTNR | SAMPLE ID    | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|----------|------------------|-------|--------------|---------------|--------------|----------------------|
|          | SW-846.8280B     | 1     | RE15-10-8416 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8417 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8418 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8420 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8421 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8422 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8423 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8424 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8425 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8441 | R             | 1/14/2010    |                      |
|          | SW-846.8270C     | 1     | RE15-10-8447 | S             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8410 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8411 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8412 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8413 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8416 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8417 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8418 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8420 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8421 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8422 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8423 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8424 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8425 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8441 | R             | 1/14/2010    |                      |
|          | SW-846.8321A_MOD | 1     | RE15-10-8410 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8411 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8412 | R             | 1/14/2010    |                      |

Tuesday, January 19, 2010

Page 3 of 3

REQUEST NUMBER: 10-1324

| PRIORITY | METHOD CODE      | CNTNR | SAMPLE ID    | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|----------|------------------|-------|--------------|---------------|--------------|----------------------|
|          | SW-846-8321A_MOD | 1     | RE15-10-8413 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8416 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8417 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8418 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8420 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8421 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8422 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8423 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8424 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8425 | R             | 1/14/2010    |                      |
|          |                  | 1     | RE15-10-8441 | R             | 1/14/2010    |                      |

Final Page of REQUEST NUMBER 10-1324

|                                     |     |                                 |   |
|-------------------------------------|-----|---------------------------------|---|
| Client: LANL                        |     | SDG/ARCOC/Work Order: 10-1324   |   |
| Received By: Patricia Dover-Dent    |     | Date Received: January 20, 2009 |   |
| 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*: 80 CPM  |
| Classified Radioactive II by RSO?   |     | X                               |   |
| COC/Samples marked containing PCBs? |     | X                               |   |
| Shipped as a DOT Hazardous?         |     | X                               | Hazard Class Shipped: UN#:  |
| Samples identified as Foreign Soil? |     | X                               |   |

| Sample Receipt Criteria   | Yes | NA | No | Comments/Qualifiers (Required for Non-Conforming Items)  |
|---|-----|----|----|--|
| 1 Shipping containers received intact and sealed?                 | X   |    |    | Circle Applicable:<br>seals broken    damaged container    leaking container    other (describe)         |
| 2 Samples requiring cold preservation within 0 ≤ 6 deg. C?        | X   |    |    | Preservation Method:<br>ice bags    blue ice    dry ice    none    other (describe)<br>2-5C    12-15,17C |
| 3 Chain of custody documents included with shipment?              | X   |    |    |  |
| 4 Sample containers intact and sealed?                            | X   |    |    | Circle Applicable:<br>seals broken    damaged container    leaking container    other (describe)         |
| 5 Samples requiring chemical preservation at proper pH?           |     | X  |    | Sample ID's, containers affected and observed pH:<br>If Preservation added, Lot#:                        |
| 6 VOA vials free of headspace (defined as < 6mm bubble)?          |     | X  |    | Sample ID's and containers affected:   |
| 7 Are Encore containers present?                                  |     |    | X  | (If yes, immediately deliver to Volatiles laboratory)  |
| 8 Samples received within holding time?                           | X   |    |    | Id's and tests affected:   |
| 9 Sample ID's on COC match ID's on bottles?                       | X   |    |    | Sample ID's and containers affected:   |
| 10 Date & time on COC match date & time on bottles?               |     |    | X  | Sample ID's affected:<br>time written on containers, not on COC  |
| 11 Number of containers received match number indicated on COC?   |     |    | X  | Sample ID's affected: Please see attached E-mail   |
| 12 COC form is properly signed in relinquished/received sections? | X   |    |    |  |

Comments: FEDEX#S

7209 7849 5644 2C    ~~7209 7849 5302 12C~~    7209 7849 5817 14C  
 7209 7849 5725 2C    7209 7849 5828 4C    7209 7849 5872 14C  
 7209 7849 5736 2C    7209 7849 5839 4C    7209 7849 5703 15C  
 7209 7849 5840 2C    7209 7849 5861 4C    7209 7849 5633 17C  
 7209 7849 5688 3C    7209 7849 5883 4C  
 7209 7849 5850 3C    7209 7849 5747 5C  
 7209 7849 5655 4C    7209 7849 6055 5C  
 7209 7849 5666 4C    7209 7849 5677 12C  
 7209 7849 5714 4C    7209 7849 5699 13C



**Subject:** Re: Sample Receipt for 1/20/10

**From:** Dionne Francis <Dionne.Francis@gel.com>

**Date:** Mon, 25 Jan 2010 10:47:59 -0500

**To:** "Keith R. Greene" <kgreene@lanl.gov>, Joylene Valdez <joylenev@lanl.gov>, Valerie Davis <vsd@gel.com>

Good Morning Keith,

The lab rec'd all the missing containers listed below on 1/23/10.

Thanks,  
Dionne

Dionne Francis wrote:

Keith,

RN 10-1337: the lab did not receive the amber glass NMED Explosives container for sample WSTWA-10-11330.

RN 10-1299: the lab rec'd (1) 40ml vial 8260B container for sample RE46-10-11171 instead of (2) as indicated on the COC.

RN 10-1292: the lab rec'd (1) 40ml vial 8260B container each for samples RE46-10-11311 and 11324 instead of (2) as indicated on the COC.

RN 10-1294: the lab rec'd (1) 40ml vial 8260B container for sample RE16-10-1019 instead of (2) as indicated on the COC.

RN 10-1301: the lab rec'd (1) 40ml vial 8260B container for sample RE15-10-7234 instead of (2) as indicated on the COC.

RN 10-1293: the TCN container for sample RE46-10-11309 was preserved prior to analysis.

RN 10-1334: the lab did not receive any vial containers for sample RE16-10-1084.

RN 10-1335: the lab did not receive a poly NO3NO2 container for sample RE16-10-1084.

RN 10-1300: the Metals and TCN were preserved prior to analysis.

RN 10-1327: containers not rec'd  
none for samples RE15-10-7208, 7201, 7220  
amber glass 8260B containers for samples RE15-10-7207, 7199, 7206, 7202  
amber glass 8270C+NMED Exp containers for samples RE15-10-7210, 7204, 7221

RN 10-1325: containers not rec'd  
poly Perchlorate+CN+NO3+PH for samples RE15-10-8425, 8412, 8410, 8417  
poly METALS+U for sample RE15-10-8417

RN 10-1330: containers not rec'd  
amber glass 8270+NMED Exp for samples RE16-10-965, 981, 1008, 8416  
amber glass 8260B for sample RE16-10-959

RN 10-1324: containers not rec'd  
amber glass 8270+NMED Exp for samples RE15-10-8422, 8425  
amber glass 8260B for samples RE15-10-8410, 8411, 8420, 8418, 8424, 8413, 8422, 8425

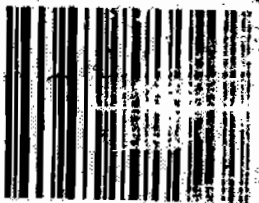
RN 10-1339: the lab did not receive amber glass 8081A, 8082, TPH-GRO containers for sample WSTCB-10-11545. However, we rec'd amber glass containers with the same test for sample WSTCB-10-11543 without a COC. Please advise.

Thanks,  
Dionne

--  
Dionne Francis  
Project Manager Assistant  
GEL Laboratories, LLC  
2040 Savage Road  
Charleston, SC (USA) 29407  
Direct: 843.769.7376 Ext. 4432  
Main: 843.556.8171  
Fax: 843.766.1178  
E-mail: [daf@gel.com](mailto:daf@gel.com)  
Web: [www.gel.com](http://www.gel.com)

Let the Bible fill the memory, rule the heart, and guide the feet.





SHIP DATE: 19JAN10  
ACTWGT: 62.0 LB MAN  
CAD: 0014176/CAFE2449

BILL SENDER

CHS  
SC-US

29407

2c

PRIORITY OVERNIGHT  
TUE - 19JAN A1

FedEx  
Express



3 of 3  
7209 7849 5644  
7209 7849 5622 0201

WED - 20JAN A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

XX CHSA



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: 19JAN10  
ACTWGT: 62.0 LB MAN  
CAD: 0014176/CAFE2449

BILL SENDER

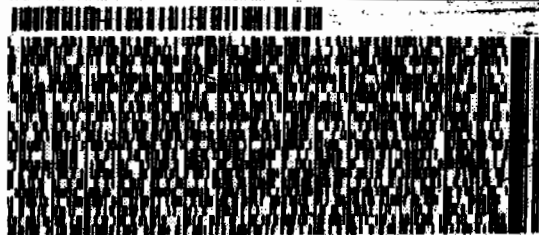
VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(943) 556-9171  
REF: 68010AMR2A0515BYDU

2c

FedEx  
Express



2 of 2  
7209 7849 5736  
7209 7849 5725 0201

WED - 20JAN A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

XX CHSA

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: 19JAN10  
ACTWGT: 61.8 LB MAN  
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(943) 556-9171  
REF: 68010AMR2A0515BYDU

2c



FedEx  
Express



1 of 2  
7209 7849 5725  
7209 7849 5725 0201

WED - 20JAN A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

XX CHSA



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: 19JAN10  
ACTWGT: 61.8 LB MAN  
CAD: 0014176/CAFE2449

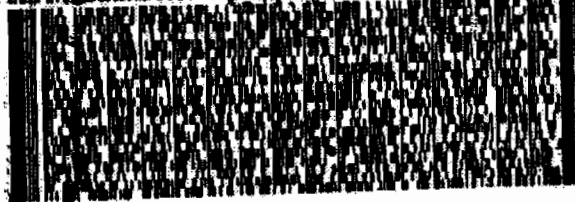
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(943) 556-9171  
REF: 68010AMR3A05529E00

2c



FedEx  
Express



2 of 2  
7209 7849 5840  
7209 7849 5839 0201

WED - 20JAN A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

XX CHSA

LOS ALAMOS NATL LAB  
700 BLDG 1237 DPU 03  
LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 19 JAN 80  
ACTWGT: 53.0 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171  
REF: 6B010AMR3A05529E00

3c



2 of 2  
PSK 7209 7849 5688  
str 7209 7849 5877 0201

WED - 20 JAN A1  
PRIORITY OVERNIGHT

XX CHSA

29407  
SC-US  
CHS



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

SHIP DATE: 19 JAN 80  
ACTWGT: 54.0 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171  
REF: 6B010AMR3A05529E00

4c



1 of 2  
PSK 7209 7849 5655  
NN MASTER NN

WED - 20 JAN A1  
PRIORITY OVERNIGHT

XX CHSA

29407  
SC-US  
CHS

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

SHIP DATE: 19 JAN 80  
ACTWGT: 52.0 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171  
REF: 6B010AMR3A05529E00

3c

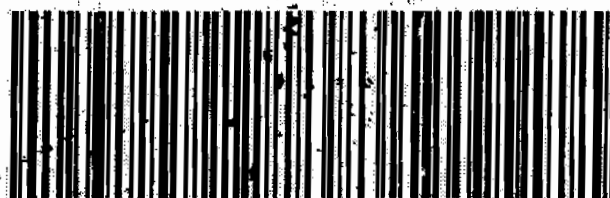


PSK 7209 7849 5850  
str 7209 7849 5877 0201

WED - 20 JAN A1  
PRIORITY OVERNIGHT

XX CHSA

29407  
SC-US  
CHS



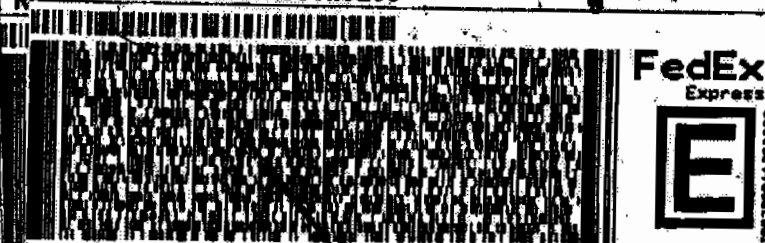
ORIGIN ID: SAFA (505) 665-9968  
JO: EILENE VALDEZ  
LOS ALAMOS NATL LAB  
700 BLDG 1237 DPU 03  
LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 19 JAN 80  
ACTWGT: 54.0 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171  
REF: 6B010AMR3A05529E00

4c



2 of 2  
PSK 7209 7849 5666  
str 7209 7849 5655 0201

WED - 20 JAN A1  
PRIORITY OVERNIGHT

XX CHSA

29407  
SC-US  
CHS

JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAG# BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 19JAN10  
ACTWT: 54.0 LB MAN  
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR2A05158YDO

4C



3 of 3  
MPSH 7209 7849 5714  
Matr# 7209 7849 5699 0201

WED - 20JAN A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

XX CHSA



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

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 19JAN10  
ACTWT: 54.0 LB MAN  
CAD: 0014176/CAFE2449

BILL SENDER

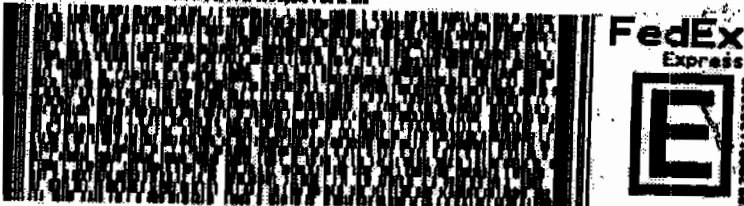
VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A03529E00

4C



1 of 2  
TRKH 7209 7849 5839  
IN MASTER NH

WED - 20JAN A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

XX CHSA

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

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 19JAN10  
ACTWT: 51.0 LB MAN  
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A03529E00

4C



3 of 3  
MPSH 7209 7849 5828  
Matr# 7209 7849 5806 0201

WED - 20JAN A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

XX CHSA



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

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 19JAN10  
ACTWT: 51.0 LB MAN  
CAD: 0014176/CAFE2449

BILL SENDER

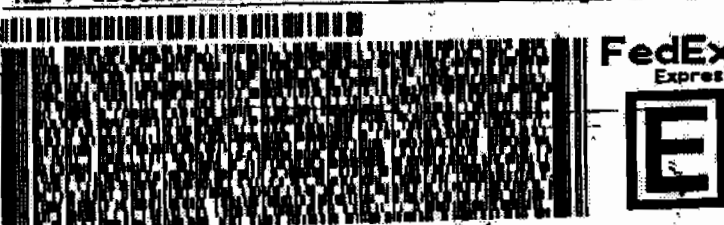
VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A03529A00

4C



TRKH 7209 7849 5861

WED - 20JAN A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

XX CHSA



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

SHIP DATE: 19JAN10  
ACTWGT: 37.0 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171  
REF: 6B010AMR1A0130Y0000

4c



WED - 20JAN A1  
PRIORITY OVERNIGHT  
RKH 7209 7849 5883  
201

XX CHSA

29407  
SC-US  
CHS



GIN 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: 19JAN10  
ACTWGT: 36.0 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171  
F: 6B010AME6L11550000

5c



WED - 20JAN A1  
PRIORITY OVERNIGHT  
7209 7849 6055  
201

XX CHSA

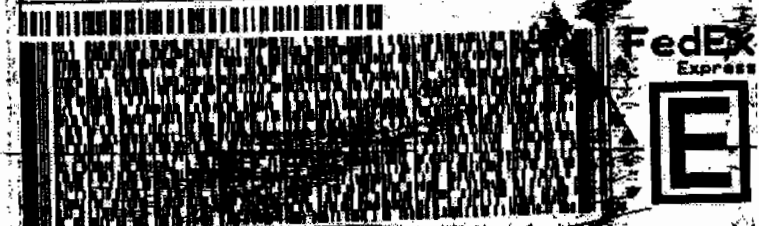
29407  
SC-US  
CHS

SHIP DATE: 19JAN10  
ACTWGT: 55.0 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171  
REF: 6B010AMR2A0515BYD0

5c



WED - 20JAN A1  
PRIORITY OVERNIGHT  
RKH 7209 7849 5747  
0201

XX CHSA

29407  
SC-US  
CHS



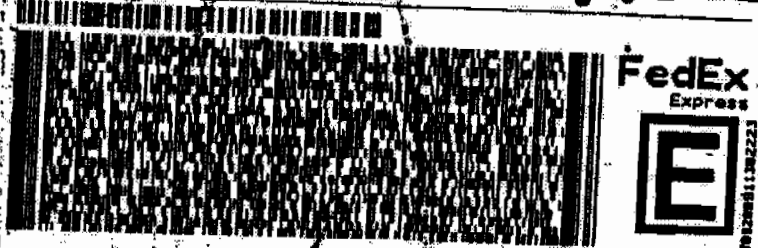
ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03  
LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 19JAN10  
ACTWGT: 61.0 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171  
REF: 6B010AMR3A05520E00

12c



1 of 2  
TRKH 7209 7849 5677  
0201  
NN MASTER NN  
WED - 20JAN A1  
PRIORITY OVERNIGHT

XX CHSA

29407

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: 19JAN10  
ACTWGT: 41.0 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171  
REF: 6B010AMR2A0515BYDO

13c



1 of 3  
TRKH 7209 7849 5699  
NM MASTER NM

WED - 20 JAN A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

XX CHSA



Part 8 156148-434 NRIT V3 04-05

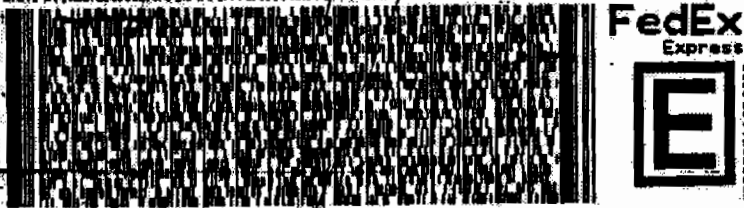
ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03  
LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 19JAN10  
ACTWGT: 48.0 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171  
REF: 6B010AMR3A05529E00

14c

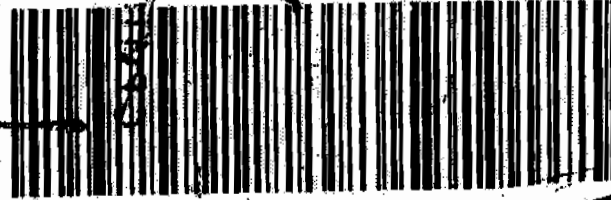


2 of 3  
MPSH 7209 7849 5817  
Mstr-N 7209 7849 5806 0201

WED - 20 JAN A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

XX CHSA



Part 8 156148-434 NRIT V3 04-05

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: 19JAN10  
ACTWGT: 127.0 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171  
REF: 6B010AMR3A0352VA00

14c



TRKH 7209 7849 5872  
0201

WED - 20 JAN A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

YY CHSA

IN ID: SAFA (505) 555-9968  
JOYLENE VALDEZ  
ALAMOS NATL LAB  
BLDG 1237 DPU 03

SHIP DATE: 19JAN10  
ACTWGT: 46.0 LB MAN  
CAD: 0014176/CAFE2445

ALAMOS, NM 87645  
UNITED STATES US

BILL SENDER

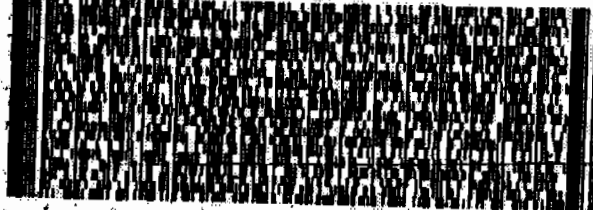
VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171  
REF: 6B010AMR2A0515BYDO

15

NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES



FedEx  
Express



JAN200911302223

2 of 3  
NPS# 7209 7849 5703  
Matr# 7209 7849 5699 0201

WED - 20JAN A1  
PRIORITY OVERNIGHT

XX CHSA

29407  
SC-US  
CHS



ORIGIN ID: SAFA (505) 555-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGO BLDG 1237 DPU 03  
LOS ALAMOS, NM 87540  
UNITED STATES US

SHIP DATE: 19JAN10  
ACTWGT: 67.0 LB MAN  
CAD: 0014176/CAFE2449

BILL SENDER

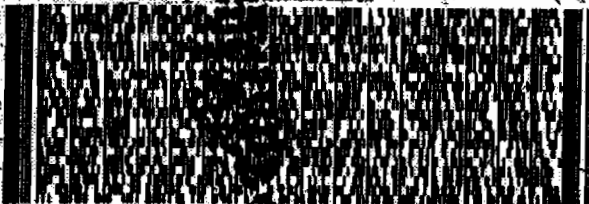
VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171  
REF: 6B010AMR2A05529E00

17c

NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES



FedEx  
Express



JAN200911302223

2 of 3  
NPS# 7209 7849 5633  
Matr# 7209 7849 5622 0201

WED - 20JAN A1  
PRIORITY OVERNIGHT

XX CHSA

29407  
SC-US  
CHS



# **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.

# **GC/MS Volatile Analysis**

# Case Narrative

**ChemStation Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1324**

**Method/Analysis Information**

Procedure: Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer  
Analytical Method: SW846 8260B  
Prep Method: SW846 5030  
Analytical Batch Number: 946008  
Prep Batch Number: 946006

**Sample Analysis**

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

| <b>Sample ID</b> | <b>Client ID</b>                                   |
|------------------|--|
| 245114001        | RE15-10-8447                                       |
| 245114002        | RE15-10-8410                                       |
| 245114003        | RE15-10-8411                                       |
| 245114004        | RE15-10-8412                                       |
| 245114005        | RE15-10-8441                                       |
| 245114006        | RE15-10-8413                                       |
| 245114007        | RE15-10-8425                                       |
| 245114008        | RE15-10-8422                                       |
| 245114009        | RE15-10-8417                                       |
| 245114010        | RE15-10-8423                                       |
| 245114011        | RE15-10-8416                                       |
| 245114012        | RE15-10-8418                                       |
| 245114013        | RE15-10-8424                                       |
| 245114014        | RE15-10-8421                                       |
| 245114015        | RE15-10-8420                                       |
| 1202037689       | High Blank (HB)                                    |
| 1202026235       | Method Blank (MB)                                  |
| 1202026238       | Laboratory Control Sample (LCS)                    |
| 1202026239       | Laboratory Control Sample (LCS)                    |
| 1202037686       | Method Blank (MB)                                  |
| 1202037687       | Laboratory Control Sample (LCS)                    |
| 1202037688       | Laboratory Control Sample (LCS)                    |
| 1202026236       | 245114002(RE15-10-8410) Post Spike (PS)            |
| 1202026237       | 245114002(RE15-10-8410) Post Spike Duplicate (PSD) |

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.

Samples 245114 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014 and 015 in this SDG were analyzed on an "dry weight" basis. Samples 245114 001 in this SDG were analyzed on a "as received" basis.

**Preparation/Analytical Method Verification**

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories

LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 13.

Raw data reports are processed and reviewed by the analyst using the Chemstation software package. False positives have been removed from the quantitation reports per standard operating procedures (SOP) section 19.1.2. False positive analytes are designated on the quantitation report with a 'd' qualifier.

#### **Calibration Information**

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

#### **Initial Calibration**

All initial calibration requirements have been met for this sample delivery groups (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

#### **Continuing Calibration Verification Requirements**

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

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

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

The MBs analyzed with this SDG met the acceptance criteria.

##### **Surrogate Recoveries**

Samples 1202026237 (RE15-10-8410MS), 245114002 (RE15-10-8410), 245114004 (RE15-10-8412) and 245114006 (RE15-10-8413) did not pass surrogate recoveries. Sample re-analysis and/or spike analysis confirmed the results. It is believed matrix interference has been demonstrated. See DER 7894073

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

The LCS spike recoveries met the acceptance limits.

##### **QC Sample Designation**

Sample 245114002 (RE15-10-8410) was designated for spike analysis in this SDG.

##### **Matrix Spike (PS) Recovery Statement**

The spike recoveries were not all within the acceptance limits. The spike duplicate recovered in a similar manner. The results are reported. See DER 789407.

##### **Matrix Spike Duplicate (PSD) Recovery Statement**

The spike duplicate recoveries were not all within the acceptance limits. The spike duplicate recovered in a similar manner. The results are reported. See DER 789407.

##### **Relative Percent Difference (RPD) Statement**

The RPD between the matrix spike pair were not all within the acceptance limits. The results are reported. See DER 789407.

**Internal Standard (ISTD) Acceptance**

In samples 1202026236 (RE15-10-8410MS), 1202026237 (RE15-10-8410MSD), 245114002 (RE15-10-8410), 245114003 (RE15-10-8411), 245114006 (RE15-10-8413) and 245114010 (RE15-10-8423), internal standard responses were outside the required acceptance criteria. Sample re-analysis and/or spike analyses confirmed the results. It is believed matrix interference has been demonstrated. See DER 7894073

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

GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or 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. Sample 245114006 (RE15-10-8413) was initially analyzed within holding and did not have acceptable surrogate recoveries or internal standard responses. The sample was not re-analyzed within holding due to sample capacity but it was analyzed within two times the hold period. The re-analysis results passed and are reported. See DER 789407.

**Sample Preservation and Integrity**

All samples met the sample preservation and integrity requirements.

**Sample Dilutions Methanol Dilutions**

Sample 245114003 (RE15-10-8411DL) was diluted using the methanol extraction procedure for medium-level concentration samples because target analyte concentrations exceeded the calibration range

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

Re-analyses were required for samples in this SDG due to unacceptable recoveries in the initial analysis.

**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. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Data Exception (DER) Documentation**

DER # 789407 was generated for this SDG.

**Manual Integrations**

Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

**TIC Comment**

Tentatively identified compounds (TIC) were required for this sample delivery group/work order. The tentatively identified compounds included some silanols. These compounds were due to column or septum bleed and were not native to the affected samples. Please note that non-requested target analytes that are reported on the quantitation reports will not be present on the Form I. These detected analytes are included in the calibrated method and as a result cannot be reported on the TIC quantitation report.

**Additional Comments**

Additional comments were not required for this SDG.

**Residual Chlorine**

Residual Chlorine was not detected in any of the samples in this SDG.

**System Configuration**

The Volatile-GC/MS analysis was performed on the following instrument configuration:

| <b>Instrument ID</b> | <b>Instrument</b>                   | <b>System Configuration</b> | <b>Column ID</b> | <b>Column Description</b> | <b>P &amp; T Trap</b> |
|----------------------|-------------------------------------|-----------------------------|------------------|---------------------------|-----------------------|
| VOA5.I               | Gas Chromatograph/Mass Spectrometer | HP6890N/HP5975              | DB-624           | J&W, 60m x 0.25mm x 1.4um | Trap 10               |

**Certification Statement**

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



## 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: 10-1324 GEL Work Order: 245114

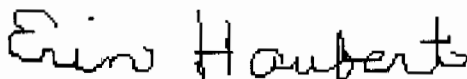
**The Qualifiers in this report are defined as follows:**

- \* A quality control analyte recovery is outside of specified acceptance criteria
- \*\* Analyte is a surrogate compound
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- H Analytical holding time was exceeded
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

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

Signature: 

Name: Erin Haubert

Date: 13 FEB 2010

Title: Data Validator

# **Sample Data Summary**

**Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 2

SDG Number: 10-1324  
Lab Sample ID: 245114001

Client ID: RE15-10-8447  
Batch ID: 946008  
Run Date: 01/28/2010 11:28  
Prep Date: 01/28/2009 11:01  
Data File: 012810V55V406.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: S  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.00   | ug/kg | 0.340   | 1.00    |
| 74-87-3    | Chloromethane               | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-01-4    | Vinyl chloride              | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-83-9    | Bromomethane                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-00-3    | Chloroethane                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 67-64-1    | Acetone                     | J         | 2.80   | ug/kg | 1.66    | 5.00    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-88-4    | Iodomethane                 | U         | 5.00   | ug/kg | 1.60    | 5.00    |
| 75-09-2    | Methylene chloride          | U         | 5.00   | ug/kg | 2.00    | 5.00    |
| 75-15-0    | Carbon disulfide            | U         | 5.00   | ug/kg | 1.25    | 5.00    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 78-93-3    | 2-Butanone                  | U         | 5.00   | ug/kg | 1.50    | 5.00    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 67-66-3    | Chloroform                  | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-97-5    | Bromochloromethane          | U         | 1.00   | ug/kg | 0.330   | 1.00    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 71-43-2    | Benzene                     | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 79-01-6    | Trichloroethylene           | U         | 1.00   | ug/kg | 0.330   | 1.00    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-27-4    | Bromodichloromethane        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-95-3    | Dibromomethane              | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.00   | ug/kg | 1.25    | 5.00    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-88-3   | Toluene                     | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 591-78-6   | 2-Hexanone                  | U         | 5.00   | ug/kg | 1.50    | 5.00    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 124-48-1   | Dibromochloromethane        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-90-7   | Chlorobenzene               | U         | 1.00   | ug/kg | 0.300   | 1.00    |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114001  
 Client ID: RE15-10-8447  
 Batch ID: 946008  
 Run Date: 01/28/2010 11:28  
 Prep Date: 01/28/2009 11:01  
 Data File: 012810V55V406.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: S  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.00   | ug/kg | 0.300   | 2.00    |
| 95-47-6     | o-Xylene                              | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 100-42-5    | Styrene                               | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-25-2     | Bromoform                             | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-86-1    | Bromobenzene                          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.00   | ug/kg | 1.60    | 5.00    |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.00   | ug/kg | 0.300   | 1.00    |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114002  
  
Client ID: RE15-10-8410  
Batch ID: 946008  
Run Date: 01/28/2010 11:53  
Prep Date: 01/28/2009 11:02  
Data File: 012810V5SV407.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
% Moisture: 24.9  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.33   | ug/kg | 0.453   | 1.33    |
| 74-87-3    | Chloromethane               | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 75-01-4    | Vinyl chloride              | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 74-83-9    | Bromomethane                | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 75-00-3    | Chloroethane                | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 67-64-1    | Acetone                     | J         | 2.97   | ug/kg | 2.21    | 6.66    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 74-88-4    | Iodomethane                 | U         | 6.66   | ug/kg | 2.13    | 6.66    |
| 75-09-2    | Methylene chloride          | J         | 2.90   | ug/kg | 2.66    | 6.66    |
| 75-15-0    | Carbon disulfide            | U         | 6.66   | ug/kg | 1.66    | 6.66    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 78-93-3    | 2-Butanone                  | U         | 6.66   | ug/kg | 2.00    | 6.66    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 67-66-3    | Chloroform                  | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 74-97-5    | Bromochloromethane          | U         | 1.33   | ug/kg | 0.440   | 1.33    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 71-43-2    | Benzene                     | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 79-01-6    | Trichloroethylene           | U         | 1.33   | ug/kg | 0.440   | 1.33    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 75-27-4    | Bromodichloromethane        | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 74-95-3    | Dibromomethane              | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 6.66   | ug/kg | 1.66    | 6.66    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 108-88-3   | Toluene                     | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 591-78-6   | 2-Hexanone                  | U         | 6.66   | ug/kg | 2.00    | 6.66    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 124-48-1   | Dibromochloromethane        | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 108-90-7   | Chlorobenzene               | U         | 1.33   | ug/kg | 0.400   | 1.33    |

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114002  
  
Client ID: RE15-10-8410  
Batch ID: 946008  
Run Date: 01/28/2010 11:53  
Prep Date: 01/28/2009 11:02  
Data File: 012810V55V407.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 24.9  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.66   | ug/kg | 0.400   | 2.66    |
| 95-47-6     | o-Xylene                              | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 100-42-5    | Styrene                               | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 75-25-2     | Bromoform                             | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 108-86-1    | Bromobenzene                          | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 6.66   | ug/kg | 2.13    | 6.66    |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.33   | ug/kg | 0.400   | 1.33    |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114003  
  
Client ID: RE15-10-8411  
Batch ID: 946008  
Run Date: 01/28/2010 12:19  
Prep Date: 01/28/2009 11:05  
Data File: 012810V55V408.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 15.4  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.18   | ug/kg | 0.402   | 1.18    |
| 74-87-3    | Chloromethane               | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 75-01-4    | Vinyl chloride              | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 74-83-9    | Bromomethane                | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 75-00-3    | Chloroethane                | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 67-64-1    | Acetone                     | F         | 710    | ug/kg | 1.96    | 5.91    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 74-88-4    | Iodomethane                 | U         | 5.91   | ug/kg | 1.89    | 5.91    |
| 75-09-2    | Methylene chloride          | J         | 4.34   | ug/kg | 2.36    | 5.91    |
| 75-15-0    | Carbon disulfide            | U         | 5.91   | ug/kg | 1.48    | 5.91    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 78-93-3    | 2-Butanone                  | U         | 5.91   | ug/kg | 1.77    | 5.91    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 67-66-3    | Chloroform                  | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 74-97-5    | Bromoethanol                | U         | 1.18   | ug/kg | 0.390   | 1.18    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 71-43-2    | Benzene                     | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 79-01-6    | Trichloroethylene           | U         | 1.18   | ug/kg | 0.390   | 1.18    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 75-27-4    | Bromodichloromethane        | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 74-95-3    | Dibromomethane              | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.91   | ug/kg | 1.48    | 5.91    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 108-88-3   | Toluene                     |           | 18.5   | ug/kg | 0.354   | 1.18    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 591-78-6   | 2-Hexanone                  | U         | 5.91   | ug/kg | 1.77    | 5.91    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 124-48-1   | Dibromochloromethane        | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 108-90-7   | Chlorobenzene               | U         | 1.18   | ug/kg | 0.354   | 1.18    |

**Volatile  
Certificate of Analysis  
Sample Summary**

Page 2 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114003  
  
Client ID: RE15-10-8411  
Batch ID: 946008  
Run Date: 01/28/2010 12:19  
Prep Date: 01/28/2009 11:05  
Data File: 012810V5\SV408.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
% Moisture: 15.4  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 179601-23-1 | m,p-Xylenes                           | J         | 0.732  | ug/kg | 0.354   | 2.36    |
| 95-47-6     | o-Xylene                              | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 100-42-5    | Styrene                               | J         | 0.555  | ug/kg | 0.354   | 1.18    |
| 75-25-2     | Bromoform                             | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 108-86-1    | Bromobenzene                          | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.91   | ug/kg | 1.89    | 5.91    |
|             | Trichlorotrifluoroethane              |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.18   | ug/kg | 0.354   | 1.18    |

**Tentatively Identified Compound Summary**

| CAS No.     | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|-------------|---------------------------------------|-------|-----------|-------|-----|------|
| 000508-32-7 | Tricyclo[2.2.1.0(2,6)]heptane, 1,7    | 14.45 | 7.11      | ug/kg | 96  | NJ   |
| 007785-70-8 | 1R- $\alpha$ -Pinene                  | 14.57 | 887       | ug/kg | 97  | NJ   |
| 000079-92-5 | Camphene                              | 14.89 | 33.2      | ug/kg | 97  | NJ   |
| 003479-89-8 | 1,3,5-Cycloheptatriene, 3,7,7-trim    | 15.18 | 13.1      | ug/kg | 95  | NJ   |
| 013466-78-9 | 3-Carene                              | 15.58 | 946       | ug/kg | 97  | NJ   |
| 000099-86-5 | 1,3-Cyclohexadiene, 1-methyl-4-(1-    | 15.66 | 6.98      | ug/kg | 97  | NJ   |
| 013898-73-2 | Cyclohexene, 1-methyl-5-(1-methyle    | 15.75 | 7.09      | ug/kg | 93  | NJ   |
| 000138-86-3 | Limonene                              | 15.8  | 1390      | ug/kg | 95  | NJ   |
| 000527-84-4 | Benzene, 1-methyl-2-(1-methylethyl    | 15.83 | 731       | ug/kg | 93  | NJ   |
| 000099-85-4 | 1,4-Cyclohexadiene, 1-methyl-4-(1-    | 16.12 | 17.8      | ug/kg | 96  | NJ   |



**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114003  
  
Client ID: RE15-10-8411  
Batch ID: 946008  
Run Date: 01/28/2010 12:19  
Prep Date: 01/28/2009 11:05  
Data File: 012810V55V408.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
% Moisture: 15.4  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.  | Parmname                              | Qualifier | Result    | Units | MDL/LOD | PQL/LOQ |
|--|---------------------------------------|-----------|-----------|-------|---------|---------|
| <b>Tentatively Identified Compound Summary</b> |                                       |           |           |       |         |         |
| CAS No.  | Tentatively Identified Compound (TIC) | RT        | Estimated | Units | Fit     | Qual    |
| 029050-33-7                                    | (+)-4-Carene                          | 16.54     | 118       | ug/kg | 97      | NJ      |
| 001195-32-0                                    | Benzene, 1-methyl-4-(1-methylethen    | 16.73     | 50.2      | ug/kg | 96      | NJ      |
| 000464-48-2                                    | Bicyclo[2.2.1]heptan-2-one, 1,7,7-    | 18.23     | 18.4      | ug/kg | 97      | NJ      |

**Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 2

SDG Number: 10-1324  
Lab Sample ID: 245114003  
  
Client ID: RE15-10-8411REDL  
Batch ID: 946008  
Run Date: 01/28/2010 20:15  
Prep Date: 01/28/2010 15:10  
Data File: 012810V5SV426.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 15.4  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 50  
Purge Vol: 5 mL  
Final Volume: 10 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 118    | ug/kg | 40.2    | 118     |
| 74-87-3    | Chloromethane               | U         | 118    | ug/kg | 35.4    | 118     |
| 75-01-4    | Vinyl chloride              | U         | 118    | ug/kg | 35.4    | 118     |
| 74-83-9    | Bromomethane                | U         | 118    | ug/kg | 35.4    | 118     |
| 75-00-3    | Chloroethane                | U         | 118    | ug/kg | 35.4    | 118     |
| 75-69-4    | Trichlorofluoromethane      | U         | 118    | ug/kg | 35.4    | 118     |
| 67-64-1    | Acetone                     |           | 689    | ug/kg | 196     | 591     |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 118    | ug/kg | 35.4    | 118     |
| 74-88-4    | Iodomethane                 | U         | 591    | ug/kg | 189     | 591     |
| 75-09-2    | Methylene chloride          | U         | 591    | ug/kg | 236     | 591     |
| 75-15-0    | Carbon disulfide            | U         | 591    | ug/kg | 148     | 591     |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 118    | ug/kg | 35.4    | 118     |
| 75-34-3    | 1,1-Dichloroethane          | U         | 118    | ug/kg | 35.4    | 118     |
| 78-93-3    | 2-Butanone                  | U         | 591    | ug/kg | 177     | 591     |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 118    | ug/kg | 35.4    | 118     |
| 594-20-7   | 2,2-Dichloropropane         | U         | 118    | ug/kg | 35.4    | 118     |
| 67-66-3    | Chloroform                  | U         | 118    | ug/kg | 35.4    | 118     |
| 74-97-5    | Bromochloromethane          | U         | 118    | ug/kg | 39.0    | 118     |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 118    | ug/kg | 35.4    | 118     |
| 563-58-6   | 1,1-Dichloropropene         | U         | 118    | ug/kg | 35.4    | 118     |
| 56-23-5    | Carbon tetrachloride        | U         | 118    | ug/kg | 35.4    | 118     |
| 107-06-2   | 1,2-Dichloroethane          | U         | 118    | ug/kg | 35.4    | 118     |
| 71-43-2    | Benzene                     | U         | 118    | ug/kg | 35.4    | 118     |
| 79-01-6    | Trichloroethylene           | U         | 118    | ug/kg | 39.0    | 118     |
| 78-87-5    | 1,2-Dichloropropane         | U         | 118    | ug/kg | 35.4    | 118     |
| 75-27-4    | Bromodichloromethane        | U         | 118    | ug/kg | 35.4    | 118     |
| 74-95-3    | Dibromomethane              | U         | 118    | ug/kg | 35.4    | 118     |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 591    | ug/kg | 148     | 591     |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 118    | ug/kg | 35.4    | 118     |
| 108-88-3   | Toluene                     | U         | 118    | ug/kg | 35.4    | 118     |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 118    | ug/kg | 35.4    | 118     |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 118    | ug/kg | 35.4    | 118     |
| 591-78-6   | 2-Hexanone                  | U         | 591    | ug/kg | 177     | 591     |
| 142-28-9   | 1,3-Dichloropropane         | U         | 118    | ug/kg | 35.4    | 118     |
| 127-18-4   | Tetrachloroethylene         | U         | 118    | ug/kg | 35.4    | 118     |
| 124-48-1   | Dibromochloromethane        | U         | 118    | ug/kg | 35.4    | 118     |
| 106-93-4   | 1,2-Dibromoethane           | U         | 118    | ug/kg | 35.4    | 118     |
| 108-90-7   | Chlorobenzene               | U         | 118    | ug/kg | 35.4    | 118     |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114003  
 Client ID: RE15-10-8411REDL  
 Batch ID: 946008  
 Run Date: 01/28/2010 20:15  
 Prep Date: 01/28/2010 15:10  
 Data File: 012810V5\5V426.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 % Moisture: 15.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 50  
 Purge Vol: 5 mL  
 Final Volume: 10 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 118    | ug/kg | 35.4    | 118     |
| 179601-23-1 | m,p-Xylenes                           | U         | 236    | ug/kg | 35.4    | 236     |
| 95-47-6     | o-Xylene                              | U         | 118    | ug/kg | 35.4    | 118     |
| 100-42-5    | Styrene                               | U         | 118    | ug/kg | 35.4    | 118     |
| 75-25-2     | Bromoform                             | U         | 118    | ug/kg | 35.4    | 118     |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 118    | ug/kg | 35.4    | 118     |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 118    | ug/kg | 35.4    | 118     |
| 108-86-1    | Bromobenzene                          | U         | 118    | ug/kg | 35.4    | 118     |
| 103-65-1    | n-Propylbenzene                       | U         | 118    | ug/kg | 35.4    | 118     |
| 95-49-8     | 2-Chlorotoluene                       | U         | 118    | ug/kg | 35.4    | 118     |
| 98-82-8     | Isopropylbenzene                      | U         | 118    | ug/kg | 35.4    | 118     |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 118    | ug/kg | 35.4    | 118     |
| 106-43-4    | 4-Chlorotoluene                       | U         | 118    | ug/kg | 35.4    | 118     |
| 98-06-6     | tert-Butylbenzene                     | U         | 118    | ug/kg | 35.4    | 118     |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 118    | ug/kg | 35.4    | 118     |
| 135-98-8    | sec-Butylbenzene                      | U         | 118    | ug/kg | 35.4    | 118     |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 118    | ug/kg | 35.4    | 118     |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 118    | ug/kg | 35.4    | 118     |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 118    | ug/kg | 35.4    | 118     |
| 104-51-8    | n-Butylbenzene                        | U         | 118    | ug/kg | 35.4    | 118     |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 118    | ug/kg | 35.4    | 118     |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 591    | ug/kg | 189     | 591     |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 118    | ug/kg | 35.4    | 118     |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 118    | ug/kg | 35.4    | 118     |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 2

SDG Number: 10-1324  
 Lab Sample ID: 245114004

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 7.6  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE15-10-8412  
 Batch ID: 946008  
 Run Date: 01/28/2010 12:45  
 Prep Date: 01/28/2009 11:06  
 Data File: 012810V5SV409.D

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.08   | ug/kg | 0.368   | 1.08    |
| 74-87-3    | Chloromethane               | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 75-01-4    | Vinyl chloride              | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 74-83-9    | Bromomethane                | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 75-00-3    | Chloroethane                | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 67-64-1    | Acetone                     | J         | 2.85   | ug/kg | 1.80    | 5.41    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 74-88-4    | Iodomethane                 | U         | 5.41   | ug/kg | 1.73    | 5.41    |
| 75-09-2    | Methylene chloride          | U         | 5.41   | ug/kg | 2.16    | 5.41    |
| 75-15-0    | Carbon disulfide            | U         | 5.41   | ug/kg | 1.35    | 5.41    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 78-93-3    | 2-Butanone                  | U         | 5.41   | ug/kg | 1.62    | 5.41    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 67-66-3    | Chloroform                  | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 74-97-5    | Bromochloromethane          | U         | 1.08   | ug/kg | 0.357   | 1.08    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 71-43-2    | Benzene                     | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 79-01-6    | Trichloroethylene           | U         | 1.08   | ug/kg | 0.357   | 1.08    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 75-27-4    | Bromodichloromethane        | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 74-95-3    | Dibromomethane              | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.41   | ug/kg | 1.35    | 5.41    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 108-88-3   | Toluene                     | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 591-78-6   | 2-Hexanone                  | U         | 5.41   | ug/kg | 1.62    | 5.41    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 127-18-4   | Tetrachloroethylene         | J         | 0.584  | ug/kg | 0.325   | 1.08    |
| 124-48-1   | Dibromochloromethane        | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 108-90-7   | Chlorobenzene               | U         | 1.08   | ug/kg | 0.325   | 1.08    |

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114004  
  
Client ID: RE15-10-8412  
Batch ID: 946008  
Run Date: 01/28/2010 12:45  
Prep Date: 01/28/2009 11:06  
Data File: 012810V55V409.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 7.6  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 179601-23-1 | m,p-Xylenes                           | J         | 0.400  | ug/kg | 0.325   | 2.16    |
| 95-47-6     | o-Xylene                              | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 100-42-5    | Styrene                               | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 75-25-2     | Bromoform                             | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 108-86-1    | Bromobenzene                          | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.41   | ug/kg | 1.73    | 5.41    |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.08   | ug/kg | 0.325   | 1.08    |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|-------|-----------|-------|-----|------|
|         | unknown siloxane                      | 16.55 | 11.3      | ug/kg | 0   | J    |

**Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 2

SDG Number: 10-1324  
Lab Sample ID: 245114005  
  
Client ID: RE15-10-8441  
Batch ID: 946008  
Run Date: 01/28/2010 13:23  
Prep Date: 01/28/2009 11:07  
Data File: 012810V5SV410.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5J  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 9.6  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.11   | ug/kg | 0.376   | 1.11    |
| 74-87-3    | Chloromethane               | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-01-4    | Vinyl chloride              | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 74-83-9    | Bromomethane                | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-00-3    | Chloroethane                | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 67-64-1    | Acetone                     | J         | 1.85   | ug/kg | 1.84    | 5.53    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 74-88-4    | Iodomethane                 | U         | 5.53   | ug/kg | 1.77    | 5.53    |
| 75-09-2    | Methylene chloride          | U         | 5.53   | ug/kg | 2.21    | 5.53    |
| 75-15-0    | Carbon disulfide            | U         | 5.53   | ug/kg | 1.38    | 5.53    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 78-93-3    | 2-Butanone                  | U         | 5.53   | ug/kg | 1.66    | 5.53    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 67-66-3    | Chloroform                  | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 74-97-5    | Bromochloromethane          | U         | 1.11   | ug/kg | 0.365   | 1.11    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 71-43-2    | Benzene                     | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 79-01-6    | Trichloroethylene           | U         | 1.11   | ug/kg | 0.365   | 1.11    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-27-4    | Bromodichloromethane        | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 74-95-3    | Dibromomethane              | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.53   | ug/kg | 1.38    | 5.53    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 108-88-3   | Toluene                     | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 591-78-6   | 2-Hexanone                  | U         | 5.53   | ug/kg | 1.66    | 5.53    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 127-18-4   | Tetrachloroethylene         | J         | 0.354  | ug/kg | 0.332   | 1.11    |
| 124-48-1   | Dibromochloromethane        | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 108-90-7   | Chlorobenzene               | U         | 1.11   | ug/kg | 0.332   | 1.11    |

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114005  
  
Client ID: RE15-10-8441  
Batch ID: 946008  
Run Date: 01/28/2010 13:23  
Prep Date: 01/28/2009 11:07  
Data File: 012810V5SV410.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 9.6  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.21   | ug/kg | 0.332   | 2.21    |
| 95-47-6     | o-Xylene                              | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 100-42-5    | Styrene                               | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-25-2     | Bromoform                             | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 108-86-1    | Bromobenzene                          | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.53   | ug/kg | 1.77    | 5.53    |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.332   | 1.11    |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 2

SDG Number: 10-1324  
 Lab Sample ID: 245114006  
 Client ID: RE15-10-8413  
 Batch ID: 946008  
 Run Date: 01/31/2010 16:34  
 Prep Date: 01/31/2009 10:37  
 Data File: 013110V5\5V713.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 % Moisture: 10.6  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | IIU       | 1.12   | ug/kg | 0.380   | 1.12    |
| 74-87-3    | Chloromethane               | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 75-01-4    | Vinyl chloride              | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 74-83-9    | Bromomethane                | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 75-00-3    | Chloroethane                | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 75-69-4    | Trichlorofluoromethane      | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 67-64-1    | Acetone                     | H         | 54.4   | ug/kg | 1.86    | 5.59    |
| 75-35-4    | 1,1-Dichloroethylene        | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 74-88-4    | Iodomethane                 | HU        | 5.59   | ug/kg | 1.79    | 5.59    |
| 75-09-2    | Methylene chloride          | HJ        | 4.18   | ug/kg | 2.24    | 5.59    |
| 75-15-0    | Carbon disulfide            | HU        | 5.59   | ug/kg | 1.40    | 5.59    |
| 156-60-5   | trans-1,2-Dichloroethylene  | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 75-34-3    | 1,1-Dichloroethane          | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 78-93-3    | 2-Butanone                  | HU        | 5.59   | ug/kg | 1.68    | 5.59    |
| 156-59-2   | cis-1,2-Dichloroethylene    | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 594-20-7   | 2,2-Dichloropropane         | IIU       | 1.12   | ug/kg | 0.336   | 1.12    |
| 67-66-3    | Chloroform                  | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 74-97-5    | Bromochloromethane          | HU        | 1.12   | ug/kg | 0.369   | 1.12    |
| 71-55-6    | 1,1,1-Trichloroethane       | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 563-58-6   | 1,1-Dichloropropene         | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 56-23-5    | Carbon tetrachloride        | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 107-06-2   | 1,2-Dichloroethane          | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 71-43-2    | Benzene                     | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 79-01-6    | Trichloroethylene           | HU        | 1.12   | ug/kg | 0.369   | 1.12    |
| 78-87-5    | 1,2-Dichloropropane         | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 75-27-4    | Bromodichloromethane        | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 74-95-3    | Dibromomethane              | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 108-10-1   | 4-Methyl-2-pentanone        | HU        | 5.59   | ug/kg | 1.40    | 5.59    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 108-88-3   | Toluene                     | H         | 1.44   | ug/kg | 0.336   | 1.12    |
| 10061-02-6 | trans-1,3-Dichloropropylene | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 79-00-5    | 1,1,2-Trichloroethane       | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 591-78-6   | 2-Hexanone                  | HU        | 5.59   | ug/kg | 1.68    | 5.59    |
| 142-28-9   | 1,3-Dichloropropane         | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 127-18-4   | Tetrachloroethylene         | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 124-48-1   | Dibromochloromethane        | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 106-93-4   | 1,2-Dibromoethane           | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 108-90-7   | Chlorobenzene               | HU        | 1.12   | ug/kg | 0.336   | 1.12    |



**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

Page 2 of 2

SDG Number: 10-1324  
 Lab Sample ID: 245114006  
 Client ID: RE15-10-8413  
 Batch ID: 946008  
 Run Date: 01/31/2010 16:34  
 Prep Date: 01/31/2009 10:37  
 Data File: 013110V55V713.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 10.6  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 179601-23-1 | m,p-Xylenes                           | HU        | 2.24   | ug/kg | 0.336   | 2.24    |
| 95-47-6     | o-Xylene                              | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 100-42-5    | Styrene                               | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 75-25-2     | Bromoform                             | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 96-18-4     | 1,2,3-Trichloropropane                | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 108-86-1    | Bromobenzene                          | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 103-65-1    | n-Propylbenzene                       | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 95-49-8     | 2-Chlorotoluene                       | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 98-82-8     | Isopropylbenzene                      | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 106-43-4    | 4-Chlorotoluene                       | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 98-06-6     | tert-Butylbenzene                     | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 135-98-8    | sec-Butylbenzene                      | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 99-87-6     | 4-Isopropyltoluene                    | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 541-73-1    | 1,3-Dichlorobenzene                   | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 106-46-7    | 1,4-Dichlorobenzene                   | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 104-51-8    | n-Butylbenzene                        | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | HU        | 5.59   | ug/kg | 1.79    | 5.59    |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 95-50-1     | 1,2-Dichlorobenzene                   | HU        | 1.12   | ug/kg | 0.336   | 1.12    |

**Tentatively Identified Compound Summary**

| CAS No.     | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|-------------|---------------------------------------|-------|-----------|-------|-----|------|
|             | unknown                               | 6.5   | 77.1      | ug/kg | 0   | J    |
| 000105-37-3 | Propanoic acid, ethyl ester           | 10.91 | 5.64      | ug/kg | 91  | NJ   |
| 000105-54-4 | Butanoic acid, ethyl ester            | 12.46 | 6.78      | ug/kg | 91  | NJ   |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 2

SDG Number: 10-1324  
 Lab Sample ID: 245114007  
 Client ID: RE15-10-8425  
 Batch ID: 946008  
 Run Date: 01/28/2010 14:14  
 Prep Date: 01/28/2009 11:09  
 Data File: 012810V5SV412.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/23/2010 09:20  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 10.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.12   | ug/kg | 0.379   | 1.12    |
| 74-87-3    | Chloromethane               | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 75-01-4    | Vinyl chloride              | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 74-83-9    | Bromomethane                | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 75-00-3    | Chloroethane                | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 67-64-1    | Acetone                     | U         | 5.58   | ug/kg | 1.85    | 5.58    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 74-88-4    | Iodomethane                 | U         | 5.58   | ug/kg | 1.79    | 5.58    |
| 75-09-2    | Methylene chloride          | U         | 5.58   | ug/kg | 2.23    | 5.58    |
| 75-15-0    | Carbon disulfide            | U         | 5.58   | ug/kg | 1.40    | 5.58    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 78-93-3    | 2-Butanone                  | U         | 5.58   | ug/kg | 1.67    | 5.58    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 67-66-3    | Chloroform                  | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 74-97-5    | Bromochloromethane          | U         | 1.12   | ug/kg | 0.368   | 1.12    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 71-43-2    | Benzene                     | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 79-01-6    | Trichloroethylene           | U         | 1.12   | ug/kg | 0.368   | 1.12    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 75-27-4    | Bromodichloromethane        | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 74-95-3    | Dibromomethane              | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.58   | ug/kg | 1.40    | 5.58    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 108-88-3   | Toluene                     | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 591-78-6   | 2-Hexanone                  | U         | 5.58   | ug/kg | 1.67    | 5.58    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 124-48-1   | Dibromochloromethane        | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 108-90-7   | Chlorobenzene               | U         | 1.12   | ug/kg | 0.335   | 1.12    |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114007  
 Client ID: RE15-10-8425  
 Batch ID: 946008  
 Run Date: 01/28/2010 14:14  
 Prep Date: 01/28/2009 11:09  
 Data File: 012810V55V412.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/23/2010 09:20  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 10.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.23   | ug/kg | 0.335   | 2.23    |
| 95-47-6     | o-Xylene                              | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 100-42-5    | Styrene                               | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 75-25-2     | Bromoforn                             | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 108-86-1    | Bromobenzene                          | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.58   | ug/kg | 1.79    | 5.58    |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.12   | ug/kg | 0.335   | 1.12    |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

**Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 2

SDG Number: 10-1324  
Lab Sample ID: 245114008  
  
Client ID: RE15-10-8422  
Batch ID: 946008  
Run Date: 01/28/2010 14:40  
Prep Date: 01/28/2009 11:10  
Data File: 012810V55V413.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/23/2010 09:20  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 10.9  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.12   | ug/kg | 0.382   | 1.12    |
| 74-87-3    | Chloromethane               | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 75-01-4    | Vinyl chloride              | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 74-83-9    | Bromomethane                | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 75-00-3    | Chloroethane                | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 67-64-1    | Acetone                     | J         | 4.11   | ug/kg | 1.86    | 5.61    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 74-88-4    | Iodomethane                 | U         | 5.61   | ug/kg | 1.80    | 5.61    |
| 75-09-2    | Methylene chloride          | J         | 3.71   | ug/kg | 2.25    | 5.61    |
| 75-15-0    | Carbon disulfide            | U         | 5.61   | ug/kg | 1.40    | 5.61    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 78-93-3    | 2-Butanone                  | U         | 5.61   | ug/kg | 1.68    | 5.61    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 67-66-3    | Chloroform                  | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 74-97-5    | Bromochloromethane          | U         | 1.12   | ug/kg | 0.371   | 1.12    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 71-43-2    | Benzene                     | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 79-01-6    | Trichloroethylene           | U         | 1.12   | ug/kg | 0.371   | 1.12    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 75-27-4    | Bromodichloromethane        | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 74-95-3    | Dibromomethane              | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.61   | ug/kg | 1.40    | 5.61    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 108-88-3   | Toluene                     | J         | 0.618  | ug/kg | 0.337   | 1.12    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 591-78-6   | 2-Hexanone                  | U         | 5.61   | ug/kg | 1.68    | 5.61    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 124-48-1   | Dibromochloromethane        | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 108-90-7   | Chlorobenzene               | U         | 1.12   | ug/kg | 0.337   | 1.12    |

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114008  
  
Client ID: RE15-10-8422  
Batch ID: 946008  
Run Date: 01/28/2010 14:40  
Prep Date: 01/28/2009 11:10  
Data File: 012810V5SV413.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/23/2010 09:20  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 10.9  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.25   | ug/kg | 0.337   | 2.25    |
| 95-47-6     | o-Xylene                              | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 100-42-5    | Styrene                               | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 75-25-2     | Bromoform                             | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 108-86-1    | Bromobenzene                          | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.61   | ug/kg | 1.80    | 5.61    |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.12   | ug/kg | 0.337   | 1.12    |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|-------|-----------|-------|-----|------|
|         | unknown siloxane                      | 16.55 | 8.84      | ug/kg | 0   | J    |

**Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 2

SDG Number: 10-1324  
Lab Sample ID: 245114009  
  
Client ID: RE15-10-8417  
Batch ID: 946008  
Run Date: 01/28/2010 15:06  
Prep Date: 01/28/2009 11:11  
Data File: 012810V55V414.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 5.3  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.06   | ug/kg | 0.359   | 1.06    |
| 74-87-3    | Chloromethane               | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 75-01-4    | Vinyl chloride              | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 74-83-9    | Bromomethane                | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 75-00-3    | Chloroethane                | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 67-64-1    | Acetone                     | U         | 5.28   | ug/kg | 1.75    | 5.28    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 74-88-4    | Iodomethane                 | U         | 5.28   | ug/kg | 1.69    | 5.28    |
| 75-09-2    | Methylene chloride          | U         | 5.28   | ug/kg | 2.11    | 5.28    |
| 75-15-0    | Carbon disulfide            | U         | 5.28   | ug/kg | 1.32    | 5.28    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 78-93-3    | 2-Butanone                  | U         | 5.28   | ug/kg | 1.58    | 5.28    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 67-66-3    | Chloroform                  | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 74-97-5    | Bromochloromethane          | U         | 1.06   | ug/kg | 0.349   | 1.06    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 71-43-2    | Benzene                     | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 79-01-6    | Trichloroethylene           | U         | 1.06   | ug/kg | 0.349   | 1.06    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 75-27-4    | Bromodichloromethane        | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 74-95-3    | Dibromomethane              | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.28   | ug/kg | 1.32    | 5.28    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 108-88-3   | Toluene                     | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 591-78-6   | 2-Hexanone                  | U         | 5.28   | ug/kg | 1.58    | 5.28    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 124-48-1   | Dibromochloromethane        | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 108-90-7   | Chlorobenzene               | U         | 1.06   | ug/kg | 0.317   | 1.06    |

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114009  
  
Client ID: RE15-10-8417  
Batch ID: 946008  
Run Date: 01/28/2010 15:06  
Prep Date: 01/28/2009 11:11  
Data File: 012810V5S5V414.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 5.3  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.11   | ug/kg | 0.317   | 2.11    |
| 95-47-6     | o-Xylene                              | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 100-42-5    | Styrene                               | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 75-25-2     | Bromoform                             | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 108-86-1    | Bromobenzene                          | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.28   | ug/kg | 1.69    | 5.28    |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.06   | ug/kg | 0.317   | 1.06    |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114010

Client ID: RE15-10-8423  
Batch ID: 946008  
Run Date: 01/28/2010 15:32  
Prep Date: 01/28/2009 11:12  
Data File: 012810V5SV415.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
% Moisture: 9.4  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.10   | ug/kg | 0.375   | 1.10    |
| 74-87-3    | Chloromethane               | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 75-01-4    | Vinyl chloride              | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 74-83-9    | Bromomethane                | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 75-00-3    | Chloroethane                | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 67-64-1    | Acetone                     | U         | 5.52   | ug/kg | 1.83    | 5.52    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 74-88-4    | Iodomethane                 | U         | 5.52   | ug/kg | 1.77    | 5.52    |
| 75-09-2    | Methylene chloride          | U         | 5.52   | ug/kg | 2.21    | 5.52    |
| 75-15-0    | Carbon disulfide            | U         | 5.52   | ug/kg | 1.38    | 5.52    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 78-93-3    | 2-Butanone                  | U         | 5.52   | ug/kg | 1.65    | 5.52    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 67-66-3    | Chloroform                  | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 74-97-5    | Bromochloromethane          | U         | 1.10   | ug/kg | 0.364   | 1.10    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 71-43-2    | Benzene                     | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 79-01-6    | Trichloroethylene           | U         | 1.10   | ug/kg | 0.364   | 1.10    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 75-27-4    | Bromodichloromethane        | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 74-95-3    | Dibromomethane              | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.52   | ug/kg | 1.38    | 5.52    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 108-88-3   | Toluene                     | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 591-78-6   | 2-Hexanone                  | U         | 5.52   | ug/kg | 1.65    | 5.52    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 124-48-1   | Dibromochloromethane        | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 108-90-7   | Chlorobenzene               | U         | 1.10   | ug/kg | 0.331   | 1.10    |



**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114010  
 Client ID: RE15-10-8423  
 Batch ID: 946008  
 Run Date: 01/28/2010 15:32  
 Prep Date: 01/28/2009 11:12  
 Data File: 012810V55V415.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 9.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.21   | ug/kg | 0.331   | 2.21    |
| 95-47-6     | o-Xylene                              | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 100-42-5    | Styrene                               | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 75-25-2     | Bromoform                             | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 108-86-1    | Bromobenzene                          | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.52   | ug/kg | 1.77    | 5.52    |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.10   | ug/kg | 0.331   | 1.10    |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 2

SDG Number: 10-1324  
 Lab Sample ID: 245114011

Client ID: RE15-10-8416  
 Batch ID: 946008  
 Run Date: 01/28/2010 15:58  
 Prep Date: 01/28/2009 11:13  
 Data File: 012810V55V416.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 9.6  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.11   | ug/kg | 0.376   | 1.11    |
| 74-87-3    | Chloromethane               | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-01-4    | Vinyl chloride              | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 74-83-9    | Bromomethane                | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-00-3    | Chloroethane                | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 67-64-1    | Acetone                     | U         | 5.53   | ug/kg | 1.84    | 5.53    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 74-88-4    | Iodomethane                 | U         | 5.53   | ug/kg | 1.77    | 5.53    |
| 75-09-2    | Methylene chloride          | U         | 5.53   | ug/kg | 2.21    | 5.53    |
| 75-15-0    | Carbon disulfide            | U         | 5.53   | ug/kg | 1.38    | 5.53    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 78-93-3    | 2-Butanone                  | U         | 5.53   | ug/kg | 1.66    | 5.53    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 67-66-3    | Chloroform                  | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 74-97-5    | Bromochloromethane          | U         | 1.11   | ug/kg | 0.365   | 1.11    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 71-43-2    | Benzene                     | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 79-01-6    | Trichloroethylene           | U         | 1.11   | ug/kg | 0.365   | 1.11    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-27-4    | Bromodichloromethane        | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 74-95-3    | Dibromomethane              | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.53   | ug/kg | 1.38    | 5.53    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 108-88-3   | Toluene                     | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 591-78-6   | 2-Hexanone                  | U         | 5.53   | ug/kg | 1.66    | 5.53    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 124-48-1   | Dibromochloromethane        | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 108-90-7   | Chlorobenzene               | U         | 1.11   | ug/kg | 0.332   | 1.11    |

**Volatile  
Certificate of Analysis  
Sample Summary**

Page 2 of 2

SDG Number: 10-1324  
Lab Sample ID: 245114011  
  
Client ID: RE15-10-8416  
Batch ID: 946008  
Run Date: 01/28/2010 15:58  
Prep Date: 01/28/2009 11:13  
Data File: 012810V55V416.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXX1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
% Moisture: 9.6  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.21   | ug/kg | 0.332   | 2.21    |
| 95-47-6     | o-Xylene                              | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 100-42-5    | Styrene                               | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-25-2     | Bromoform                             | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 108-86-1    | Bromobenzene                          | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.53   | ug/kg | 1.77    | 5.53    |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.332   | 1.11    |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114012

Client ID: RE15-10-8418  
Batch ID: 946008  
Run Date: 01/28/2010 16:23  
Prep Date: 01/28/2009 11:14  
Data File: 012810VSSV417.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 11.3  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.13   | ug/kg | 0.383   | 1.13    |
| 74-87-3    | Chloromethane               | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 75-01-4    | Vinyl chloride              | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 74-83-9    | Bromomethane                | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 75-00-3    | Chloroethane                | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 67-64-1    | Acetone                     | U         | 5.64   | ug/kg | 1.87    | 5.64    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 74-88-4    | Iodomethane                 | U         | 5.64   | ug/kg | 1.80    | 5.64    |
| 75-09-2    | Methylene chloride          | U         | 5.64   | ug/kg | 2.25    | 5.64    |
| 75-15-0    | Carbon disulfide            | U         | 5.64   | ug/kg | 1.41    | 5.64    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 78-93-3    | 2-Butanone                  | U         | 5.64   | ug/kg | 1.69    | 5.64    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 67-66-3    | Chloroform                  | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 74-97-5    | Bromochloromethane          | U         | 1.13   | ug/kg | 0.372   | 1.13    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 71-43-2    | Benzene                     | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 79-01-6    | Trichloroethylene           | U         | 1.13   | ug/kg | 0.372   | 1.13    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 75-27-4    | Bromodichloromethane        | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 74-95-3    | Dibromomethane              | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.64   | ug/kg | 1.41    | 5.64    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 108-88-3   | Toluene                     | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 591-78-6   | 2-Hexanone                  | U         | 5.64   | ug/kg | 1.69    | 5.64    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 124-48-1   | Dibromochloromethane        | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 108-90-7   | Chlorobenzene               | U         | 1.13   | ug/kg | 0.338   | 1.13    |

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114012  
  
Client ID: RE15-10-8418  
Batch ID: 946008  
Run Date: 01/28/2010 16:23  
Prep Date: 01/28/2009 11:14  
Data File: 012810V5SV417.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 11.3  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.25   | ug/kg | 0.338   | 2.25    |
| 95-47-6     | o-Xylene                              | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 100-42-5    | Styrene                               | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 75-25-2     | Bromoform                             | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 108-86-1    | Bromobenzene                          | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.64   | ug/kg | 1.80    | 5.64    |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.13   | ug/kg | 0.338   | 1.13    |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|-------|-----------|-------|-----|------|
|         | unknown siloxane                      | 16.55 | 8.04      | ug/kg | 0   | J    |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114013

Client ID: RE15-10-8424  
 Batch ID: 946008  
 Run Date: 01/28/2010 16:49  
 Prep Date: 01/28/2009 11:15  
 Data File: 012810V5SV418.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 10  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.11   | ug/kg | 0.378   | 1.11    |
| 74-87-3    | Chloromethane               | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 75-01-4    | Vinyl chloride              | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 74-83-9    | Bromomethane                | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 75-00-3    | Chloroethane                | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 67-64-1    | Acetone                     | U         | 5.56   | ug/kg | 1.85    | 5.56    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 74-88-4    | Iodomethane                 | U         | 5.56   | ug/kg | 1.78    | 5.56    |
| 75-09-2    | Methylene chloride          | U         | 5.56   | ug/kg | 2.22    | 5.56    |
| 75-15-0    | Carbon disulfide            | U         | 5.56   | ug/kg | 1.39    | 5.56    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 78-93-3    | 2-Butanone                  | U         | 5.56   | ug/kg | 1.67    | 5.56    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 67-66-3    | Chloroform                  | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 74-97-5    | Bromochloromethane          | U         | 1.11   | ug/kg | 0.367   | 1.11    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 71-43-2    | Benzene                     | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 79-01-6    | Trichloroethylene           | U         | 1.11   | ug/kg | 0.367   | 1.11    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 75-27-4    | Bromodichloromethane        | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 74-95-3    | Dibromomethane              | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.56   | ug/kg | 1.39    | 5.56    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 108-88-3   | Toluene                     | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 591-78-6   | 2-Hexanone                  | U         | 5.56   | ug/kg | 1.67    | 5.56    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 124-48-1   | Dibromochloromethane        | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 108-90-7   | Chlorobenzene               | U         | 1.11   | ug/kg | 0.333   | 1.11    |

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114013  
  
Client ID: RE15-10-8424  
Batch ID: 946008  
Run Date: 01/28/2010 16:49  
Prep Date: 01/28/2009 11:15  
Data File: 012810V55V418.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 10  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.22   | ug/kg | 0.333   | 2.22    |
| 95-47-6     | o-Xylene                              | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 100-42-5    | Styrene                               | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 75-25-2     | Bromoform                             | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 108-86-1    | Bromobenzene                          | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.56   | ug/kg | 1.78    | 5.56    |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.333   | 1.11    |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|-------|-----------|-------|-----|------|
|         | unknown siloxane                      | 16.55 | 8.53      | ug/kg | 0   | J    |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114014

Client ID: RE15-10-8421  
 Batch ID: 946008  
 Run Date: 01/28/2010 17:15  
 Prep Date: 01/28/2009 11:16  
 Data File: 012810V55V419.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 12.5  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.14   | ug/kg | 0.388   | 1.14    |
| 74-87-3    | Chloromethane               | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 75-01-4    | Vinyl chloride              | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 74-83-9    | Bromomethane                | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 75-00-3    | Chloroethane                | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 67-64-1    | Acetone                     | U         | 5.71   | ug/kg | 1.90    | 5.71    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 74-88-4    | Iodomethane                 | U         | 5.71   | ug/kg | 1.83    | 5.71    |
| 75-09-2    | Methylene chloride          | U         | 5.71   | ug/kg | 2.28    | 5.71    |
| 75-15-0    | Carbon disulfide            | U         | 5.71   | ug/kg | 1.43    | 5.71    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 78-93-3    | 2-Butanone                  | U         | 5.71   | ug/kg | 1.71    | 5.71    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 67-66-3    | Chloroform                  | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 74-97-5    | Bromochloromethane          | U         | 1.14   | ug/kg | 0.377   | 1.14    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 71-43-2    | Benzene                     | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 79-01-6    | Trichloroethylene           | U         | 1.14   | ug/kg | 0.377   | 1.14    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 75-27-4    | Bromodichloromethane        | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 74-95-3    | Dibromomethane              | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.71   | ug/kg | 1.43    | 5.71    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 108-88-3   | Toluene                     | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 591-78-6   | 2-Hexanone                  | U         | 5.71   | ug/kg | 1.71    | 5.71    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 124-48-1   | Dibromochloromethane        | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 108-90-7   | Chlorobenzene               | U         | 1.14   | ug/kg | 0.343   | 1.14    |



**Volatile  
Certificate of Analysis  
Sample Summary**

Page 2 of 2

SDG Number: 10-1324  
Lab Sample ID: 245114014  
  
Client ID: RE15-10-8421  
Batch ID: 946008  
Run Date: 01/28/2010 17:15  
Prep Date: 01/28/2009 11:16  
Data File: 012810V5SV419.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
% Moisture: 12.5  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parname                               | Qualifier | Result | Units | MDI/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.28   | ug/kg | 0.343   | 2.28    |
| 95-47-6     | o-Xylene                              | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 100-42-5    | Styrene                               | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 75-25-2     | Bromoform                             | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 108-86-1    | Bromobenzene                          | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.71   | ug/kg | 1.83    | 5.71    |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.14   | ug/kg | 0.343   | 1.14    |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

Volatile  
Certificate of Analysis  
Sample Summary

Page 1 of 2

SDG Number: 10-1324  
Lab Sample ID: 245114015

Client ID: RE15-10-8420  
Batch ID: 946008  
Run Date: 01/28/2010 17:41  
Prep Date: 01/28/2009 11:17  
Data File: 012810V5V420.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 30.1  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.43   | ug/kg | 0.487   | 1.43    |
| 74-87-3    | Chloromethane               | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 75-01-4    | Vinyl chloride              | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 74-83-9    | Bromomethane                | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 75-00-3    | Chloroethane                | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 67-64-1    | Acetone                     | U         | 7.16   | ug/kg | 2.38    | 7.16    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 74-88-4    | Iodomethane                 | U         | 7.16   | ug/kg | 2.29    | 7.16    |
| 75-09-2    | Methylene chloride          | U         | 7.16   | ug/kg | 2.86    | 7.16    |
| 75-15-0    | Carbon disulfide            | U         | 7.16   | ug/kg | 1.79    | 7.16    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 78-93-3    | 2-Butanone                  | U         | 7.16   | ug/kg | 2.15    | 7.16    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 67-66-3    | Chloroform                  | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 74-97-5    | Bromochloromethane          | U         | 1.43   | ug/kg | 0.472   | 1.43    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 71-43-2    | Benzene                     | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 79-01-6    | Trichloroethylene           | U         | 1.43   | ug/kg | 0.472   | 1.43    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 75-27-4    | Bromodichloromethane        | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 74-95-3    | Dibromomethane              | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 7.16   | ug/kg | 1.79    | 7.16    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 108-88-3   | Toluene                     | J         | 0.501  | ug/kg | 0.429   | 1.43    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 591-78-6   | 2-Hexanone                  | U         | 7.16   | ug/kg | 2.15    | 7.16    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 124-48-1   | Dibromochloromethane        | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 108-90-7   | Chlorobenzene               | U         | 1.43   | ug/kg | 0.429   | 1.43    |

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114015  
  
Client ID: RE15-10-8420  
Batch ID: 946008  
Run Date: 01/28/2010 17:41  
Prep Date: 01/28/2009 11:17  
Data File: 012810V5SV420.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXX1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
% Moisture: 30.1  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.86   | ug/kg | 0.429   | 2.86    |
| 95-47-6     | o-Xylene                              | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 100-42-5    | Styrene                               | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 75-25-2     | Bromoform                             | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 108-86-1    | Bromobenzene                          | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 7.16   | ug/kg | 2.29    | 7.16    |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.43   | ug/kg | 0.429   | 1.43    |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

# **Quality Control Summary**

Volatile  
Surrogate Recovery Report

Page 1 of 2

SDG Number: 10-1324

Matrix Type: SOLID

| Sample ID  | Client ID            | DCED4<br>%REC | TOL<br>%REC | BFB<br>%REC |
|------------|----------------------|---------------|-------------|-------------|
| 1202026238 | LCS for batch 946006 | 103           | 101         | 104         |
| 1202026239 | LCS for batch 946006 | 104           | 101         | 110         |
| 1202026235 | MB for batch 946006  | 109           | 105         | 112         |
| 245114001  | RE15-10-8447         | 107           | 101         | 109         |
| 245114002  | RE15-10-8410         | 114           | 125         | 139 *       |
| 245114003  | RE15-10-8411         | 107           | 110         | 119         |
| 245114004  | RE15-10-8412         | 109           | 107         | 222 *       |
| 245114005  | RE15-10-8441         | 104           | 105         | 127         |
| 245114007  | RE15-10-8425         | 107           | 101         | 121         |
| 245114008  | RE15-10-8422         | 115           | 103         | 122         |
| 245114009  | RE15-10-8417         | 107           | 103         | 121         |
| 245114010  | RE15-10-8423         | 116           | 106         | 128         |
| 245114011  | RE15-10-8416         | 107           | 107         | 125         |
| 245114012  | RE15-10-8418         | 106           | 103         | 128         |
| 245114013  | RE15-10-8424         | 103           | 104         | 120         |
| 245114014  | RE15-10-8421         | 111           | 101         | 114         |
| 245114015  | RE15-10-8420         | 103           | 106         | 118         |
| 1202037689 | HB for batch 946006  | 107 D         | 103 D       | 112 D       |
| 245114003  | RE15-10-8411REDL     | 103 D         | 99 D        | 105 D       |
| 1202026236 | RE15-10-8410PS       | 105           | 122         | 203 *       |
| 1202026237 | RE15-10-8410PSD      | 112           | 110         | 123         |
| 1202037687 | LCS for batch 946006 | 106           | 98          | 104         |
| 1202037688 | LCS for batch 946006 | 110           | 100         | 114         |
| 1202037686 | MB for batch 946006  | 105           | 100         | 111         |

DCED4 = 1,2-Dichloroethane-d4 (68%-131%)

TOL = Toluene-d8 (75%-129%)

BFB = Bromofluorobenzene (68%-133%)

\* Recovery outside Acceptance Limits

# Column to be used to flag recovery values

D Sample Diluted

## Volatile

Page 2 of 2

## Surrogate Recovery Report

SDG Number: 10-1324

Matrix Type: SOLID

| Sample ID | Client ID    | DCED4<br>%REC | TOL<br>%REC | BFB<br>%REC |
|-----------|--------------|---------------|-------------|-------------|
| 245114006 | RE15-10-8413 | 107           | 98          | 110         |

## Surrogate

## Acceptance Limits

DCED4 = 1,2-Dichloroethane-d4

(68%-131%)

TOL = Toluene-d8

(75%-129%)

BFB = Bromofluorobenzene

(68%-133%)

\* Recovery outside Acceptance Limits

# Column to be used to flag recovery values

D Sample Diluted

## Volatile

Page 1 of 6

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1324

Sample Type: Post Spike

Client ID: RE15-10-8410PS

Matrix: R

Lab Sample ID: 1202026236

%Moisture: 24.9

Instrument: VOA5.I

Analysis Date: 01/28/2010 20:41

Dilution: 1

Analyst: DXK1

Pre Batch ID: 946006

Purge Vol: 5 mL

Batch ID: 946008

| CAS No   | Parmname                      | Amount Added<br>ug/kg | Sample Conc.<br>ug/kg | Spike Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits |
|----------|-------------------------------|-----------------------|-----------------------|----------------------|---------------|----------------------|
| 75-71-8  | PS Dichlorodifluoromethane    | 50.0                  | 0.00 U                | 37.1                 | 74            | 25-149               |
| 74-87-3  | PS Chloromethane              | 50.0                  | 0.00 U                | 50.5                 | 101           | 39-140               |
| 75-01-4  | PS Vinyl chloride             | 50.0                  | 0.00 U                | 52.4                 | 105           | 47-129               |
| 74-83-9  | PS Bromomethane               | 50.0                  | 0.00 U                | 29.1                 | 58            | 31-135               |
| 75-00-3  | PS Chloroethane               | 50.0                  | 0.00 U                | 43.6                 | 87            | 53-128               |
| 75-69-4  | PS Trichlorofluoromethane     | 50.0                  | 0.00 U                | 42.0                 | 84            | 51-151               |
| 67-64-1  | PS Acetone                    | 250                   | 2.23 J                | 54.5                 | 21            | 21-153               |
| 75-35-4  | PS 1,1-Dichloroethylene       | 50.0                  | 0.00 U                | 45.2                 | 90            | 61-125               |
| 74-88-4  | PS Iodomethane                | 250                   | 0.00 U                | 101                  | 40 *          | 53-142               |
| 75-09-2  | PS Methylene chloride         | 50.0                  | 2.18 J                | 38.9                 | 74            | 59-136               |
| 75-15-0  | PS Carbon disulfide           | 250                   | 0.00 U                | 176                  | 70            | 46-129               |
| 156-60-5 | PS trans-1,2-Dichloroethylene | 50.0                  | 0.00 U                | 36.3                 | 73            | 56-126               |
| 75-34-3  | PS 1,1-Dichloroethane         | 50.0                  | 0.00 U                | 41.6                 | 83            | 62-125               |
| 78-93-3  | PS 2-Butanone                 | 250                   | 0.00 U                | 33.1                 | 13 *          | 26-152               |
| 156-59-2 | PS cis-1,2-Dichloroethylene   | 50.0                  | 0.00 U                | 34.7                 | 69            | 60-130               |
| 594-20-7 | PS 2,2-Dichloropropane        | 50.0                  | 0.00 U                | 38.1                 | 76            | 55-135               |
| 67-66-3  | PS Chloroform                 | 50.0                  | 0.00 U                | 37.8                 | 76            | 60-127               |
| 74-97-5  | PS Bromochloromethane         | 50.0                  | 0.00 U                | 29.0                 | 58 *          | 61-131               |
| 71-55-6  | PS 1,1,1-Trichloroethane      | 50.0                  | 0.00 U                | 39.2                 | 78            | 59-131               |
| 563-58-6 | PS 1,1-Dichloropropene        | 50.0                  | 0.00 U                | 35.1                 | 70            | 57-128               |
| 56-23-5  | PS Carbon tetrachloride       | 50.0                  | 0.00 U                | 36.9                 | 74            | 58-136               |
| 107-06-2 | PS 1,2-Dichloroethane         | 50.0                  | 0.00 U                | 34.3                 | 69            | 58-126               |

Volatile  
Quality Control Summary  
Spike Recovery Report

Page 2 of 6

SDG Number: 10-1324

Sample Type: Post Spike

Client ID: RE15-10-8410PS

Matrix: R

Lab Sample ID: 1202026236

% Moisture: 24.9

Instrument: VOA5.I

Analysis Date: 01/28/2010 20:41

Dilution: 1

Analyst: DXK1

Pren Batch ID: 946006

Purge Vol: 5 mL

Batch ID: 946008

| CAS No      | Parmname                       | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg |   | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits |
|-------------|--------------------------------|--------------------------|--------------------------|---|-------------------------|---------------|----------------------|
| 71-43-2     | PS Benzene                     | 50.0                     | 0.00                     | U | 33.8                    | 68            | 56-123               |
| 79-01-6     | PS Trichloroethylene           | 50.0                     | 0.00                     | U | 28.7                    | 57            | 51-137               |
| 78-87-5     | PS 1,2-Dichloropropane         | 50.0                     | 0.00                     | U | 37.4                    | 75            | 60-126               |
| 75-27-4     | PS Bromodichloromethane        | 50.0                     | 0.00                     | U | 29.8                    | 60            | 55-138               |
| 74-95-3     | PS Dibromomethane              | 50.0                     | 0.00                     | U | 24.9                    | 50 *          | 60-132               |
| 108-10-1    | PS 4-Methyl-2-pentanone        | 250                      | 0.00                     | U | 98.8                    | 40 *          | 58-136               |
| 10061-01-5  | PS cis-1,3-Dichloropropylene   | 50.0                     | 0.00                     | U | 13.9                    | 28 *          | 54-133               |
| 108-88-3    | PS Toluene                     | 50.0                     | 0.00                     | U | 39.4                    | 79            | 52-128               |
| 10061-02-6  | PS trans-1,3-Dichloropropylene | 50.0                     | 0.00                     | U | 18.5                    | 37 *          | 53-137               |
| 79-00-5     | PS 1,1,2-Trichloroethane       | 50.0                     | 0.00                     | U | 35.8                    | 72            | 59-130               |
| 591-78-6    | PS 2-Hexanone                  | 250                      | 0.00                     | U | 13.2                    | 5 *           | 31-148               |
| 142-28-9    | PS 1,3-Dichloropropane         | 50.0                     | 0.00                     | U | 32.8                    | 66            | 57-127               |
| 127-18-4    | PS Tetrachloroethylene         | 50.0                     | 0.00                     | U | 32.9                    | 66            | 51-128               |
| 124-48-1    | PS Dibromochloromethane        | 50.0                     | 0.00                     | U | 25.9                    | 52 *          | 59-139               |
| 106-93-4    | PS 1,2-Dibromoethane           | 50.0                     | 0.00                     | U | 22.2                    | 44 *          | 57-133               |
| 108-90-7    | PS Chlorobenzene               | 50.0                     | 0.00                     | U | 22.7                    | 45 *          | 53-122               |
| 100-41-4    | PS Ethylbenzene                | 50.0                     | 0.00                     | U | 34.0                    | 68            | 51-125               |
| 179601-23-1 | PS m,p-Xylenes                 | 100                      | 0.00                     | U | 56.4                    | 56            | 50-126               |
| 95-47-6     | PS o-Xylene                    | 50.0                     | 0.00                     | U | 29.2                    | 58            | 52-127               |
| 100-42-5    | PS Styrene                     | 50.0                     | 0.00                     | U | 15.4                    | 31 *          | 49-135               |
| 75-25-2     | PS Bromoform                   | 50.0                     | 0.00                     | U | 28.9                    | 58            | 57-149               |
| 79-34-5     | PS 1,1,2,2-Tetrachloroethane   | 50.0                     | 0.00                     | U | 50.7                    | 101           | 63-127               |



Volatile  
Quality Control Summary  
Spike Recovery Report

Page 3 of 6

SDG Number: 10-1324

Sample Type: Post Spike

Client ID: RE15-10-8410PS

Matrix: R

Lab Sample ID: 1202026236

% Moisture: 24.9

Instrument: VOA5.I

Analysis Date: 01/28/2010 20:41

Dilution: 1

Analyst: DXK1

Pren Batch ID: 946006

Purge Vol: 5 mL

Batch ID: 946008

| CAS No   | Parmname                       | Amount Added<br>ug/kg | Sample Conc.<br>ug/kg | Spike Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits |
|----------|--------------------------------|-----------------------|-----------------------|----------------------|---------------|----------------------|
| 96-18-4  | PS 1,2,3-Trichloropropane      | 50.0                  | 0.00                  | U 41.8               | 84            | 57-149               |
| 108-86-1 | PS Bromobenzene                | 50.0                  | 0.00                  | U 24.6               | 49            | 49-131               |
| 103-65-1 | PS n-Propylbenzene             | 50.0                  | 0.00                  | U 48.2               | 96            | 40-136               |
| 95-49-8  | PS 2-Chlorotoluene             | 50.0                  | 0.00                  | U 35.1               | 70            | 44-135               |
| 98-82-8  | PS Isopropylbenzene            | 50.0                  | 0.00                  | U 57.0               | 114           | 44-140               |
| 108-67-8 | PS 1,3,5-Trimethylbenzene      | 50.0                  | 0.00                  | U 44.4               | 89            | 42-140               |
| 106-43-4 | PS 4-Chlorotoluene             | 50.0                  | 0.00                  | U 28.1               | 56            | 44-132               |
| 98-06-6  | PS tert-Butylbenzene           | 50.0                  | 0.00                  | U 48.2               | 96            | 42-142               |
| 95-63-6  | PS 1,2,4-Trimethylbenzene      | 50.0                  | 0.00                  | U 35.1               | 70            | 43-137               |
| 135-98-8 | PS sec-Butylbenzene            | 50.0                  | 0.00                  | U 44.6               | 89            | 39-139               |
| 99-87-6  | PS 4-Isopropyltoluene          | 50.0                  | 0.00                  | U 22.3               | 45            | 38-145               |
| 541-73-1 | PS 1,3-Dichlorobenzene         | 50.0                  | 0.00                  | U 17.2               | 34 *          | 43-129               |
| 106-46-7 | PS 1,4-Dichlorobenzene         | 50.0                  | 0.00                  | U 15.7               | 31 *          | 44-125               |
| 104-51-8 | PS n-Butylbenzene              | 50.0                  | 0.00                  | U 30.6               | 61            | 36-141               |
| 96-12-8  | PS 1,2-Dibromo-3-chloropropane | 50.0                  | 0.00                  | U 17.6               | 35 *          | 47-151               |
| 630-20-6 | PS 1,1,1,2-Tetrachloroethane   | 50.0                  | 0.00                  | U 34.2               | 68            | 59-131               |
| 95-50-1  | PS 1,2-Dichlorobenzene         | 50.0                  | 0.00                  | U 15.2               | 30 *          | 43-129               |

## Volatile

Page 4 of 6

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1324

Sample Type: Post Spike Duplicate

Client ID: RE15-10-8410PSD

Matrix: R

Lab Sample ID:1202026237

%Moisture: 24.9

Instrument: VOA5.1

Analysis Date: 01/28/2010 21:07

Dilution: 1

Analyst: DXK1

Pren Batch II 946006

Purge Vol: 5 mL

Batch ID: 946008

| CAS No   | Parmname                       | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg |   | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits | RPD<br>% | Acceptance<br>Limits |
|----------|--------------------------------|--------------------------|--------------------------|---|-------------------------|---------------|----------------------|----------|----------------------|
| 75-71-8  | PSD Dichlorodifluoromethane    | 50.0                     | 0.00                     | U | 35.0                    | 70            | 25-149               | 6        | 0-25                 |
| 74-87-3  | PSD Chloromethane              | 50.0                     | 0.00                     | U | 49.4                    | 99            | 39-140               | 2        | 0-25                 |
| 75-01-4  | PSD Vinyl chloride             | 50.0                     | 0.00                     | U | 46.1                    | 92            | 47-129               | 13       | 0-25                 |
| 74-83-9  | PSD Bromomethane               | 50.0                     | 0.00                     | U | 23.1                    | 46            | 31-135               | 23       | 0-25                 |
| 75-00-3  | PSD Chloroethane               | 50.0                     | 0.00                     | U | 39.9                    | 80            | 53-128               | 9        | 0-25                 |
| 75-69-4  | PSD Trichlorofluoromethane     | 50.0                     | 0.00                     | U | 37.3                    | 75            | 51-151               | 12       | 0-25                 |
| 67-64-1  | PSD Acetone                    | 250                      | 2.23                     | J | 55.0                    | 21            | 21-153               | 1        | 0-25                 |
| 75-35-4  | PSD 1,1-Dichloroethylene       | 50.0                     | 0.00                     | U | 36.8                    | 74            | 61-125               | 20       | 0-25                 |
| 74-88-4  | PSD Iodomethane                | 250                      | 0.00                     | U | 69.8                    | 28 *          | 53-142               | 36 *     | 0-25                 |
| 75-09-2  | PSD Methylene chloride         | 50.0                     | 2.18                     | J | 34.2                    | 64            | 59-136               | 13       | 0-25                 |
| 75-15-0  | PSD Carbon disulfide           | 250                      | 0.00                     | U | 126                     | 50            | 46-129               | 33 *     | 0-25                 |
| 156-60-5 | PSD trans-1,2-Dichloroethylene | 50.0                     | 0.00                     | U | 28.2                    | 56            | 56-126               | 25       | 0-25                 |
| 75-34-3  | PSD 1,1-Dichloroethane         | 50.0                     | 0.00                     | U | 36.6                    | 73            | 62-125               | 13       | 0-25                 |
| 78-93-3  | PSD 2-Butanone                 | 250                      | 0.00                     | U | 31.7                    | 13 *          | 26-152               | 4        | 0-25                 |
| 156-59-2 | PSD cis-1,2-Dichloroethylene   | 50.0                     | 0.00                     | U | 27.8                    | 56 *          | 60-130               | 22       | 0-25                 |
| 594-20-7 | PSD 2,2-Dichloropropane        | 50.0                     | 0.00                     | U | 33.6                    | 67            | 55-135               | 13       | 0-25                 |
| 67-66-3  | PSD Chloroform                 | 50.0                     | 0.00                     | U | 32.5                    | 65            | 60-127               | 15       | 0-25                 |
| 74-97-5  | PSD Bromochloromethane         | 50.0                     | 0.00                     | U | 24.9                    | 50 *          | 61-131               | 15       | 0-25                 |
| 71-55-6  | PSD 1,1,1-Trichloroethane      | 50.0                     | 0.00                     | U | 34.3                    | 69            | 59-131               | 13       | 0-25                 |
| 563-58-6 | PSD 1,1-Dichloropropene        | 50.0                     | 0.00                     | U | 25.8                    | 52 *          | 57-128               | 31 *     | 0-25                 |
| 56-23-5  | PSD Carbon tetrachloride       | 50.0                     | 0.00                     | U | 30.0                    | 60            | 58-136               | 20       | 0-25                 |
| 107-06-2 | PSD 1,2-Dichloroethane         | 50.0                     | 0.00                     | U | 30.6                    | 61            | 58-126               | 12       | 0-25                 |

## Volatile

Page 5 of 6

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1324

Sample Type: Post Spike Duplicate

Client ID: RE15-10-8410PSD

Matrix: R

Lab Sample ID: 1202026237

% Moisture: 24.9

Instrument: VOA5.1

Analysis Date: 01/28/2010 21:07

Dilution: 1

Analyst: DXK1

Pren Batch #: 946006

Purge Vol: 5 mL

Batch ID: 946008

| CAS No      | Parmname                        | Amount Added<br>ug/kg | Sample Conc.<br>ug/kg | Spike Conc.<br>ug/kg | Recovery<br>% | Acceptance Limits | RPD<br>% | Acceptance Limits |
|-------------|---------------------------------|-----------------------|-----------------------|----------------------|---------------|-------------------|----------|-------------------|
| 71-43-2     | PSD Benzene                     | 50.0                  | 0.00                  | U 27.8               | 56            | 56-123            | 20       | 0-25              |
| 79-01-6     | PSD Trichloroethylene           | 50.0                  | 0.00                  | U 21.7               | 43 *          | 51-137            | 28 *     | 0-25              |
| 78-87-5     | PSD 1,2-Dichloropropane         | 50.0                  | 0.00                  | U 32.3               | 65            | 60-126            | 15       | 0-25              |
| 75-27-4     | PSD Bromodichloromethane        | 50.0                  | 0.00                  | U 26.0               | 52 *          | 55-138            | 14       | 0-25              |
| 74-95-3     | PSD Dibromomethane              | 50.0                  | 0.00                  | U 21.7               | 43 *          | 60-132            | 14       | 0-25              |
| 108-10-1    | PSD 4-Methyl-2-pentanone        | 250                   | 0.00                  | U 64.5               | 26 *          | 58-136            | 42 *     | 0-25              |
| 10061-01-5  | PSD cis-1,3-Dichloropropylene   | 50.0                  | 0.00                  | U 9.99               | 20 *          | 54-133            | 33 *     | 0-25              |
| 108-88-3    | PSD Toluene                     | 50.0                  | 0.00                  | U 26.4               | 53            | 52-128            | 40 *     | 0-25              |
| 10061-02-6  | PSD trans-1,3-Dichloropropylene | 50.0                  | 0.00                  | U 13.1               | 26 *          | 53-137            | 35 *     | 0-25              |
| 79-00-5     | PSD 1,1,2-Trichloroethane       | 50.0                  | 0.00                  | U 29.8               | 60            | 59-130            | 18       | 0-25              |
| 591-78-6    | PSD 2-Hexanone                  | 250                   | 0.00                  | U 9.80               | 4 *           | 31-148            | 30 *     | 0-25              |
| 142-28-9    | PSD 1,3-Dichloropropane         | 50.0                  | 0.00                  | U 27.2               | 54 *          | 57-127            | 19       | 0-25              |
| 127-18-4    | PSD Tetrachloroethylene         | 50.0                  | 0.00                  | U 20.5               | 41 *          | 51-128            | 46 *     | 0-25              |
| 124-48-1    | PSD Dibromochloromethane        | 50.0                  | 0.00                  | U 21.2               | 42 *          | 59-139            | 20       | 0-25              |
| 106-93-4    | PSD 1,2-Dibromoethane           | 50.0                  | 0.00                  | U 18.3               | 37 *          | 57-133            | 19       | 0-25              |
| 108-90-7    | PSD Chlorobenzene               | 50.0                  | 0.00                  | U 15.5               | 31 *          | 53-122            | 38 *     | 0-25              |
| 100-41-4    | PSD Ethylbenzene                | 50.0                  | 0.00                  | U 21.8               | 44 *          | 51-125            | 44 *     | 0-25              |
| 179601-23-1 | PSD m,p-Xylenes                 | 100                   | 0.00                  | U 36.1               | 36 *          | 50-126            | 44 *     | 0-25              |
| 95-47-6     | PSD o-Xylene                    | 50.0                  | 0.00                  | U 19.4               | 39 *          | 52-127            | 40 *     | 0-25              |
| 100-42-5    | PSD Styrene                     | 50.0                  | 0.00                  | U 10.4               | 21 *          | 49-135            | 38 *     | 0-25              |
| 75-25-2     | PSD Bromoform                   | 50.0                  | 0.00                  | U 20.5               | 41 *          | 57-149            | 34 *     | 0-25              |
| 79-34-5     | PSD 1,1,2,2-Tetrachloroethane   | 50.0                  | 0.00                  | U 32.1               | 64            | 63-127            | 45 *     | 0-25              |

## Volatile

Page 6 of 6

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1324

Sample Type: Post Spike Duplicate

Client ID: RE15-10-8410PSD

Matrix: R

Lab Sample ID: 1202026237

%Moisture: 24.9

Instrument: VOA5.I

Analysis Date: 01/28/2010 21:07

Dilution: 1

Analyst: DXK1

Pren Batch #: 946006

Purge Vol: 5 mL

Batch ID: 946008

| CAS No   | Parmname                        | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg |   | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits | Acceptance<br>RPD<br>% | Acceptance<br>Limits |
|----------|---------------------------------|--------------------------|--------------------------|---|-------------------------|---------------|----------------------|------------------------|----------------------|
| 96-18-4  | PSD 1,2,3-Trichloropropane      | 50.0                     | 0.00                     | U | 31.7                    | 63            | 57-149               | 27 *                   | 0-25                 |
| 108-86-1 | PSD Bromobenzene                | 50.0                     | 0.00                     | U | 14.5                    | 29 *          | 49-131               | 52 *                   | 0-25                 |
| 103-65-1 | PSD n-Propylbenzene             | 50.0                     | 0.00                     | U | 22.8                    | 46            | 40-136               | 72 *                   | 0-25                 |
| 95-49-8  | PSD 2-Chlorotoluene             | 50.0                     | 0.00                     | U | 18.6                    | 37 *          | 44-135               | 61 *                   | 0-25                 |
| 98-82-8  | PSD Isopropylbenzene            | 50.0                     | 0.00                     | U | 29.5                    | 59            | 44-140               | 63 *                   | 0-25                 |
| 108-67-8 | PSD 1,3,5-Trimethylbenzene      | 50.0                     | 0.00                     | U | 22.5                    | 45            | 42-140               | 66 *                   | 0-25                 |
| 106-43-4 | PSD 4-Chlorotoluene             | 50.0                     | 0.00                     | U | 15.5                    | 31 *          | 44-132               | 58 *                   | 0-25                 |
| 98-06-6  | PSD tert-Butylbenzene           | 50.0                     | 0.00                     | U | 23.6                    | 47            | 42-142               | 68 *                   | 0-25                 |
| 95-63-6  | PSD 1,2,4-Trimethylbenzene      | 50.0                     | 0.00                     | U | 18.3                    | 37 *          | 43-137               | 63 *                   | 0-25                 |
| 135-98-8 | PSD sec-Butylbenzene            | 50.0                     | 0.00                     | U | 20.6                    | 41            | 39-139               | 74 *                   | 0-25                 |
| 99-87-6  | PSD 4-Isopropyltoluene          | 50.0                     | 0.00                     | U | 7.43                    | 15 *          | 38-145               | 100 *                  | 0-25                 |
| 541-73-1 | PSD 1,3-Dichlorobenzene         | 50.0                     | 0.00                     | U | 10.2                    | 20 *          | 43-129               | 51 *                   | 0-25                 |
| 106-46-7 | PSD 1,4-Dichlorobenzene         | 50.0                     | 0.00                     | U | 9.48                    | 19 *          | 44-125               | 49 *                   | 0-25                 |
| 104-51-8 | PSD n-Butylbenzene              | 50.0                     | 0.00                     | U | 12.9                    | 26 *          | 36-141               | 81 *                   | 0-25                 |
| 96-12-8  | PSD 1,2-Dibromo-3-chloropropane | 50.0                     | 0.00                     | U | 14.9                    | 30 *          | 47-151               | 17                     | 0-25                 |
| 630-20-6 | PSD 1,1,1,2-Tetrachloroethane   | 50.0                     | 0.00                     | U | 26.2                    | 52 *          | 59-131               | 27 *                   | 0-25                 |
| 95-50-1  | PSD 1,2-Dichlorobenzene         | 50.0                     | 0.00                     | U | 10.1                    | 20 *          | 43-129               | 40 *                   | 0-25                 |

## Volatile

Page 1 of 3

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1324

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 946006

Matrix: SOIL

Lab Sample ID:1202026238

Instrument: VOA5.I

Analysis Date: 01/28/2010 10:10

Dilution: 1

Analyst: DXK1

Pre Batch ID 946006

Purge Vol: 5 mL

Batch ID: 946008

| CAS No   | Parmname                       | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits |
|----------|--------------------------------|--------------------------|--------------------------|-------------------------|---------------|----------------------|
| 75-71-8  | LCS Dichlorodifluoromethane    | 50.0                     | 0.0                      | 44.7                    | 89            | 33-155               |
| 74-87-3  | LCS Chloromethane              | 50.0                     | 0.0                      | 54.5                    | 109           | 53-132               |
| 75-01-4  | LCS Vinyl chloride             | 50.0                     | 0.0                      | 57.6                    | 115           | 61-128               |
| 74-83-9  | LCS Bromomethane               | 50.0                     | 0.0                      | 50.0                    | 100           | 63-126               |
| 75-00-3  | LCS Chloroethane               | 50.0                     | 0.0                      | 50.4                    | 101           | 67-124               |
| 75-69-4  | LCS Trichlorofluoromethane     | 50.0                     | 0.0                      | 51.7                    | 103           | 67-151               |
| 67-64-1  | LCS Acetone                    | 250                      | 0.0                      | 261                     | 104           | 29-160               |
| 75-35-4  | LCS 1,1-Dichloroethylene       | 50.0                     | 0.0                      | 59.8                    | 120           | 70-125               |
| 74-88-4  | LCS Iodomethane                | 250                      | 0.0                      | 212                     | 85            | 74-131               |
| 75-09-2  | LCS Methylene chloride         | 50.0                     | 0.0                      | 43.9                    | 88            | 72-127               |
| 75-15-0  | LCS Carbon disulfide           | 250                      | 0.0                      | 273                     | 109           | 64-127               |
| 156-60-5 | LCS trans-1,2-Dichloroethylene | 50.0                     | 0.0                      | 54.2                    | 108           | 71-122               |
| 75-34-3  | LCS 1,1-Dichloroethane         | 50.0                     | 0.0                      | 52.5                    | 105           | 75-120               |
| 78-93-3  | LCS 2-Butanone                 | 250                      | 0.0                      | 270                     | 108           | 35-162               |
| 156-59-2 | LCS cis-1,2-Dichloroethylene   | 50.0                     | 0.0                      | 52.4                    | 105           | 76-122               |
| 594-20-7 | LCS 2,2-Dichloropropane        | 50.0                     | 0.0                      | 50.3                    | 101           | 74-135               |
| 67-66-3  | LCS Chloroform                 | 50.0                     | 0.0                      | 50.2                    | 100           | 77-120               |
| 74-97-5  | LCS Bromochloromethane         | 50.0                     | 0.0                      | 40.9                    | 82            | 76-122               |
| 71-55-6  | LCS 1,1,1-Trichloroethane      | 50.0                     | 0.0                      | 50.8                    | 102           | 75-128               |
| 563-58-6 | LCS 1,1-Dichloropropene        | 50.0                     | 0.0                      | 54.5                    | 109           | 77-125               |
| 56-23-5  | LCS Carbon tetrachloride       | 50.0                     | 0.0                      | 51.8                    | 104           | 77-134               |
| 107-06-2 | LCS 1,2-Dichloroethane         | 50.0                     | 0.0                      | 51.4                    | 103           | 72-120               |

Volatile  
Quality Control Summary  
Spike Recovery Report

Page 2 of 3

SDG Number: 10-1324

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 946006

Matrix: SOIL

Lab Sample ID: 1202026238

Instrument: VOA5.I

Analysis Date: 01/28/2010 10:10

Dilution: 1

Analyst: DXK1

Pren Batch II 946006

Purge Vol: 5 mL

Batch ID: 946008

| CAS No      | Parmname                        | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits |
|-------------|---------------------------------|--------------------------|--------------------------|-------------------------|---------------|----------------------|
| 71-43-2     | LCS Benzene                     | 50.0                     | 0.0                      | 49.4                    | 99            | 72-120               |
| 79-01-6     | LCS Trichloroethylene           | 50.0                     | 0.0                      | 50.6                    | 101           | 78-121               |
| 78-87-5     | LCS 1,2-Dichloropropane         | 50.0                     | 0.0                      | 52.8                    | 106           | 74-120               |
| 75-27-4     | LCS Bromodichloromethane        | 50.0                     | 0.0                      | 51.4                    | 103           | 79-125               |
| 74-95-3     | LCS Dibromomethane              | 50.0                     | 0.0                      | 46.7                    | 93            | 78-122               |
| 108-10-1    | LCS 4-Methyl-2-pentanone        | 250                      | 0.0                      | 288                     | 115           | 71-134               |
| 10061-01-5  | LCS cis-1,3-Dichloropropylene   | 50.0                     | 0.0                      | 50.9                    | 102           | 80-125               |
| 108-88-3    | LCS Toluene                     | 50.0                     | 0.0                      | 51.8                    | 104           | 65-124               |
| 10061-02-6  | LCS trans-1,3-Dichloropropylene | 50.0                     | 0.0                      | 55.6                    | 111           | 71-134               |
| 79-00-5     | LCS 1,1,2-Trichloroethane       | 50.0                     | 0.0                      | 49.6                    | 99            | 76-120               |
| 591-78-6    | LCS 2-Hexanone                  | 250                      | 0.0                      | 307                     | 123           | 42-159               |
| 142-28-9    | LCS 1,3-Dichloropropane         | 50.0                     | 0.0                      | 51.7                    | 103           | 72-120               |
| 127-18-4    | LCS Tetrachloroethylene         | 50.0                     | 0.0                      | 46.1                    | 92            | 74-123               |
| 124-48-1    | LCS Dibromochloromethane        | 50.0                     | 0.0                      | 48.0                    | 96            | 83-128               |
| 106-93-4    | LCS 1,2-Dibromoethane           | 50.0                     | 0.0                      | 48.3                    | 97            | 79-121               |
| 108-90-7    | LCS Chlorobenzene               | 50.0                     | 0.0                      | 47.6                    | 95            | 75-120               |
| 100-41-4    | LCS Ethylbenzene                | 50.0                     | 0.0                      | 54.6                    | 109           | 74-120               |
| 179601-23-1 | LCS m,p-Xylenes                 | 100                      | 0.0                      | 104                     | 104           | 74-120               |
| 95-47-6     | LCS o-Xylene                    | 50.0                     | 0.0                      | 52.2                    | 104           | 74-120               |
| 100-42-5    | LCS Styrene                     | 50.0                     | 0.0                      | 54.6                    | 109           | 76-125               |
| 75-25-2     | LCS Bromoform                   | 50.0                     | 0.0                      | 48.5                    | 97            | 77-138               |
| 79-34-5     | LCS 1,1,2,2-Tetrachloroethane   | 50.0                     | 0.0                      | 53.4                    | 107           | 72-122               |

## Volatile

Page 3 of 3

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1324

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 946006

Matrix: SOIL

Lab Sample ID: 1202026238

Instrument: VOA5.I

Analysis Date: 01/28/2010 10:10

Dilution: 1

Analyst: DXK1

Pre Batch ID: 946006

Purge Vol: 5 mL

Batch ID: 946008

| CAS No   | Parname                         | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits |
|----------|---------------------------------|--------------------------|--------------------------|-------------------------|---------------|----------------------|
| 96-18-4  | LCS 1,2,3-Trichloropropane      | 50.0                     | 0.0                      | 50.2                    | 100           | 75-135               |
| 108-86-1 | LCS Bromobenzene                | 50.0                     | 0.0                      | 46.5                    | 93            | 73-120               |
| 103-65-1 | LCS n-Propylbenzene             | 50.0                     | 0.0                      | 59.8                    | 120           | 68-121               |
| 95-49-8  | LCS 2-Chlorotoluene             | 50.0                     | 0.0                      | 53.5                    | 107           | 69-120               |
| 98-82-8  | LCS Isopropylbenzene            | 50.0                     | 0.0                      | 56.9                    | 114           | 66-127               |
| 108-67-8 | LCS 1,3,5-Trimethylbenzene      | 50.0                     | 0.0                      | 58.7                    | 117           | 67-126               |
| 106-43-4 | LCS 4-Chlorotoluene             | 50.0                     | 0.0                      | 55.4                    | 111           | 72-120               |
| 98-06-6  | LCS tert-Butylbenzene           | 50.0                     | 0.0                      | 51.9                    | 104           | 72-124               |
| 95-63-6  | LCS 1,2,4-Trimethylbenzene      | 50.0                     | 0.0                      | 55.7                    | 111           | 72-122               |
| 135-98-8 | LCS sec-Butylbenzene            | 50.0                     | 0.0                      | 56.7                    | 113           | 71-124               |
| 99-87-6  | LCS 4-Isopropyltoluene          | 50.0                     | 0.0                      | 55.6                    | 111           | 72-130               |
| 541-73-1 | LCS 1,3-Dichlorobenzene         | 50.0                     | 0.0                      | 47.4                    | 95            | 73-120               |
| 106-46-7 | LCS 1,4-Dichlorobenzene         | 50.0                     | 0.0                      | 46.3                    | 93            | 73-120               |
| 104-51-8 | LCS n-Butylbenzene              | 50.0                     | 0.0                      | 60.4                    | 121           | 72-128               |
| 96-12-8  | LCS 1,2-Dibromo-3-chloropropane | 50.0                     | 0.0                      | 48.4                    | 97            | 68-145               |
| 630-20-6 | LCS 1,1,1,2-Tetrachloroethane   | 50.0                     | 0.0                      | 49.8                    | 100           | 78-121               |
| 95-50-1  | LCS 1,2-Dichlorobenzene         | 50.0                     | 0.0                      | 46.4                    | 93            | 74-120               |

Volatile

Page 1 of 1

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1324

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 946006

Matrix: SOIL

Lab Sample ID:1202026239

Instrument: VOA5.I

Analysis Date: 01/28/2010 10:36

Dilution: 1

Analyst: DXK1

Pre Batch ID 946006

Purge Vol: 5 mL

Batch ID: 946008

| CAS No  | Parmname  | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits |
|---------|---|--------------------------|--------------------------|-------------------------|---------------|----------------------|
| 76-13-1 | LCS 1,1,2-Trichloro-1,2,2-Trifluor<br><i>Trichlorotrifluoroethane</i> | 250                      | 0.0                      | 346                     | 138           | 52-139               |



## Volatile

Page 1 of 3

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1324

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 946006

Matrix: SOIL

Lab Sample ID: 1202037687

Instrument: VOA5.1

Analysis Date: 01/31/2010 12:15

Dilution: 1

Analyst: DXK1

Pren Batch II 946006

Purge Vol: 5 mL

Batch ID: 946008

| CAS No   | Parmname                       | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits |
|----------|--------------------------------|--------------------------|--------------------------|-------------------------|---------------|----------------------|
| 75-71-8  | LCS Dichlorodifluoromethane    | 50.0                     | 0.0                      | 39.0                    | 78            | 33-155               |
| 74-87-3  | LCS Chloromethane              | 50.0                     | 0.0                      | 52.0                    | 104           | 53-132               |
| 75-01-4  | LCS Vinyl chloride             | 50.0                     | 0.0                      | 54.9                    | 110           | 61-128               |
| 74-83-9  | LCS Bromomethane               | 50.0                     | 0.0                      | 49.3                    | 99            | 63-126               |
| 75-00-3  | LCS Chloroethane               | 50.0                     | 0.0                      | 46.8                    | 94            | 67-124               |
| 75-69-4  | LCS Trichlorofluoromethane     | 50.0                     | 0.0                      | 50.3                    | 101           | 67-151               |
| 67-64-1  | LCS Acetone                    | 250                      | 0.0                      | 228                     | 91            | 29-160               |
| 75-35-4  | LCS 1,1-Dichloroethylene       | 50.0                     | 0.0                      | 58.0                    | 116           | 70-125               |
| 74-88-4  | LCS Iodomethane                | 250                      | 0.0                      | 211                     | 85            | 74-131               |
| 75-09-2  | LCS Methylene chloride         | 50.0                     | 0.0                      | 44.2                    | 88            | 72-127               |
| 75-15-0  | LCS Carbon disulfide           | 250                      | 0.0                      | 258                     | 103           | 64-127               |
| 156-60-5 | LCS trans-1,2-Dichloroethylene | 50.0                     | 0.0                      | 52.9                    | 106           | 71-122               |
| 75-34-3  | LCS 1,1-Dichloroethane         | 50.0                     | 0.0                      | 51.8                    | 104           | 75-120               |
| 78-93-3  | LCS 2-Butanone                 | 250                      | 0.0                      | 235                     | 94            | 35-162               |
| 156-59-2 | LCS cis-1,2-Dichloroethylene   | 50.0                     | 0.0                      | 52.5                    | 105           | 76-122               |
| 594-20-7 | LCS 2,2-Dichloropropane        | 50.0                     | 0.0                      | 49.4                    | 99            | 74-135               |
| 67-66-3  | LCS Chloroform                 | 50.0                     | 0.0                      | 50.7                    | 101           | 77-120               |
| 74-97-5  | LCS Bromochloromethane         | 50.0                     | 0.0                      | 43.1                    | 86            | 76-122               |
| 71-55-6  | LCS 1,1,1-Trichloroethane      | 50.0                     | 0.0                      | 49.1                    | 98            | 75-128               |
| 563-58-6 | LCS 1,1-Dichloropropene        | 50.0                     | 0.0                      | 52.4                    | 105           | 77-125               |
| 56-23-5  | LCS Carbon tetrachloride       | 50.0                     | 0.0                      | 49.7                    | 99            | 77-134               |
| 107-06-2 | LCS 1,2-Dichloroethane         | 50.0                     | 0.0                      | 55.2                    | 110           | 72-120               |

## Volatile

Page 2 of 3

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1324

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 946006

Matrix: SOIL

Lab Sample ID: 1202037687

Instrument: VOA5.I

Analysis Date: 01/31/2010 12:15

Dilution: 1

Analyst: DXK1

Prep Batch ID: 946006

Purge Vol: 5 mL

Batch ID: 946008

| CAS No      | Parmname                        | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits |
|-------------|---------------------------------|--------------------------|--------------------------|-------------------------|---------------|----------------------|
| 71-43-2     | LCS Benzene                     | 50.0                     | 0.0                      | 48.7                    | 97            | 72-120               |
| 79-01-6     | LCS Trichloroethylene           | 50.0                     | 0.0                      | 49.0                    | 98            | 78-121               |
| 78-87-5     | LCS 1,2-Dichloropropane         | 50.0                     | 0.0                      | 53.3                    | 107           | 74-120               |
| 75-27-4     | LCS Bromodichloromethane        | 50.0                     | 0.0                      | 52.9                    | 106           | 79-125               |
| 74-95-3     | LCS Dibromomethane              | 50.0                     | 0.0                      | 48.7                    | 97            | 78-122               |
| 108-10-1    | LCS 4-Methyl-2-pentanone        | 250                      | 0.0                      | 288                     | 115           | 71-134               |
| 10061-01-5  | LCS cis-1,3-Dichloropropylene   | 50.0                     | 0.0                      | 51.3                    | 103           | 80-125               |
| 108-88-3    | LCS Toluene                     | 50.0                     | 0.0                      | 49.0                    | 98            | 65-124               |
| 10061-02-6  | LCS trans-1,3-Dichloropropylene | 50.0                     | 0.0                      | 54.9                    | 110           | 71-134               |
| 79-00-5     | LCS 1,1,2-Trichloroethane       | 50.0                     | 0.0                      | 49.1                    | 98            | 76-120               |
| 591-78-6    | LCS 2-Hexanone                  | 250                      | 0.0                      | 264                     | 106           | 42-159               |
| 142-28-9    | LCS 1,3-Dichloropropane         | 50.0                     | 0.0                      | 51.9                    | 104           | 72-120               |
| 127-18-4    | LCS Tetrachloroethylene         | 50.0                     | 0.0                      | 43.5                    | 87            | 74-123               |
| 124-48-1    | LCS Dibromochloromethane        | 50.0                     | 0.0                      | 48.1                    | 96            | 83-128               |
| 106-93-4    | LCS 1,2-Dibromoethane           | 50.0                     | 0.0                      | 48.0                    | 96            | 79-121               |
| 108-90-7    | LCS Chlorobenzene               | 50.0                     | 0.0                      | 46.4                    | 93            | 75-120               |
| 100-41-4    | LCS Ethylbenzene                | 50.0                     | 0.0                      | 51.9                    | 104           | 74-120               |
| 179601-23-1 | LCS m,p-Xylenes                 | 100                      | 0.0                      | 99.4                    | 99            | 74-120               |
| 95-47-6     | LCS o-Xylene                    | 50.0                     | 0.0                      | 50.7                    | 101           | 74-120               |
| 100-42-5    | LCS Styrene                     | 50.0                     | 0.0                      | 53.7                    | 107           | 76-125               |
| 75-25-2     | LCS Bromoform                   | 50.0                     | 0.0                      | 47.8                    | 96            | 77-138               |
| 79-34-5     | LCS 1,1,2,2-Tetrachloroethane   | 50.0                     | 0.0                      | 52.0                    | 104           | 72-122               |

Volatile  
Quality Control Summary  
Spike Recovery Report

Page 3 of 3

SDG Number: 10-1324

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 946006

Matrix: SOIL

Lab Sample ID: 1202037687

Instrument: VOA5.1

Analysis Date: 01/31/2010 12:15

Dilution: 1

Analyst: DXK1

Pre Batch ID: 946006

Purge Vol: 5 mL

Batch ID: 946008

| CAS No   | Parmname                        | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits |
|----------|---------------------------------|--------------------------|--------------------------|-------------------------|---------------|----------------------|
| 96-18-4  | LCS 1,2,3-Trichloropropane      | 50.0                     | 0.0                      | 49.9                    | 100           | 75-135               |
| 108-86-1 | LCS Bromobenzene                | 50.0                     | 0.0                      | 45.5                    | 91            | 73-120               |
| 103-65-1 | LCS n-Propylbenzene             | 50.0                     | 0.0                      | 54.9                    | 110           | 68-121               |
| 95-49-8  | LCS 2-Chlorotoluene             | 50.0                     | 0.0                      | 51.0                    | 102           | 69-120               |
| 98-82-8  | LCS Isopropylbenzene            | 50.0                     | 0.0                      | 52.3                    | 105           | 66-127               |
| 108-67-8 | LCS 1,3,5-Trimethylbenzene      | 50.0                     | 0.0                      | 54.9                    | 110           | 67-126               |
| 106-43-4 | LCS 4-Chlorotoluene             | 50.0                     | 0.0                      | 51.6                    | 103           | 72-120               |
| 98-06-6  | LCS tert-Butylbenzene           | 50.0                     | 0.0                      | 47.4                    | 95            | 72-124               |
| 95-63-6  | LCS 1,2,4-Trimethylbenzene      | 50.0                     | 0.0                      | 52.4                    | 105           | 72-122               |
| 135-98-8 | LCS sec-Butylbenzene            | 50.0                     | 0.0                      | 51.3                    | 103           | 71-124               |
| 99-87-6  | LCS 4-Isopropyltoluene          | 50.0                     | 0.0                      | 50.9                    | 102           | 72-130               |
| 541-73-1 | LCS 1,3-Dichlorobenzene         | 50.0                     | 0.0                      | 45.1                    | 90            | 73-120               |
| 106-46-7 | LCS 1,4-Dichlorobenzene         | 50.0                     | 0.0                      | 44.5                    | 89            | 73-120               |
| 104-51-8 | LCS n-Butylbenzene              | 50.0                     | 0.0                      | 54.5                    | 109           | 72-128               |
| 96-12-8  | LCS 1,2-Dibromo-3-chloropropane | 50.0                     | 0.0                      | 47.1                    | 94            | 68-145               |
| 630-20-6 | LCS 1,1,1,2-Tetrachloroethane   | 50.0                     | 0.0                      | 48.9                    | 98            | 78-121               |
| 95-50-1  | LCS 1,2-Dichlorobenzene         | 50.0                     | 0.0                      | 44.6                    | 89            | 74-120               |

## Volatile

Page 1 of 1

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1324

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 946006

Matrix: SOIL

Lab Sample ID: 1202037688

Instrument: VOA5.I

Analysis Date: 01/31/2010 12:41

Dilution: 1

Analyst: DXK1

Prep Batch ID: 946006

Purge Vol: 5 mL

Batch ID: 946008

| CAS No  | Parmname   | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits |
|---------|--|--------------------------|--------------------------|-------------------------|---------------|----------------------|
| 76-13-1 | LCS 1,1,2-Trichloro-1,2,2-Trifluor<br>Trichlorotrifluoroethane | 250                      | 0.0                      | 325                     | 130           | 52-139               |

## Method Blank Summary

Page 1 of 1

|                |                     |                |                  |            |                   |
|----------------|---------------------|----------------|------------------|------------|-------------------|
| SDG Number:    | 10-1324             | Client:        | LANL010          | Matrix:    | SOIL              |
| Client ID:     | MB for batch 946006 | Instrument ID: | VOA5.I           | Data File: | 012810V5SV405BL.D |
| Lab Sample ID: | 1202026235          | Prep Date:     | 01/28/2009 08:00 | Analyzed:  | 01/28/10 11:02    |
| Column:        | DB-624              |                |                  |            |                   |

This method blank applies to the following samples and quality control samples:

| Client Sample ID        | Lab Sample ID | File ID           | Date Analyzed | Time Analyzed |
|-------------------------|---------------|-------------------|---------------|---------------|
| 01 LCS for batch 946006 | 1202026238    | 012810V5SV403LL.D | 01/28/10      | 1010          |
| 02 LCS for batch 946006 | 1202026239    | 012810V5SV404SL.D | 01/28/10      | 1036          |
| 03 RE15-10-8447         | 245114001     | 012810V5SV406.D   | 01/28/10      | 1128          |
| 04 RE15-10-8410         | 245114002     | 012810V5SV407.D   | 01/28/10      | 1153          |
| 05 RE15-10-8411         | 245114003     | 012810V5SV408.D   | 01/28/10      | 1219          |
| 06 RE15-10-8412         | 245114004     | 012810V5SV409.D   | 01/28/10      | 1245          |
| 07 RE15-10-8441         | 245114005     | 012810V5SV410.D   | 01/28/10      | 1323          |
| 08 RE15-10-8425         | 245114007     | 012810V5SV412.D   | 01/28/10      | 1414          |
| 09 RE15-10-8422         | 245114008     | 012810V5SV413.D   | 01/28/10      | 1440          |
| 10 RE15-10-8417         | 245114009     | 012810V5SV414.D   | 01/28/10      | 1506          |
| 11 RE15-10-8423         | 245114010     | 012810V5SV415.D   | 01/28/10      | 1532          |
| 12 RE15-10-8416         | 245114011     | 012810V5SV416.D   | 01/28/10      | 1558          |
| 13 RE15-10-8418         | 245114012     | 012810V5SV417.D   | 01/28/10      | 1623          |
| 14 RE15-10-8424         | 245114013     | 012810V5SV418.D   | 01/28/10      | 1649          |
| 15 RE15-10-8421         | 245114014     | 012810V5SV419.D   | 01/28/10      | 1715          |
| 16 RE15-10-8420         | 245114015     | 012810V5SV420.D   | 01/28/10      | 1741          |
| 17 HB for batch 946006  | 1202037689    | 012810V5SV421HL.D | 01/28/10      | 1806          |
| 18 RE15-10-8411REDL     | 245114003     | 012810V5SV426.D   | 01/28/10      | 2015          |
| 19 RE15-10-8410PS       | 1202026236    | 012810V5SV427.D   | 01/28/10      | 2041          |
| 20 RE15-10-8410PSD      | 1202026237    | 012810V5SV428.D   | 01/28/10      | 2107          |

## Method Blank Summary

Page 1 of 1

|                |                     |                |                  |            |                   |
|----------------|---------------------|----------------|------------------|------------|-------------------|
| SDG Number:    | 10-1324             | Client:        | LANL010          | Matrix:    | SOIL              |
| Client ID:     | MB for batch 946006 | Instrument ID: | VOA5.I           | Data File: | 013110V55V705BL.D |
| Lab Sample ID: | 1202037686          | Prep Date:     | 01/31/2009 08:00 | Analyzed:  | 01/31/10 13:07    |
| Column:        | DB-624              |                |                  |            |                   |

This method blank applies to the following samples and quality control samples:

| Client Sample ID        | Lab Sample ID | File ID           | Date Analyzed | Time Analyzed |
|-------------------------|---------------|-------------------|---------------|---------------|
| 01 LCS for batch 946006 | 1202037687    | 013110V55V703LL.D | 01/31/10      | 1215          |
| 02 LCS for batch 946006 | 1202037688    | 013110V55V704SL.D | 01/31/10      | 1241          |
| 03 RE15-10-8413         | 245114006     | 013110V55V713.D   | 01/31/10      | 1634          |

## Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1324

Instrument ID: VOA5.I

Injection Date/Time: 08-JAN-10 13:05

Column Description: DB-624

Lab File ID 010810V5\SS505.D

| m/e | Ion Abundance Criteria             | % Relative Abundance |
|-----|------------------------------------|----------------------|
| 50  | 15.0 - 40.0% of mass 95            | 21.1                 |
| 75  | 30.0 - 60.0% of mass 95            | 43.7                 |
| 95  | Base Peak, 100% Relative Abundance | 100                  |
| 96  | 5.0 - 9.0% of mass 95              | 6.8                  |
| 173 | Less than 2.0% of mass 174         | 0.7                  |
| 174 | 50.0 - 100.0% of mass 95           | 80.9                 |
| 175 | 5.0 - 9.0% of mass 174             | 7.1                  |
| 176 | 95.0 - 101.0% of mass 174          | 95.3                 |
| 177 | 5.0 - 9.0% of mass 176             | 6.6                  |

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD, BLANKS AND STANDARDS

| Client Sample ID | Lab Sample ID | Lab File ID      | Time Analyzed   |
|------------------|---------------|------------------|-----------------|
| ICALMIX[A]       | W5VM100108-01 | 010810V5\SS506.D | 08-JAN-10 13:40 |
| ICALMIX[A]       | W5VM100108-02 | 010810V5\SS507.D | 08-JAN-10 14:05 |
| ICALMIX[A]       | W5VM100108-03 | 010810V5\SS508.D | 08-JAN-10 14:31 |
| ICALMIX[A]       | W5VM100108-04 | 010810V5\SS509.D | 08-JAN-10 14:57 |
| ICALMIX[A]       | W5VM100108-05 | 010810V5\SS511.D | 08-JAN-10 15:23 |
| ICALMIX[A]       | W5VM100108-06 | 010810V5\SS512.D | 08-JAN-10 15:49 |
| ICALMIX[A]       | W5VM100108-07 | 010810V5\SS513.D | 08-JAN-10 16:14 |
| ICALMIX[A]       | W5VM100108-08 | 010810V5\SS515.D | 08-JAN-10 17:06 |
| ICALMIX[B]       | W5VM100108-11 | 010810V5\SS518.D | 08-JAN-10 18:24 |
| ICALMIX[B]       | W5VM100108-12 | 010810V5\SS519.D | 08-JAN-10 18:50 |
| ICALMIX[B]       | W5VM100108-13 | 010810V5\SS520.D | 08-JAN-10 19:16 |
| ICALMIX[B]       | W5VM100108-14 | 010810V5\SS521.D | 08-JAN-10 19:42 |
| ICALMIX[B]       | W5VM100108-15 | 010810V5\SS522.D | 08-JAN-10 20:07 |
| ICALMIX[B]       | W5VM100108-16 | 010810V5\SS523.D | 08-JAN-10 20:33 |
| ICALMIX[B]       | W5VM100108-17 | 010810V5\SS524.D | 08-JAN-10 20:59 |
| ICVMIX[B]01      | W5VM100108-18 | 010810V5\SS526.D | 08-JAN-10 21:50 |

## Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1324

Instrument ID: VOA5.I

Injection Date/Time: 11-JAN-10 10:13

Column Description: DB-624

Lab File ID 011110V5\5T102.D

| m/e | Ion Abundance Criteria             | % Relative Abundance |
|-----|------------------------------------|----------------------|
| 50  | 15.0 - 40.0% of mass 95            | 19.7                 |
| 75  | 30.0 - 60.0% of mass 95            | 42.7                 |
| 95  | Base Peak, 100% Relative Abundance | 100                  |
| 96  | 5.0 - 9.0% of mass 95              | 6.8                  |
| 173 | Less than 2.0% of mass 174         | 0.6                  |
| 174 | 50.0 - 100.0% of mass 95           | 87.3                 |
| 175 | 5.0 - 9.0% of mass 174             | 6.8                  |
| 176 | 95.0 - 101.0% of mass 174          | 96.7                 |
| 177 | 5.0 - 9.0% of mass 176             | 6.5                  |

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

| Client<br>Sample ID | Lab<br>Sample ID | Lab<br>File ID   | Time<br>Analyzed |
|---------------------|------------------|------------------|------------------|
| ICVMIX[A]02         | W5VM100111-01    | 011110V5\5T103.D | 11-JAN-10 10:39  |



## Instrument Performance Check

## BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1324

Instrument ID: VOA5.I

Injection Date/Time: 28-JAN-10 09:18

Column Description: DB-624

Lab File ID 012810V5\SV401.D

| m/e | Ion Abundance Criteria             | % Relative Abundance |
|-----|------------------------------------|----------------------|
| 50  | 15.0 - 40.0% of mass 95            | 26.1                 |
| 75  | 30.0 - 60.0% of mass 95            | 50                   |
| 95  | Base Peak, 100% Relative Abundance | 100                  |
| 96  | 5.0 - 9.0% of mass 95              | 6.5                  |
| 173 | Less than 2.0% of mass 174         | 0.6                  |
| 174 | 50.0 - 100.0% of mass 95           | 68                   |
| 175 | 5.0 - 9.0% of mass 174             | 7.1                  |
| 176 | 95.0 - 101.0% of mass 174          | 95.3                 |
| 177 | 5.0 - 9.0% of mass 176             | 7.2                  |

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD, BLANKS AND STANDARDS

| Client Sample ID | Lab Sample ID | Lab File ID        | Time Analyzed   |
|------------------|---------------|--------------------|-----------------|
| CCVMIX[A]01      | W5VM100128-02 | 012810V5\SV403.D   | 28-JAN-10 10:10 |
| BLK01LCS         | 1202026238    | 012810V5\SV403LL.D | 28-JAN-10 10:10 |
| CCVMIX[B]02      | W5VM100128-03 | 012810V5\SV404.D   | 28-JAN-10 10:36 |
| BLK01SLCS        | 1202026239    | 012810V5\SV404SL.D | 28-JAN-10 10:36 |
| BLK01            | 1202026235    | 012810V5\SV405BL.D | 28-JAN-10 11:02 |
| RE15-10-8447     | 245114001     | 012810V5\SV406.D   | 28-JAN-10 11:28 |
| RE15-10-8410     | 245114002     | 012810V5\SV407.D   | 28-JAN-10 11:53 |
| RE15-10-8411     | 245114003     | 012810V5\SV408.D   | 28-JAN-10 12:19 |
| RE15-10-8412     | 245114004     | 012810V5\SV409.D   | 28-JAN-10 12:45 |
| RE15-10-8441     | 245114005     | 012810V5\SV410.D   | 28-JAN-10 13:23 |
| RE15-10-8425     | 245114007     | 012810V5\SV412.D   | 28-JAN-10 14:14 |
| RE15-10-8422     | 245114008     | 012810V5\SV413.D   | 28-JAN-10 14:40 |
| RE15-10-8417     | 245114009     | 012810V5\SV414.D   | 28-JAN-10 15:06 |
| RE15-10-8423     | 245114010     | 012810V5\SV415.D   | 28-JAN-10 15:32 |
| RE15-10-8416     | 245114011     | 012810V5\SV416.D   | 28-JAN-10 15:58 |
| RE15-10-8418     | 245114012     | 012810V5\SV417.D   | 28-JAN-10 16:23 |
| RE15-10-8424     | 245114013     | 012810V5\SV418.D   | 28-JAN-10 16:49 |
| RE15-10-8421     | 245114014     | 012810V5\SV419.D   | 28-JAN-10 17:15 |
| RE15-10-8420     | 245114015     | 012810V5\SV420.D   | 28-JAN-10 17:41 |

## Instrument Performance Check

## BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1324

Instrument ID: VOA5.I

Injection Date/Time: 28-JAN-10 09:18

Column Description: DB-624

Lab File ID 012810V5\5V401.D

| m/e | Ion Abundance Criteria             | % Relative Abundance |
|-----|------------------------------------|----------------------|
| 50  | 15.0 - 40.0% of mass 95            | 26.1                 |
| 75  | 30.0 - 60.0% of mass 95            | 50                   |
| 95  | Base Peak, 100% Relative Abundance | 100                  |
| 96  | 5.0 - 9.0% of mass 95              | 6.5                  |
| 173 | Less than 2.0% of mass 174         | 0.6                  |
| 174 | 50.0 - 100.0% of mass 95           | 68                   |
| 175 | 5.0 - 9.0% of mass 174             | 7.1                  |
| 176 | 95.0 - 101.0% of mass 174          | 95.3                 |
| 177 | 5.0 - 9.0% of mass 176             | 7.2                  |

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

| Client Sample ID | Lab Sample ID | Lab File ID        | Time Analyzed   |
|------------------|---------------|--------------------|-----------------|
| HBLK01           | 1202037689    | 012810V5\5V421HL.D | 28-JAN-10 18:06 |
| RE15-10-8411REDL | 245114003     | 012810V5\5V426.D   | 28-JAN-10 20:15 |
| RE15-10-8410MS   | 1202026236    | 012810V5\5V427.D   | 28-JAN-10 20:41 |
| RE15-10-8410MSD  | 1202026237    | 012810V5\5V428.D   | 28-JAN-10 21:07 |

## Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1324

Instrument ID: VOA5.I

Injection Date/Time: 31-JAN-10 11:23

Column Description: DB-624

Lab File ID 013110V5\SV701.D

| m/e | Ion Abundance Criteria             | % Relative Abundance |
|-----|------------------------------------|----------------------|
| 50  | 15.0 - 40.0% of mass 95            | 26.9                 |
| 75  | 30.0 - 60.0% of mass 95            | 51.1                 |
| 95  | Base Peak, 100% Relative Abundance | 100                  |
| 96  | 5.0 - 9.0% of mass 95              | 6.6                  |
| 173 | Less than 2.0% of mass 174         | 0.7                  |
| 174 | 50.0 - 100.0% of mass 95           | 68.3                 |
| 175 | 5.0 - 9.0% of mass 174             | 7.4                  |
| 176 | 95.0 - 101.0% of mass 174          | 96.2                 |
| 177 | 5.0 - 9.0% of mass 176             | 6.4                  |

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD, BLANKS AND STANDARDS

| Client Sample ID | Lab Sample ID | Lab File ID        | Time Analyzed   |
|------------------|---------------|--------------------|-----------------|
| CCVMIX[A]03      | W5VM100131-02 | 013110V5\SV703.D   | 31-JAN-10 12:15 |
| BLK02LCS         | 1202037687    | 013110V5\SV703LL.D | 31-JAN-10 12:15 |
| CCVMIX[B]04      | W5VM100131-03 | 013110V5\SV704.D   | 31-JAN-10 12:41 |
| BLK02SLCS        | 1202037688    | 013110V5\SV704SL.D | 31-JAN-10 12:41 |
| BLK02            | 1202037686    | 013110V5\SV705BL.D | 31-JAN-10 13:07 |
| RE15-10-8413     | 245114006     | 013110V5\SV713.D   | 31-JAN-10 16:34 |

# Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1324

Instrument: VOA5.1

STD Analysis Time: 28-JAN-10 10:10

GC Column: DB-624

Data File: C:\msdchem\1\DATA\012810V5\5V403.D

|                | Fluorobenzene |        | Chlorobenzene-d5 |        | 1,4-Dichlorobenzene-d4 |        |
|----------------|---------------|--------|------------------|--------|------------------------|--------|
|                | Area          | # RT # | Area             | # RT # | Area                   | # RT # |
| 12 Hour STD    | 1993245       | 10.4   | 1312881          | 13.6   | 649435                 | 16.0   |
| Upper Limit    | 3986490       | 10.9   | 2625762          | 14.1   | 1298870                | 16.5   |
| Lower Limit    | 996623        | 9.88   | 656441           | 13.1   | 324718                 | 15.5   |
| Sample ID      |               |        |                  |        |                        |        |
| K01LCS         | 1993245       | 10.4   | 1312881          | 13.6   | 649435                 | 16.0   |
| K01SLCS        | 2029338       | 10.4   | 1320347          | 13.6   | 616980                 | 16.0   |
| K01            | 1864968       | 10.4   | 1206418          | 13.6   | 551655                 | 16.0   |
| 15-10-8447     | 1849161       | 10.4   | 1194442          | 13.6   | 551242                 | 16.0   |
| 15-10-8410     | 1393722       | 10.4   | 657042           | 13.6   | 185321                 | * 16.0 |
| 15-10-8411     | 1349313       | 10.4   | 759345           | 13.6   | 292611                 | * 16.0 |
| 15-10-8412     | 1808030       | 10.4   | 1101613          | 13.6   | 386320                 | 16.0   |
| 15-10-8441     | 1923433       | 10.4   | 1156983          | 13.6   | 411261                 | 16.0   |
| 15-10-8425     | 1821980       | 10.4   | 1172725          | 13.6   | 506750                 | 16.0   |
| 15-10-8422     | 1761372       | 10.4   | 1105391          | 13.6   | 457668                 | 16.0   |
| 15-10-8417     | 1837252       | 10.4   | 1153625          | 13.6   | 457982                 | 16.0   |
| 15-10-8423     | 1036864       | 10.4   | 612351           | * 13.6 | 226364                 | * 16.0 |
| 15-10-8416     | 1753275       | 10.4   | 1031545          | 13.6   | 368763                 | 16.0   |
| 15-10-8418     | 1745716       | 10.4   | 1081472          | 13.6   | 398239                 | 16.0   |
| 15-10-8424     | 1746436       | 10.4   | 1075548          | 13.6   | 414968                 | 16.0   |
| 15-10-8421     | 1626525       | 10.4   | 1045732          | 13.6   | 459513                 | 16.0   |
| 15-10-8420     | 1640187       | 10.4   | 977773           | 13.6   | 371128                 | 16.0   |
| LK01           | 1654994       | 10.4   | 1066409          | 13.6   | 469511                 | 16.0   |
| 15-10-8411REDL | 1945561       | 10.4   | 1234625          | 13.6   | 582613                 | 16.0   |
| 15-10-8410MS   | 1615730       | 10.4   | 796872           | 13.6   | 236699                 | * 16.0 |
| 15-10-8410MSD  | 1545754       | 10.4   | 851135           | 13.6   | 304834                 | * 16.0 |

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk

\* Value outside of QC Limits

# Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1324

Instrument: VOA5.I

STD Analysis Time: 31-JAN-10 12:15

GC Column: DB-624

Data File: C:\msdchem\1\DATA\013110V5\5V703.D

|             | Fluorobenzene |   |      | Chlorobenzene-d5 |   |      | 1,4-Dichlorobenzene-d4 |   |      |
|-------------|---------------|---|------|------------------|---|------|------------------------|---|------|
|             | Area          | # | RT # | Area             | # | RT # | Area                   | # | RT # |
| 12 Hour STD | 1860482       |   | 10.4 | 1273384          |   | 13.6 | 641523                 |   | 16.0 |
| Upper Limit | 3720964       |   | 10.9 | 2546768          |   | 14.1 | 1283046                |   | 16.5 |
| Lower Limit | 930241        |   | 9.88 | 636692           |   | 13.1 | 320762                 |   | 15.5 |
| Sample ID   |               |   |      |                  |   |      |                        |   |      |
| K02LCS      | 1860482       |   | 10.4 | 1273384          |   | 13.6 | 641523                 |   | 16.0 |
| K02SLCS     | 1846900       |   | 10.4 | 1231006          |   | 13.6 | 587419                 |   | 16.0 |
| K02         | 1748987       |   | 10.4 | 1142688          |   | 13.6 | 525209                 |   | 16.0 |
| 15-10-8413  | 1524904       |   | 10.4 | 1006998          |   | 13.6 | 459699                 |   | 16.0 |

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk

\* Value outside of QC Limits

# Sample Data

**Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 2

SDG Number: 10-1324  
Lab Sample ID: 245114001

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: S  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE15-10-8447  
Batch ID: 946008  
Run Date: 01/28/2010 11:28  
Prep Date: 01/28/2009 11:01  
Data File: 012810V55V406.D

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.00   | ug/kg | 0.340   | 1.00    |
| 74-87-3    | Chloromethane               | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-01-4    | Vinyl chloride              | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-83-9    | Bromomethane                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-00-3    | Chloroethane                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 67-64-1    | Acetone                     | J         | 2.80   | ug/kg | 1.66    | 5.00    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-88-4    | Iodomethane                 | U         | 5.00   | ug/kg | 1.60    | 5.00    |
| 75-09-2    | Methylene chloride          | U         | 5.00   | ug/kg | 2.00    | 5.00    |
| 75-15-0    | Carbon disulfide            | U         | 5.00   | ug/kg | 1.25    | 5.00    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 78-93-3    | 2-Butanone                  | U         | 5.00   | ug/kg | 1.50    | 5.00    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 67-66-3    | Chloroform                  | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-97-5    | Bromochloromethane          | U         | 1.00   | ug/kg | 0.330   | 1.00    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 71-43-2    | Benzene                     | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 79-01-6    | Trichloroethylene           | U         | 1.00   | ug/kg | 0.330   | 1.00    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-27-4    | Bromodichloromethane        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-95-3    | Dibromomethane              | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.00   | ug/kg | 1.25    | 5.00    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-88-3   | Toluene                     | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 591-78-6   | 2-Hexanone                  | U         | 5.00   | ug/kg | 1.50    | 5.00    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 124-48-1   | Dibromochloromethane        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-90-7   | Chlorobenzene               | U         | 1.00   | ug/kg | 0.300   | 1.00    |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114001

Client ID: RE15-10-8447  
 Batch ID: 946008  
 Run Date: 01/28/2010 11:28  
 Prep Date: 01/28/2009 11:01  
 Data File: 012810V55V406.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: S  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.00   | ug/kg | 0.300   | 2.00    |
| 95-47-6     | o-Xylene                              | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 100-42-5    | Styrene                               | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-25-2     | Bromoform                             | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-86-1    | Bromobenzene                          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.00   | ug/kg | 1.60    | 5.00    |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.00   | ug/kg | 0.300   | 1.00    |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V406.D  
Acq On : 28 Jan 2010 11:28 am  
Operator : DXK1  
InstName : VOA5  
Sample : |245114001|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 29 09:11:47 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT         | Rel RT   | QIon | Response | Conc  | Units |           |
|-------------------------------|--------|----------------|----------|------|----------|-------|-------|-----------|
| Internal Standards            |        |                |          |      |          |       |       | Dev (Min) |
| 1) Fluorobenzene              | 10.379 | 10.375         | 1.000    | 96   | 1849161  | 50.00 | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547 | 13.547         | 1.000    | 117  | 1194442  | 50.00 | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.959 | 15.962         | 1.000    | 152  | 551242   | 50.00 | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.379 | 10.375         | 1.000    | 96   | 1849161  | 50.00 | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547 | 13.547         | 1.000    | 117  | 1194442  | 50.00 | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.959 | 15.962         | 1.000    | 152  | 551242   | 50.00 | ug/L  | 0.00      |
| System Monitoring Compounds   |        |                |          |      |          |       |       | Dev (Min) |
| 29) 1,2-Dichloroethane-d4     | 10.025 | 10.021         | 0.966    | 65   | 460612   | 53.59 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 131 | Recovery | =    | 107.18%  |       |       |           |
| 43) Toluene-d8                | 12.016 | 12.016         | 0.887    | 98   | 1643860  | 50.46 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 75 - 129 | Recovery | =    | 100.92%  |       |       |           |
| 61) Bromofluorobenzene        | 14.739 | 14.739         | 0.924    | 95   | 571963   | 54.37 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 133 | Recovery | =    | 108.74%  |       |       |           |
| Target Compounds              |        |                |          |      |          |       |       | QValue    |
| 2) Dichlorodifluoromethane    | 0.000  | 4.689          | 0.000    |      | 0        | N.D.  |       |           |
| 3) Chloromethane              | 5.061  | 5.051          | 0.488    | 50   | 1022     | N.D.  |       |           |
| 4) Vinyl chloride             | 0.000  | 5.283          | 0.000    |      | 0        | N.D.  |       |           |
| 5) Bromomethane               | 0.000  | 5.877          | 0.000    |      | 0        | N.D.  |       |           |
| 6) Chloroethane               | 0.000  | 6.018          | 0.000    |      | 0        | N.D.  |       |           |
| 7) Trichlorofluoromethane     | 0.000  | 6.391          | 0.000    |      | 0        | N.D.  |       |           |
| 8) Ethyl ether                | 0.000  | 6.733          | 0.000    |      | 0        | N.D.  |       |           |
| 9) Acetone                    | 7.107  | 7.100          | 0.685    | 43   | 19426    | 2.80  | ug/L  | 85        |
| 10) 1,1-Dichloroethylene      | 0.000  | 7.125          | 0.000    |      | 0        | N.D.  |       |           |
| 11) Iodomethane               | 0.000  | 7.373          | 0.000    |      | 0        | N.D.  |       |           |
| 12) Acetonitrile              | 7.542  | 7.450          | 0.727    | 41   | 109      | N.D.  |       |           |
| 13) Methyl acetate            | 0.000  | 7.493          | 0.000    |      | 0        | N.D.  |       |           |
| 14) Carbon disulfide          | 7.521  | 7.511          | 0.725    | 76   | 829      | N.D.  |       |           |
| 15) Methylene chloride        | 7.691  | 7.691          | 0.741    | 84   | 6469     | N.D.  |       |           |
| 16) tert-Butyl methyl ether   | 7.988  | 7.984          | 0.770    | 73   | 231      | N.D.  |       |           |
| 17) trans-1,2-Dichloroethy... | 0.000  | 8.030          | 0.000    |      | 0        | N.D.  |       |           |
| 18) Vinyl acetate             | 8.469  | 8.458          | 0.816    | 43   | 233      | N.D.  |       |           |
| 19) 1,1-Dichloroethane        | 0.000  | 8.511          | 0.000    |      | 0        | N.D.  |       |           |
| 20) 2-Butanone                | 9.081  | 9.077          | 0.875    | 43   | 6573     | N.D.  |       |           |
| 21) cis-1,2-Dichloroethylene  | 0.000  | 9.144          | 0.000    |      | 0        | N.D.  |       |           |
| 22) 2,2-Dichloropropane       | 0.000  | 9.173          | 0.000    |      | 0        | N.D.  |       |           |
| 23) Bromochloromethane        | 0.000  | 9.417          | 0.000    |      | 0        | N.D.  |       |           |
| 24) Chloroform                | 0.000  | 9.452          | 0.000    |      | 0        | N.D.  |       |           |
| 25) 1,1,1-Trichloroethane     | 0.000  | 9.735          | 0.000    |      | 0        | N.D.  |       |           |
| 26) Cyclohexane               | 0.000  | 9.830          | 0.000    |      | 0        | N.D.  |       |           |
| 27) 1,1-Dichloropropene       | 0.000  | 9.887          | 0.000    |      | 0        | N.D.  |       |           |
| 28) Carbon tetrachloride      | 0.000  | 9.929          | 0.000    |      | 0        | N.D.  |       |           |
| 30) 1,2-Dichloroethane        | 10.028 | 10.103         | 0.966    | 62   | 115      | N.D.  |       |           |
| 31) Benzene                   | 10.128 | 10.127         | 0.976    | 78   | 270      | N.D.  |       |           |
| 32) Cyclohexene               | 0.000  | 10.248         | 0.000    |      | 0        | N.D.  |       |           |
| 33) n-Butyl alcohol           | 0.000  | 10.460         | 0.000    |      | 0        | N.D.  |       |           |
| 34) Trichloroethylene         | 0.000  | 10.768         | 0.000    |      | 0        | N.D.  |       |           |
| 35) 1,2-Dichloropropane       | 0.000  | 11.004         | 0.000    |      | 0        | N.D.  |       |           |
| 36) Methylcyclohexane         | 0.000  | 11.019         | 0.000    |      | 0        | N.D.  |       |           |
| 37) Dibromomethane            | 0.000  | 11.146         | 0.000    |      | 0        | N.D.  |       |           |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V406.D  
Acq On : 28 Jan 2010 11:28 am  
Operator : DXK1  
InstName : VOA5  
Sample : |245114001|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 29 09:11:47 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|-------------------------------|--------|--------|--------|------|----------|------|-------|
| 38) Bromodichloromethane      | 0.000  | 11.256 | 0.000  |      | 0        | N.D. |       |
| 39) 2-Chloroethylvinyl ether  | 0.000  | 11.468 | 0.000  |      | 0        | N.D. |       |
| 40) cis-1,3-Dichloropropylene | 0.000  | 11.705 | 0.000  |      | 0        | N.D. |       |
| 42) 4-Methyl-2-pentanone      | 11.790 | 11.786 | 0.870  | 58   | 360      | N.D. |       |
| 44) Toluene                   | 12.083 | 12.090 | 0.892  | 91   | 537      | N.D. |       |
| 45) trans-1,3-Dichloroprop... | 0.000  | 12.239 | 0.000  |      | 0        | N.D. |       |
| 46) 1,1,2-Trichloroethane     | 0.000  | 12.465 | 0.000  |      | 0        | N.D. |       |
| 47) 2-Hexanone                | 12.635 | 12.631 | 0.933  | 43   | 7917     | N.D. |       |
| 48) 1,3-Dichloropropane       | 0.000  | 12.656 | 0.000  |      | 0        | N.D. |       |
| 49) Tetrachloroethylene       | 0.000  | 12.691 | 0.000  |      | 0        | N.D. |       |
| 50) Dibromochloromethane      | 0.000  | 12.928 | 0.000  |      | 0        | N.D. |       |
| 51) 1,2-Dibromoethane         | 0.000  | 13.094 | 0.000  |      | 0        | N.D. |       |
| 52) Chlorobenzene             | 0.000  | 13.579 | 0.000  |      | 0        | N.D. |       |
| 53) 1,1,1,2-Tetrachloroethane | 0.000  | 13.636 | 0.000  |      | 0        | N.D. |       |
| 54) Ethylbenzene              | 13.643 | 13.639 | 1.007  | 91   | 257      | N.D. |       |
| 55) m,p-Xylenes               | 13.749 | 13.749 | 1.015  | 106  | 111      | N.D. |       |
| 56) o-Xylene                  | 0.000  | 14.184 | 0.000  |      | 0        | N.D. |       |
| 57) Styrene                   | 0.000  | 14.184 | 0.000  |      | 0        | N.D. |       |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D. |       |
| 60) Isopropylbenzene          | 14.530 | 14.537 | 0.910  | 105  | 117      | N.D. |       |
| 62) 1,1,2,2-Tetrachloroethane | 0.000  | 14.810 | 0.000  |      | 0        | N.D. |       |
| 63) 1,2,3-Trichloropropane    | 0.000  | 14.898 | 0.000  |      | 0m       | N.D. | d     |
| 64) Bromobenzene              | 0.000  | 14.951 | 0.000  |      | 0        | N.D. |       |
| 65) n-Propylbenzene           | 14.969 | 14.965 | 0.938  | 91   | 248      | N.D. |       |
| 66) 1,3,5-Trimethylbenzene    | 15.110 | 15.114 | 0.947  | 105  | 107      | N.D. |       |
| 67) 2-Chlorotoluene           | 0.000  | 15.117 | 0.000  |      | 0        | N.D. |       |
| 68) 4-Chlorotoluene           | 15.213 | 15.216 | 0.953  | 91   | 867      | N.D. |       |
| 69) tert-Butylbenzene         | 0.000  | 15.489 | 0.000  |      | 0        | N.D. |       |
| 70) 1,2,4-Trimethylbenzene    | 15.535 | 15.527 | 0.973  | 105  | 559      | N.D. |       |
| 71) sec-Butylbenzene          | 15.711 | 15.711 | 0.984  | 105  | 107      | N.D. |       |
| 72) 4-Isopropyltoluene        | 15.825 | 15.832 | 0.992  | 119  | 1176     | N.D. |       |
| 73) 1,3-Dichlorobenzene       | 15.909 | 15.902 | 0.997  | 146  | 140      | N.D. |       |
| 74) 1,4-Dichlorobenzene       | 15.994 | 15.991 | 1.002  | 146  | 601      | N.D. |       |
| 75) n-Butylbenzene            | 16.284 | 16.277 | 1.020  | 91   | 409      | N.D. |       |
| 76) 1,2-Dichlorobenzene       | 0.000  | 16.422 | 0.000  |      | 0        | N.D. |       |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D. |       |
| 78) 1,2,4-Trichlorobenzene    | 18.363 | 18.371 | 1.151  | 180  | 458      | N.D. |       |
| 79) Hexachlorobutadiene       | 0.000  | 18.548 | 0.000  |      | 0        | N.D. |       |
| 80) Naphthalene               | 18.762 | 18.762 | 1.176  | 128  | 2718     | N.D. |       |
| 81) 1,2,3-Trichlorobenzene    | 19.109 | 19.116 | 1.197  | 180  | 500      | N.D. |       |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D. |       |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D. |       |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D. |       |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D. |       |
| 87) Isopropyl Alcohol         | 0.000  | 7.175  | 0.000  |      | 0        | N.D. |       |
| 88) Allyl chloride            | 7.542  | 7.546  | 0.727  | 41   | 109      | N.D. |       |
| 89) tert-Butyl Alcohol        | 0.000  | 7.673  | 0.000  |      | 0        | N.D. |       |
| 90) Acrylonitrile             | 0.000  | 7.928  | 0.000  |      | 0        | N.D. |       |
| 91) Isopropyl ether           | 0.000  | 8.483  | 0.000  |      | 0        | N.D. |       |
| 92) 2-Chloro-1,3-butadiene    | 0.000  | 8.617  | 0.000  |      | 0        | N.D. |       |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D. |       |
| 94) Ethyl acetate             | 9.081  | 9.088  | 0.875  | 43   | 6573     | N.D. |       |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V406.D  
Acq On : 28 Jan 2010 11:28 am  
Operator : DXK1  
InstName : VOA5  
Sample : |245114001|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 29 09:11:47 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|--------|--------|--------|------|----------|------|-------|
| 95) Propionitrile              | 0.000  | 9.148  | 0.000  |      | 0        | N.D. |       |
| 96) Methacrylonitrile          | 9.470  | 9.332  | 0.912  | 41   | 206      | N.D. |       |
| 97) Tetrahydrofuran            | 9.463  | 9.466  | 0.912  | 42   | 536      | N.D. |       |
| 98) Isobutyl alcohol           | 0.000  | 9.770  | 0.000  |      | 0        | N.D. |       |
| 99) Methyl tert-amyl ether     | 0.000  | 10.138 | 0.000  |      | 0        | N.D. |       |
| 100) Methyl methacrylate       | 0.000  | 10.969 | 0.000  |      | 0        | N.D. |       |
| 101) 1,4-Dioxane               | 0.000  | 11.089 | 0.000  |      | 0        | N.D. |       |
| 102) 2-Nitropropane            | 0.000  | 11.443 | 0.000  |      | 0        | N.D. |       |
| 104) Ethyl methacrylate        | 0.000  | 12.235 | 0.000  |      | 0        | N.D. |       |
| 106) 1-Chlorohexane            | 0.000  | 13.438 | 0.000  |      | 0        | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 0.000  | 14.573 | 0.000  |      | 0        | N.D. |       |
| 108) Cyclohexanone             | 0.000  | 14.693 | 0.000  |      | 0        | N.D. |       |
| 109) trans-1,4-Dichloro-2-b... | 0.000  | 14.856 | 0.000  |      | 0        | N.D. |       |
| 110) Pentachloroethane         | 0.000  | 15.559 | 0.000  |      | 0        | N.D. |       |
| 111) Benzyl chloride           | 0.000  | 16.100 | 0.000  |      | 0m       | N.D. | d     |
| 112) bis(2-Chloroisopropyl)... | 16.497 | 16.497 | 1.034  | 45   | 226      | N.D. |       |

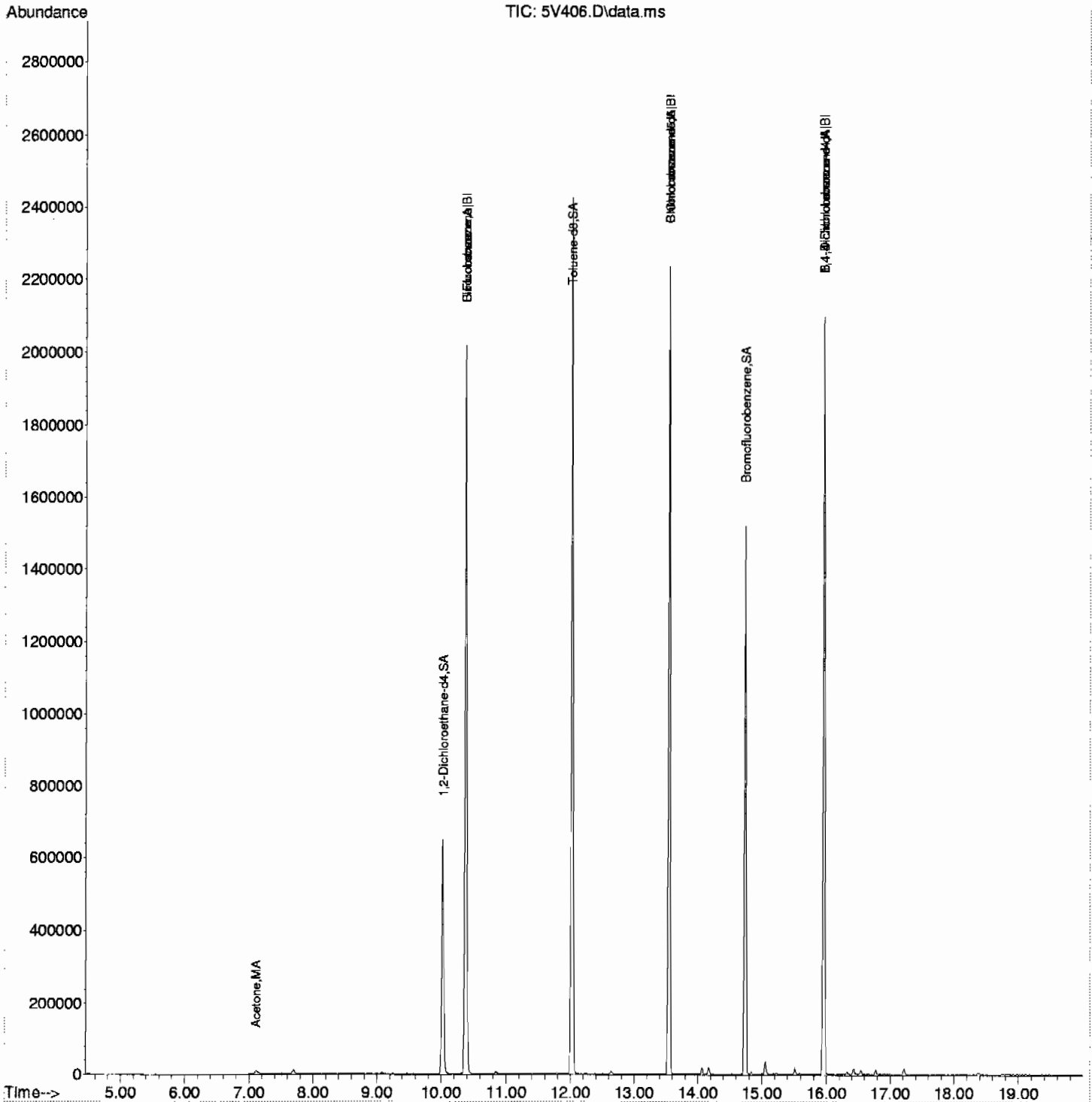
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

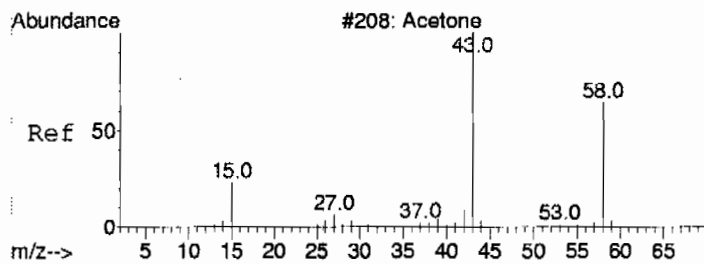
Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V406.D  
Acq On : 28 Jan 2010 11:28 am  
Operator : DXK1  
InstName : VOA5  
Sample : |245114001|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 29 09:11:47 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

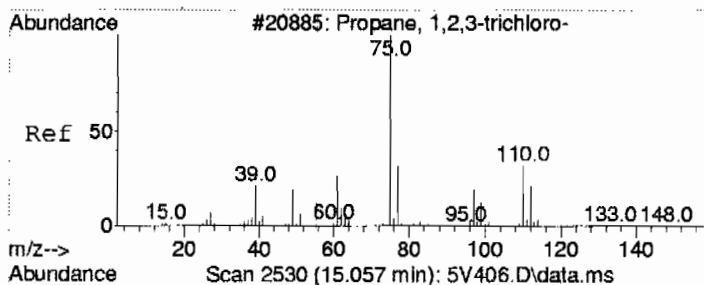
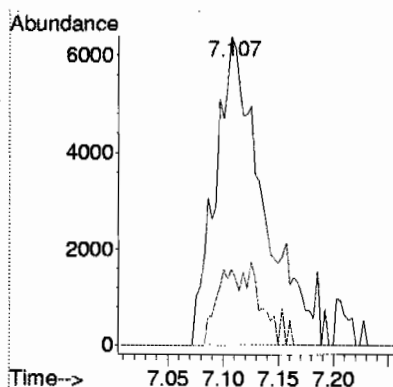
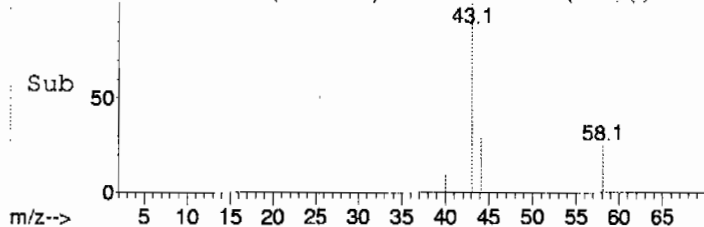
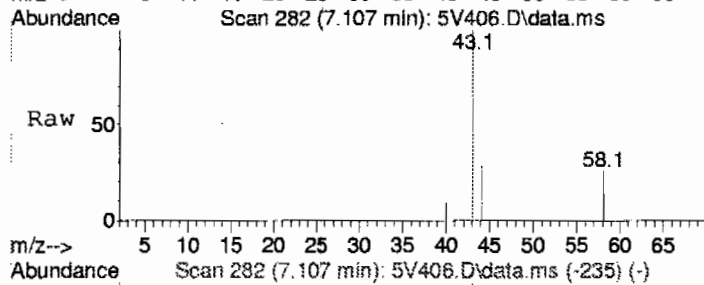
SubList :





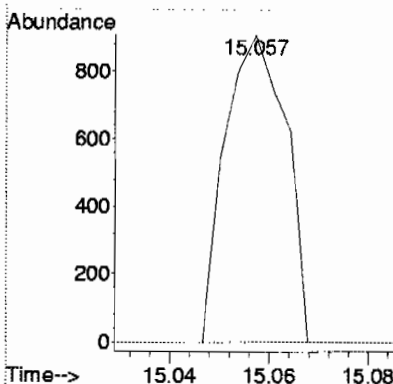
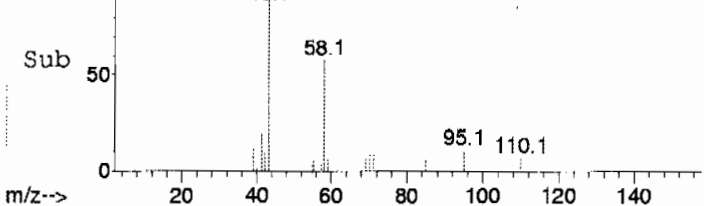
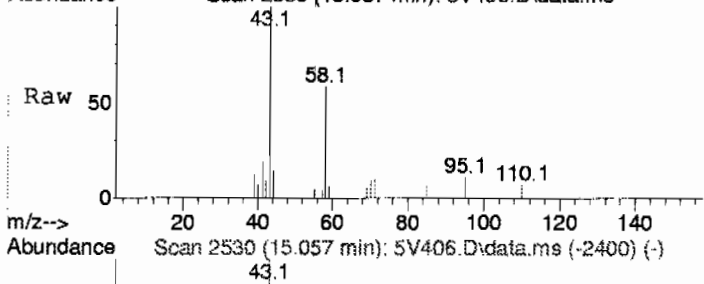
#9  
Acetone  
Concen: 2.80 ug/L  
RT: 7.107 min Scan# 282  
Delta R.T. 0.007 min  
Lab File: 5V406.D  
Acq: 28 Jan 2010 11:28 am

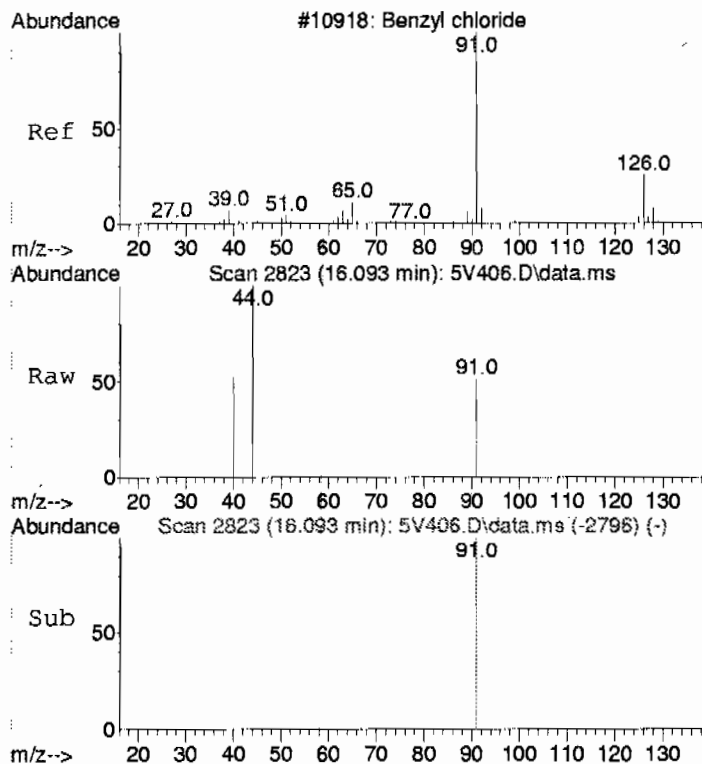
Tgt Ion: 43 Resp: 19426  
Ion Ratio Lower Upper  
43 100  
58 21.4 0.0 59.5



#63 BEFORE analyst DELETION  
1,2,3-Trichloropropane  
Concen: 0.45 ug/L  
RT: 15.057 min Scan# 2530  
Delta R.T. 0.159 min  
Lab File: 5V406.D  
Acq: 28 Jan 2010 11:28 am

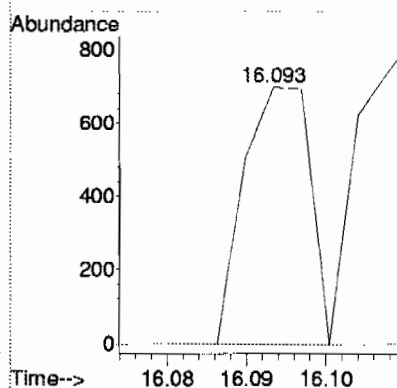
Tgt Ion: 110 Resp: 770  
Ion Ratio Lower Upper  
110 100  
75 0.0 246.3 306.3#  
77 0.0 53.2 113.2#





#111 BEFORE analyst DELETION  
Benzyl chloride  
Concen: 4.50 ug/L  
RT: 16.093 min Scan# 2823  
Delta R.T. -0.007 min  
Lab File: 5V406.D  
Acq: 28 Jan 2010 11:28 am

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 126     | 0.0   | 0.0   | 51.6  |
| 65      | 0.0   | 0.0   | 41.9  |



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V406.D  
Acq On : 28 Jan 2010 11:28 am  
Operator : DXK1  
Sample : |245114001|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V406.D  
Acq On : 28 Jan 2010 11:28 am  
Operator : DXK1  
Sample : |245114001|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

| TIC Top Hit name | RT | EstConc | Units | Response | ---Internal Standard--- |    |      |      |
|------------------|----|---------|-------|----------|-------------------------|----|------|------|
|                  |    |         |       |          | #                       | RT | Resp | Conc |



**Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 2

SDG Number: 10-1324  
Lab Sample ID: 245114002  
  
Client ID: RE15-10-8410  
Batch ID: 946008  
Run Date: 01/28/2010 11:53  
Prep Date: 01/28/2009 11:02  
Data File: 012810V5SV407.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXX1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
% Moisture: 24.9  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.33   | ug/kg | 0.453   | 1.33    |
| 74-87-3    | Chloromethane               | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 75-01-4    | Vinyl chloride              | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 74-83-9    | Bromomethane                | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 75-00-3    | Chloroethane                | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 67-64-1    | Acetone                     | J         | 2.97   | ug/kg | 2.21    | 6.66    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 74-88-4    | Iodomethane                 | U         | 6.66   | ug/kg | 2.13    | 6.66    |
| 75-09-2    | Methylene chloride          | J         | 2.90   | ug/kg | 2.66    | 6.66    |
| 75-15-0    | Carbon disulfide            | U         | 6.66   | ug/kg | 1.66    | 6.66    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 78-93-3    | 2-Butanone                  | U         | 6.66   | ug/kg | 2.00    | 6.66    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 67-66-3    | Chloroform                  | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 74-97-5    | Bromochloromethane          | U         | 1.33   | ug/kg | 0.440   | 1.33    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 71-43-2    | Benzene                     | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 79-01-6    | Trichloroethylene           | U         | 1.33   | ug/kg | 0.440   | 1.33    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 75-27-4    | Bromodichloromethane        | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 74-95-3    | Dibromomethane              | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 6.66   | ug/kg | 1.66    | 6.66    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 108-88-3   | Toluene                     | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 591-78-6   | 2-Hexanone                  | U         | 6.66   | ug/kg | 2.00    | 6.66    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 124-48-1   | Dibromochloromethane        | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 108-90-7   | Chlorobenzene               | U         | 1.33   | ug/kg | 0.400   | 1.33    |

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114002

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.J  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 24.9  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE15-10-8410  
Batch ID: 946008  
Run Date: 01/28/2010 11:53  
Prep Date: 01/28/2009 11:02  
Data File: 012810V55V407.D

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.66   | ug/kg | 0.400   | 2.66    |
| 95-47-6     | o-Xylene                              | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 100-42-5    | Styrene                               | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 75-25-2     | Bromoform                             | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 108-86-1    | Bromobenzene                          | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 6.66   | ug/kg | 2.13    | 6.66    |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.33   | ug/kg | 0.400   | 1.33    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.33   | ug/kg | 0.400   | 1.33    |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V407.D  
Acq On : 28 Jan 2010 11:53 am  
Operator : DXK1  
InstName : VOA5  
Sample : |245114002|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 29 09:12:04 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT         | Rel RT   | QIon | Response | Conc  | Units |           |
|-------------------------------|--------|----------------|----------|------|----------|-------|-------|-----------|
| Internal Standards            |        |                |          |      |          |       |       | Dev (Min) |
| 1) Fluorobenzene              | 10.375 | 10.375         | 1.000    | 96   | 1393722  | 50.00 | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547 | 13.547         | 1.000    | 117  | 657042   | 50.00 | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.963 | 15.962         | 1.000    | 152  | 185321   | 50.00 | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.375 | 10.375         | 1.000    | 96   | 1393722  | 50.00 | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547 | 13.547         | 1.000    | 117  | 657042   | 50.00 | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.963 | 15.962         | 1.000    | 152  | 185321   | 50.00 | ug/L  | 0.00      |
| System Monitoring Compounds   |        |                |          |      |          |       |       | Dev (Min) |
| 29) 1,2-Dichloroethane-d4     | 10.021 | 10.021         | 0.966    | 65   | 369964   | 57.11 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 131 | Recovery | =    | 114.22%  |       |       |           |
| 43) Toluene-d8                | 12.019 | 12.016         | 0.887    | 98   | 1118142  | 62.40 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 75 - 129 | Recovery | =    | 124.80%  |       |       |           |
| 61) Bromofluorobenzene        | 14.739 | 14.739         | 0.923    | 95   | 246102   | 69.59 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 133 | Recovery | =    | 139.18%# |       |       |           |
| Target Compounds              |        |                |          |      |          |       |       | QValue    |
| 2) Dichlorodifluoromethane    | 0.000  | 4.689          | 0.000    |      | 0        | N.D.  |       |           |
| 3) Chloromethane              | 5.071  | 5.051          | 0.489    | 50   | 390      | N.D.  |       |           |
| 4) Vinyl chloride             | 5.283  | 5.283          | 0.509    | 62   | 155      | N.D.  |       |           |
| 5) Bromomethane               | 0.000  | 5.877          | 0.000    |      | 0        | N.D.  |       |           |
| 6) Chloroethane               | 0.000  | 6.018          | 0.000    |      | 0        | N.D.  |       |           |
| 7) Trichlorofluoromethane     | 0.000  | 6.391          | 0.000    |      | 0        | N.D.  |       |           |
| 8) Ethyl ether                | 0.000  | 6.733          | 0.000    |      | 0        | N.D.  |       |           |
| 9) Acetone                    | 7.111  | 7.100          | 0.685    | 43   | 11648    | 2.23  | ug/L  | 65        |
| 10) 1,1-Dichloroethylene      | 0.000  | 7.125          | 0.000    |      | 0        | N.D.  |       |           |
| 11) Iodomethane               | 0.000  | 7.373          | 0.000    |      | 0        | N.D.  |       |           |
| 12) Acetonitrile              | 7.687  | 7.450          | 0.741    | 41   | 129      | N.D.  |       |           |
| 13) Methyl acetate            | 7.503  | 7.493          | 0.723    | 43   | 1909     | N.D.  |       |           |
| 14) Carbon disulfide          | 7.514  | 7.511          | 0.724    | 76   | 829      | N.D.  |       |           |
| 15) Methylene chloride        | 7.684  | 7.691          | 0.741    | 84   | 12955    | 2.18  | ug/L  | 92        |
| 16) tert-Butyl methyl ether   | 0.000  | 7.984          | 0.000    |      | 0        | N.D.  |       |           |
| 17) trans-1,2-Dichloroethy... | 0.000  | 8.030          | 0.000    |      | 0        | N.D.  |       |           |
| 18) Vinyl acetate             | 8.462  | 8.458          | 0.816    | 43   | 111      | N.D.  |       |           |
| 19) 1,1-Dichloroethane        | 0.000  | 8.511          | 0.000    |      | 0        | N.D.  |       |           |
| 20) 2-Butanone                | 9.081  | 9.077          | 0.875    | 43   | 142      | N.D.  |       |           |
| 21) cis-1,2-Dichloroethylene  | 0.000  | 9.144          | 0.000    |      | 0        | N.D.  |       |           |
| 22) 2,2-Dichloropropane       | 0.000  | 9.173          | 0.000    |      | 0        | N.D.  |       |           |
| 23) Bromochloromethane        | 0.000  | 9.417          | 0.000    |      | 0        | N.D.  |       |           |
| 24) Chloroform                | 9.452  | 9.452          | 0.911    | 83   | 771      | N.D.  |       |           |
| 25) 1,1,1-Trichloroethane     | 0.000  | 9.735          | 0.000    |      | 0        | N.D.  |       |           |
| 26) Cyclohexane               | 9.834  | 9.830          | 0.948    | 56   | 356      | N.D.  |       |           |
| 27) 1,1-Dichloropropene       | 0.000  | 9.887          | 0.000    |      | 0        | N.D.  |       |           |
| 28) Carbon tetrachloride      | 0.000  | 9.929          | 0.000    |      | 0        | N.D.  |       |           |
| 30) 1,2-Dichloroethane        | 0.000  | 10.103         | 0.000    |      | 0        | N.D.  |       |           |
| 31) Benzene                   | 10.124 | 10.127         | 0.976    | 78   | 431      | N.D.  |       |           |
| 32) Cyclohexene               | 0.000  | 10.248         | 0.000    |      | 0        | N.D.  |       |           |
| 33) n-Butyl alcohol           | 0.000  | 10.460         | 0.000    |      | 0        | N.D.  |       |           |
| 34) Trichloroethylene         | 0.000  | 10.768         | 0.000    |      | 0        | N.D.  |       |           |
| 35) 1,2-Dichloropropane       | 0.000  | 11.004         | 0.000    |      | 0        | N.D.  |       |           |
| 36) Methylcyclohexane         | 0.000  | 11.019         | 0.000    |      | 0        | N.D.  |       |           |
| 37) Dibromomethane            | 0.000  | 11.146         | 0.000    |      | 0        | N.D.  |       |           |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V407.D  
Acq On : 28 Jan 2010 11:53 am  
Operator : DXK1  
InstName : VOA5  
Sample : 1245114002|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 29 09:12:04 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|-------------------------------|--------|--------|--------|------|----------|------|-------|
| 38) Bromodichloromethane      | 0.000  | 11.256 | 0.000  |      | 0        | N.D. |       |
| 39) 2-Chloroethylvinyl ether  | 0.000  | 11.468 | 0.000  |      | 0        | N.D. |       |
| 40) cis-1,3-Dichloropropylene | 0.000  | 11.705 | 0.000  |      | 0        | N.D. |       |
| 42) 4-Methyl-2-pentanone      | 0.000  | 11.786 | 0.000  |      | 0        | N.D. |       |
| 44) Toluene                   | 12.094 | 12.090 | 0.893  | 91   | 4610     | N.D. |       |
| 45) trans-1,3-Dichloroprop... | 0.000  | 12.239 | 0.000  |      | 0        | N.D. |       |
| 46) 1,1,2-Trichloroethane     | 0.000  | 12.465 | 0.000  |      | 0        | N.D. |       |
| 47) 2-Hexanone                | 12.642 | 12.631 | 0.933  | 43   | 134      | N.D. |       |
| 48) 1,3-Dichloropropane       | 0.000  | 12.656 | 0.000  |      | 0        | N.D. |       |
| 49) Tetrachloroethylene       | 0.000  | 12.691 | 0.000  |      | 0        | N.D. |       |
| 50) Dibromochloromethane      | 0.000  | 12.928 | 0.000  |      | 0        | N.D. |       |
| 51) 1,2-Dibromoethane         | 0.000  | 13.094 | 0.000  |      | 0        | N.D. |       |
| 52) Chlorobenzene             | 13.579 | 13.579 | 1.002  | 112  | 106      | N.D. |       |
| 53) 1,1,1,2-Tetrachloroethane | 0.000  | 13.636 | 0.000  |      | 0        | N.D. |       |
| 54) Ethylbenzene              | 13.646 | 13.639 | 1.007  | 91   | 994      | N.D. |       |
| 55) m,p-Xylenes               | 13.745 | 13.749 | 1.015  | 106  | 837      | N.D. |       |
| 56) o-Xylene                  | 0.000  | 14.184 | 0.000  |      | 0        | N.D. |       |
| 57) Styrene                   | 0.000  | 14.184 | 0.000  |      | 0        | N.D. |       |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D. |       |
| 60) Isopropylbenzene          | 14.562 | 14.537 | 0.912  | 105  | 612      | N.D. |       |
| 62) 1,1,2,2-Tetrachloroethane | 0.000  | 14.810 | 0.000  |      | 0        | N.D. |       |
| 63) 1,2,3-Trichloropropane    | 0.000  | 14.898 | 0.000  |      | 0        | N.D. |       |
| 64) Bromobenzene              | 0.000  | 14.951 | 0.000  |      | 0        | N.D. |       |
| 65) n-Propylbenzene           | 14.965 | 14.965 | 0.938  | 91   | 132      | N.D. |       |
| 66) 1,3,5-Trimethylbenzene    | 15.121 | 15.114 | 0.947  | 105  | 115      | N.D. |       |
| 67) 2-Chlorotoluene           | 0.000  | 15.117 | 0.000  |      | 0        | N.D. |       |
| 68) 4-Chlorotoluene           | 15.220 | 15.216 | 0.953  | 91   | 264      | N.D. |       |
| 69) tert-Butylbenzene         | 0.000  | 15.489 | 0.000  |      | 0        | N.D. |       |
| 70) 1,2,4-Trimethylbenzene    | 15.531 | 15.527 | 0.973  | 105  | 113      | N.D. |       |
| 71) sec-Butylbenzene          | 15.545 | 15.711 | 0.974  | 105  | 112      | N.D. |       |
| 72) 4-Isopropyltoluene        | 15.828 | 15.832 | 0.992  | 119  | 1647     | N.D. |       |
| 73) 1,3-Dichlorobenzene       | 0.000  | 15.902 | 0.000  |      | 0        | N.D. |       |
| 74) 1,4-Dichlorobenzene       | 15.998 | 15.991 | 1.002  | 146  | 246      | N.D. |       |
| 75) n-Butylbenzene            | 16.115 | 16.277 | 1.010  | 91   | 110      | N.D. |       |
| 76) 1,2-Dichlorobenzene       | 0.000  | 16.422 | 0.000  |      | 0        | N.D. |       |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D. |       |
| 78) 1,2,4-Trichlorobenzene    | 18.378 | 18.371 | 1.151  | 180  | 118      | N.D. |       |
| 79) Hexachlorobutadiene       | 0.000  | 18.548 | 0.000  |      | 0        | N.D. |       |
| 80) Naphthalene               | 18.777 | 18.762 | 1.176  | 128  | 1397     | N.D. |       |
| 81) 1,2,3-Trichlorobenzene    | 0.000  | 19.116 | 0.000  |      | 0        | N.D. |       |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D. |       |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D. |       |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D. |       |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D. |       |
| 87) Isopropyl Alcohol         | 0.000  | 7.175  | 0.000  |      | 0        | N.D. |       |
| 88) Allyl chloride            | 7.687  | 7.546  | 0.741  | 41   | 129      | N.D. |       |
| 89) tert-Butyl Alcohol        | 0.000  | 7.673  | 0.000  |      | 0        | N.D. |       |
| 90) Acrylonitrile             | 0.000  | 7.928  | 0.000  |      | 0        | N.D. |       |
| 91) Isopropyl ether           | 0.000  | 8.483  | 0.000  |      | 0        | N.D. |       |
| 92) 2-Chloro-1,3-butadiene    | 0.000  | 8.617  | 0.000  |      | 0        | N.D. |       |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D. |       |
| 94) Ethyl acetate             | 9.081  | 9.088  | 0.875  | 43   | 142      | N.D. |       |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V407.D  
Acq On : 28 Jan 2010 11:53 am  
Operator : DXK1  
InstName : VOA5  
Sample : |245114002|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 29 09:12:04 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.  | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|-------|--------|--------|------|----------|------|-------|
| 95) Propionitrile              | 0.000 | 9.148  | 0.000  |      | 0        | N.D. |       |
| 96) Methacrylonitrile          | 0.000 | 9.332  | 0.000  |      | 0        | N.D. |       |
| 97) Tetrahydrofuran            | 9.470 | 9.466  | 0.913  | 42   | 362      | N.D. |       |
| 98) Isobutyl alcohol           | 9.813 | 9.770  | 0.946  | 41   | 122      | N.D. |       |
| 99) Methyl tert-amyl ether     | 0.000 | 10.138 | 0.000  |      | 0        | N.D. |       |
| 100) Methyl methacrylate       | 0.000 | 10.969 | 0.000  |      | 0        | N.D. |       |
| 101) 1,4-Dioxane               | 0.000 | 11.089 | 0.000  |      | 0        | N.D. |       |
| 102) 2-Nitropropane            | 0.000 | 11.443 | 0.000  |      | 0        | N.D. |       |
| 104) Ethyl methacrylate        | 0.000 | 12.235 | 0.000  |      | 0        | N.D. |       |
| 106) 1-Chlorohexane            | 0.000 | 13.438 | 0.000  |      | 0        | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 0.000 | 14.573 | 0.000  |      | 0m       | N.D. | d     |
| 108) Cyclohexanone             | 0.000 | 14.693 | 0.000  |      | 0        | N.D. |       |
| 109) trans-1,4-Dichloro-2-b... | 0.000 | 14.856 | 0.000  |      | 0        | N.D. |       |
| 110) Pentachloroethane         | 0.000 | 15.559 | 0.000  |      | 0        | N.D. |       |
| 111) Benzyl chloride           | 0.000 | 16.100 | 0.000  |      | 0m       | N.D. | d     |
| 112) bis(2-Chloroisopropyl)... | 0.000 | 16.497 | 0.000  |      | 0m       | N.D. | d     |

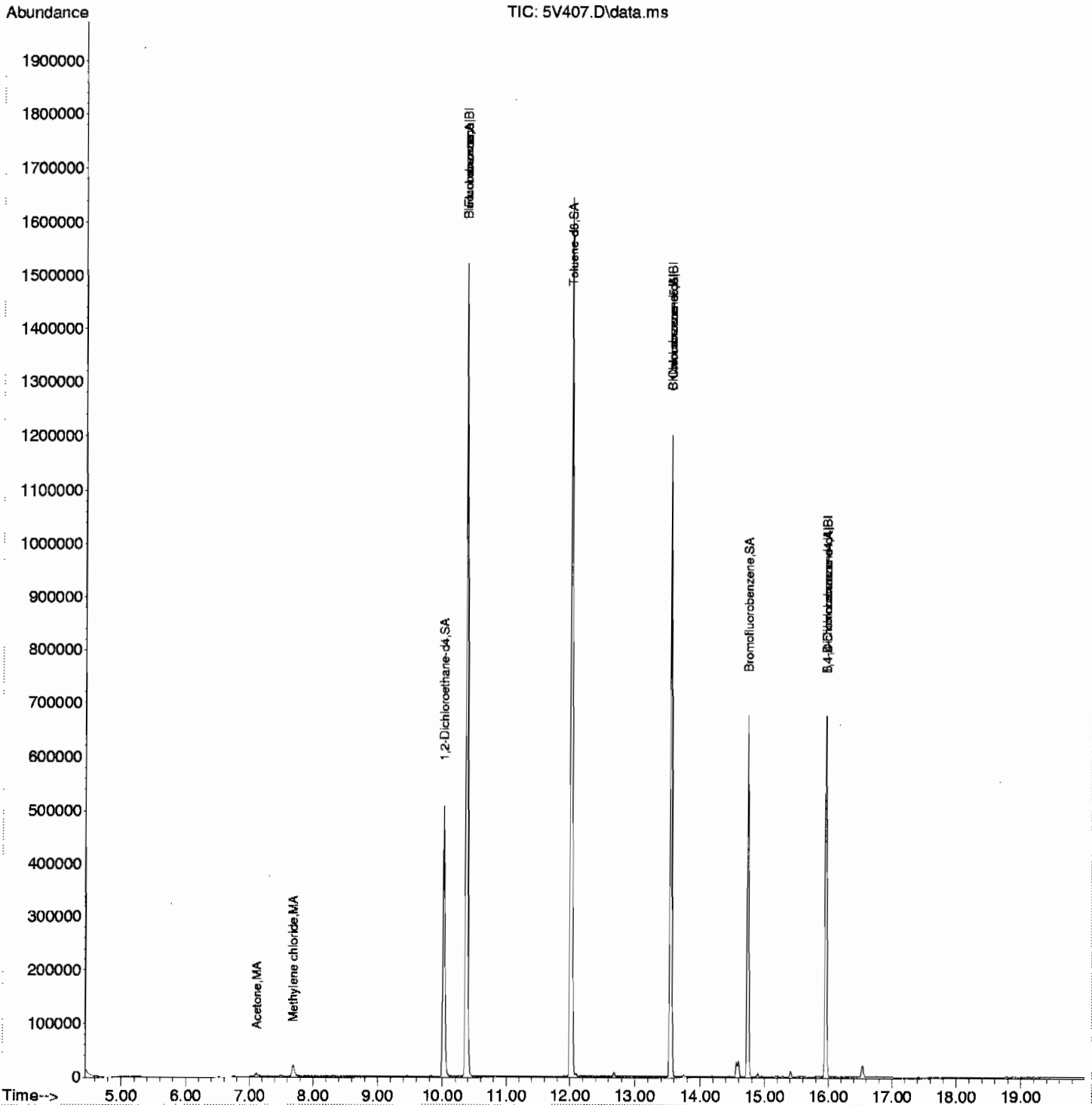
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

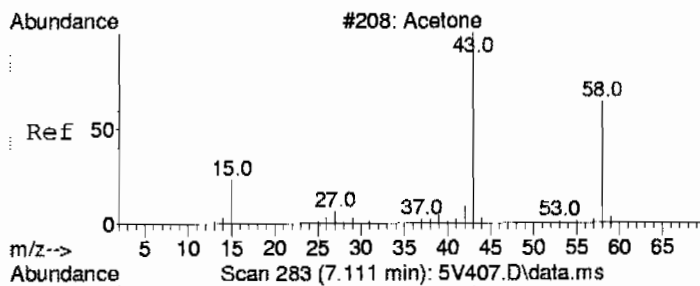
Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V407.D  
Acq On : 28 Jan 2010 11:53 am  
Operator : DXK1  
InstName : VOA5  
Sample : |245114002|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 29 09:12:04 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

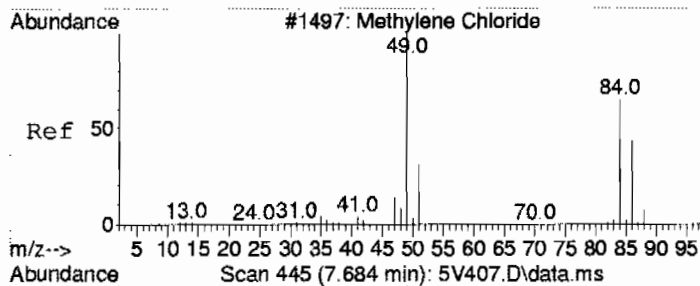
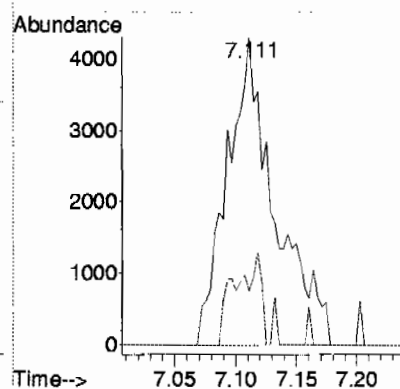
SubList :





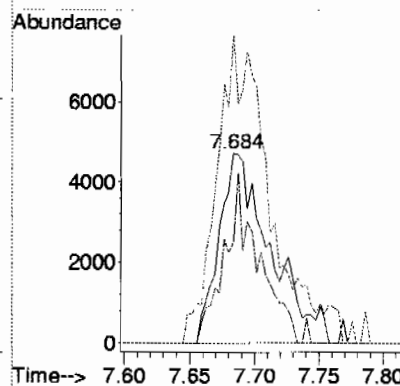
#9  
Acetone  
Concen: 2.23 ug/L  
RT: 7.111 min Scan# 283  
Delta R.T. 0.011 min  
Lab File: 5V407.D  
Acq: 28 Jan 2010 11:53 am

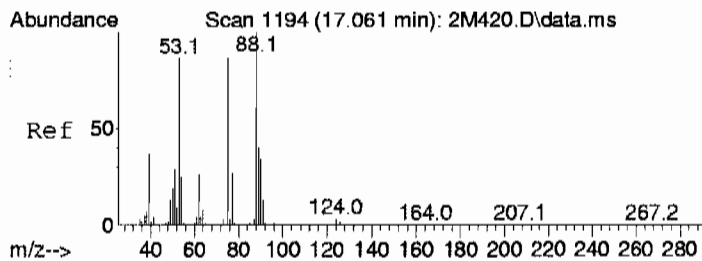
Tgt Ion: 43 Resp: 11648  
Ion Ratio Lower Upper  
43 100  
58 10.5 0.0 59.5



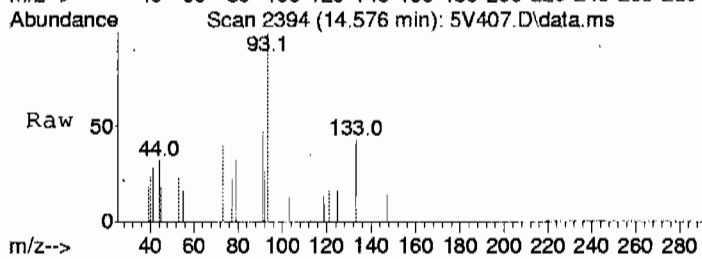
#15  
Methylene chloride  
Concen: 2.18 ug/L  
RT: 7.684 min Scan# 445  
Delta R.T. -0.007 min  
Lab File: 5V407.D  
Acq: 28 Jan 2010 11:53 am

Tgt Ion: 84 Resp: 12955  
Ion Ratio Lower Upper  
84 100  
86 59.3 33.2 93.2  
49 167.9 125.4 185.4

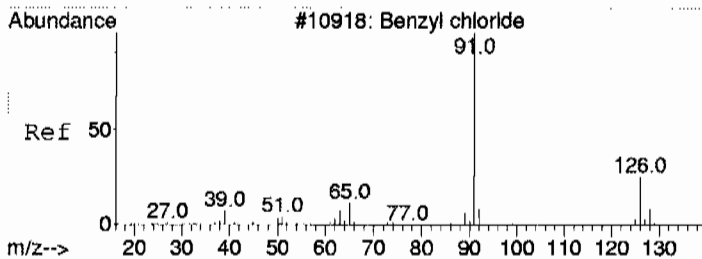
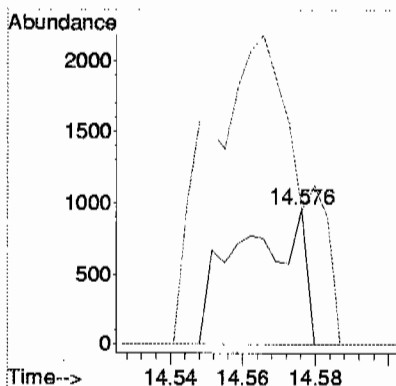
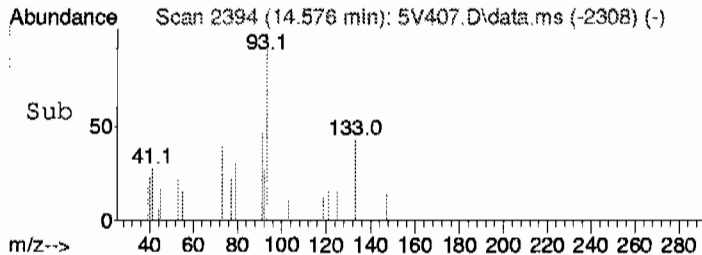




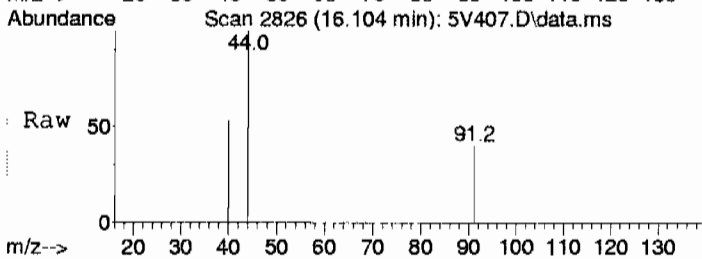
#107 BEFORE analyst DELETION  
 cis-1,4-Dichloro-2-butene  
 Concen: 1.70 ug/L  
 RT: 14.576 min Scan# 2394  
 Delta R.T. 0.003 min  
 Lab File: 5V407.D  
 Acq: 28 Jan 2010 11:53 am



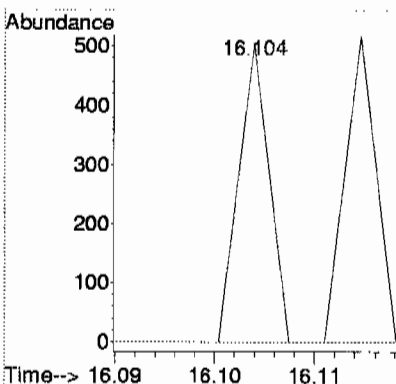
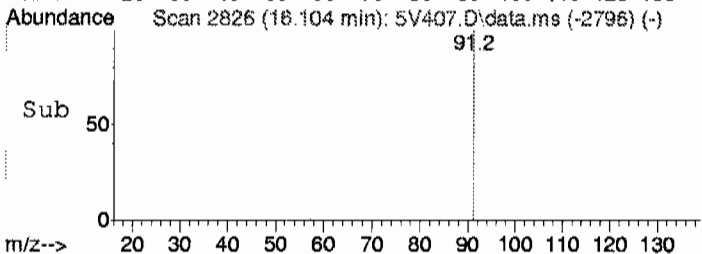
Tgt Ion: 53 Resp: 1192  
 Ion Ratio Lower Upper  
 53 100  
 88 0.0 50.2 110.2#  
 77 318.9 0.0 59.6#



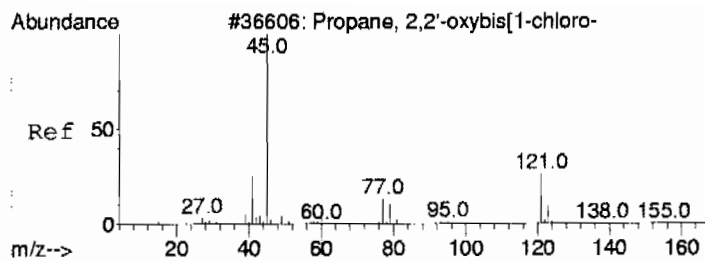
#111 BEFORE analyst DELETION  
 Benzyl chloride  
 Concen: 4.50 ug/L  
 RT: 16.104 min Scan# 2826  
 Delta R.T. 0.004 min  
 Lab File: 5V407.D  
 Acq: 28 Jan 2010 11:53 am



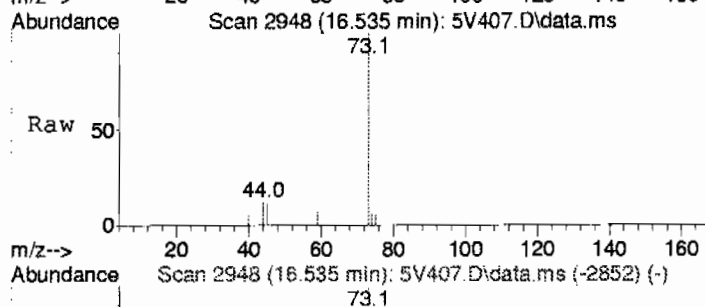
Tgt Ion: 91 Resp: 107  
 Ion Ratio Lower Upper  
 91 100  
 126 0.0 0.0 51.6  
 65 0.0 0.0 41.9



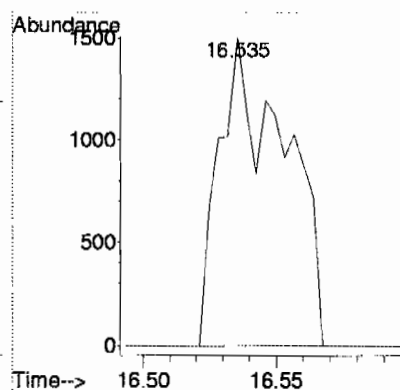
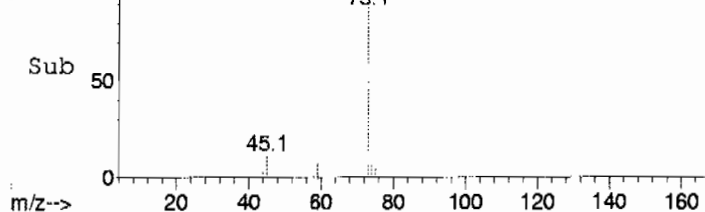




#112 BEFORE analyst DELETION  
 bis(2-Chloroisopropyl)ether  
 Concen: 2.07 ug/L  
 RT: 16.535 min Scan# 2948  
 Delta R.T. 0.038 min  
 Lab File: 5V407.D  
 Acq: 28 Jan 2010 11:53 am



| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 45      | 100   |       |       |
| 121     | 0.0   | 0.0   | 49.2  |



## Library Search Compound Report

GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V407.D  
Acq On : 28 Jan 2010 11:53 am  
Operator : DXK1  
Sample : |245114002|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V407.D  
Acq On : 28 Jan 2010 11:53 am  
Operator : DXK1  
Sample : |245114002|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard-- |    |           |
|------------------|----|---------|-------|----------|-----------------------|----|-----------|
|                  |    |         |       |          | #                     | RT | Resp Conc |

---

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 3

SDG Number: 10-1324  
 Lab Sample ID: 245114003

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOAS.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 15.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE15-10-8411  
 Batch ID: 946008  
 Run Date: 01/28/2010 12:19  
 Prep Date: 01/28/2009 11:05  
 Data File: 012810V5SV408.D

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.18   | ug/kg | 0.402   | 1.18    |
| 74-87-3    | Chloromethane               | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 75-01-4    | Vinyl chloride              | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 74-83-9    | Bromomethane                | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 75-00-3    | Chloroethane                | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 67-64-1    | Acetone                     | E         | 710    | ug/kg | 1.96    | 5.91    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 74-88-4    | Iodomethane                 | U         | 5.91   | ug/kg | 1.89    | 5.91    |
| 75-09-2    | Methylene chloride          | J         | 4.34   | ug/kg | 2.36    | 5.91    |
| 75-15-0    | Carbon disulfide            | U         | 5.91   | ug/kg | 1.48    | 5.91    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 78-93-3    | 2-Butanone                  | U         | 5.91   | ug/kg | 1.77    | 5.91    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 67-66-3    | Chloroform                  | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 74-97-5    | Bromochloromethane          | U         | 1.18   | ug/kg | 0.390   | 1.18    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 71-43-2    | Benzene                     | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 79-01-6    | Trichloroethylene           | U         | 1.18   | ug/kg | 0.390   | 1.18    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 75-27-4    | Bromodichloromethane        | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 74-95-3    | Dibromomethane              | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.91   | ug/kg | 1.48    | 5.91    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 108-88-3   | Toluene                     |           | 18.5   | ug/kg | 0.354   | 1.18    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 591-78-6   | 2-Hexanone                  | U         | 5.91   | ug/kg | 1.77    | 5.91    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 124-48-1   | Dibromochloromethane        | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 108-90-7   | Chlorobenzene               | U         | 1.18   | ug/kg | 0.354   | 1.18    |

**Volatile  
Certificate of Analysis  
Sample Summary**

Page 2 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114003  
  
Client ID: RE15-10-8411  
Batch ID: 946008  
Run Date: 01/28/2010 12:19  
Prep Date: 01/28/2009 11:05  
Data File: 012810V55V408.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 15.4  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDI/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 179601-23-1 | m,p-Xylenes                           | J         | 0.732  | ug/kg | 0.354   | 2.36    |
| 95-47-6     | o-Xylene                              | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 100-42-5    | Styrene                               | J         | 0.555  | ug/kg | 0.354   | 1.18    |
| 75-25-2     | Bromoform                             | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 108-86-1    | Bromobenzene                          | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.91   | ug/kg | 1.89    | 5.91    |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.18   | ug/kg | 0.354   | 1.18    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.18   | ug/kg | 0.354   | 1.18    |

**Tentatively Identified Compound Summary**

| CAS No.     | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|-------------|---------------------------------------|-------|-----------|-------|-----|------|
| 000508-32-7 | Tricyclo[2.2.1.0(2,6)]heptane, 1,7    | 14.45 | 7.11      | ug/kg | 96  | NJ   |
| 007785-70-8 | 1R-.alpha.-Pinene                     | 14.57 | 887       | ug/kg | 97  | NJ   |
| 000079-92-5 | Camphene                              | 14.89 | 33.2      | ug/kg | 97  | NJ   |
| 003479-89-8 | 1,3,5-Cycloheptatriene, 3,7,7-trim    | 15.18 | 13.1      | ug/kg | 95  | NJ   |
| 013466-78-9 | 3-Carene                              | 15.58 | 946       | ug/kg | 97  | NJ   |
| 000099-86-5 | 1,3-Cyclohexadiene, 1-methyl-4-(1-    | 15.66 | 6.98      | ug/kg | 97  | NJ   |
| 013898-73-2 | Cyclohexene, 1-methyl-5-(1-methyle    | 15.75 | 7.09      | ug/kg | 93  | NJ   |
| 000138-86-3 | Limonene                              | 15.8  | 1390      | ug/kg | 95  | NJ   |
| 000527-84-4 | Benzene, 1-methyl-2-(1-methylethyl    | 15.83 | 731       | ug/kg | 93  | NJ   |
| 000099-85-4 | 1,4-Cyclohexadiene, 1-methyl-4-(1-    | 16.12 | 17.8      | ug/kg | 96  | NJ   |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

Page 3 of 3

SDG Number: 10-1324  
 Lab Sample ID: 245114003

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 15.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE15-10-8411  
 Batch ID: 946008  
 Run Date: 01/28/2010 12:19  
 Prep Date: 01/28/2009 11:05  
 Data File: 012810V5SV408.D

| CAS No.  | Parname                               | Qualifier | Result    | Units | MDL/LOD | PQL/LOQ |
|--|---------------------------------------|-----------|-----------|-------|---------|---------|
| <b>Tentatively Identified Compound Summary</b> |                                       |           |           |       |         |         |
| CAS No.  | Tentatively Identified Compound (TIC) | RT        | Estimated | Units | Fit     | Qual    |
| 029050-33-7                                    | (+)-4-Carene                          | 16.54     | 118       | ug/kg | 97      | NJ      |
| 001195-32-0                                    | Benzene, 1-methyl-4-(1-methylethen    | 16.73     | 50.2      | ug/kg | 96      | NJ      |
| 000464-48-2                                    | Bicyclo[2.2.1]heptan-2-one, 1,7,7-    | 18.23     | 18.4      | ug/kg | 97      | NJ      |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V408.D  
Acq On : 28 Jan 2010 12:19 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114003|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 29 09:15:52 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT         | Rel RT   | QIon | Response | Conc   | Units |           |
|-------------------------------|--------|----------------|----------|------|----------|--------|-------|-----------|
| Internal Standards            |        |                |          |      |          |        |       | Dev (Min) |
| 1) Fluorobenzene              | 10.375 | 10.375         | 1.000    | 96   | 1349313  | 50.00  | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547 | 13.547         | 1.000    | 117  | 759345   | 50.00  | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.962 | 15.962         | 1.000    | 152  | 292611   | 50.00  | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.375 | 10.375         | 1.000    | 96   | 1349313  | 50.00  | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547 | 13.547         | 1.000    | 117  | 759345   | 50.00  | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.962 | 15.962         | 1.000    | 152  | 292611   | 50.00  | ug/L  | 0.00      |
| System Monitoring Compounds   |        |                |          |      |          |        |       | Dev (Min) |
| 29) 1,2-Dichloroethane-d4     | 10.021 | 10.021         | 0.966    | 65   | 336040   | 53.58  | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 131 | Recovery | =    | 107.16%  |        |       |           |
| 43) Toluene-d8                | 12.016 | 12.016         | 0.887    | 98   | 1144005  | 55.24  | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 75 - 129 | Recovery | =    | 110.48%  |        |       |           |
| 61) Bromofluorobenzene        | 14.735 | 14.739         | 0.923    | 95   | 332224   | 59.50  | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 133 | Recovery | =    | 119.00%  |        |       |           |
| Target Compounds              |        |                |          |      |          |        |       | QValue    |
| 2) Dichlorodifluoromethane    | 0.000  | 4.689          | 0.000    |      | 0        | N.D.   |       |           |
| 3) Chloromethane              | 5.041  | 5.051          | 0.486    | 50   | 813      | N.D.   |       |           |
| 4) Vinyl chloride             | 0.000  | 5.283          | 0.000    |      | 0        | N.D.   |       |           |
| 5) Bromomethane               | 0.000  | 5.877          | 0.000    |      | 0        | N.D.   |       |           |
| 6) Chloroethane               | 0.000  | 6.018          | 0.000    |      | 0        | N.D.   |       |           |
| 7) Trichlorofluoromethane     | 0.000  | 6.391          | 0.000    |      | 0        | N.D.   |       |           |
| 8) Ethyl ether                | 6.733  | 6.733          | 0.649    | 59   | 347      | N.D.   |       |           |
| 9) Acetone                    | 7.093  | 7.100          | 0.684    | 43   | 3039552  | 600.89 | ug/L  | 96 E      |
| 10) 1,1-Dichloroethylene      | 0.000  | 7.125          | 0.000    |      | 0        | N.D.   |       |           |
| 11) Iodomethane               | 0.000  | 7.373          | 0.000    |      | 0        | N.D.   |       |           |
| 12) Acetonitrile              | 7.323  | 7.450          | 0.706    | 41   | 137      | N.D.   |       |           |
| 13) Methyl acetate            | 7.496  | 7.493          | 0.723    | 43   | 4098     | N.D.   |       |           |
| 14) Carbon disulfide          | 7.521  | 7.511          | 0.725    | 76   | 131      | N.D.   |       |           |
| 15) Methylene chloride        | 7.684  | 7.691          | 0.741    | 84   | 21107    | 3.67   | ug/L  | 86        |
| 16) tert-Butyl methyl ether   | 0.000  | 7.984          | 0.000    |      | 0        | N.D.   |       |           |
| 17) trans-1,2-Dichloroethy... | 0.000  | 8.030          | 0.000    |      | 0        | N.D.   |       |           |
| 18) Vinyl acetate             | 8.345  | 8.458          | 0.804    | 43   | 115      | N.D.   |       |           |
| 19) 1,1-Dichloroethane        | 0.000  | 8.511          | 0.000    |      | 0        | N.D.   |       |           |
| 20) 2-Butanone                | 9.081  | 9.077          | 0.875    | 43   | 6874     | N.D.   |       |           |
| 21) cis-1,2-Dichloroethylene  | 0.000  | 9.144          | 0.000    |      | 0        | N.D.   |       |           |
| 22) 2,2-Dichloropropane       | 0.000  | 9.173          | 0.000    |      | 0        | N.D.   |       |           |
| 23) Bromochloromethane        | 0.000  | 9.417          | 0.000    |      | 0        | N.D.   |       |           |
| 24) Chloroform                | 0.000  | 9.452          | 0.000    |      | 0        | N.D.   |       |           |
| 25) 1,1,1-Trichloroethane     | 0.000  | 9.735          | 0.000    |      | 0        | N.D.   |       |           |
| 26) Cyclohexane               | 0.000  | 9.830          | 0.000    |      | 0        | N.D.   |       |           |
| 27) 1,1-Dichloropropene       | 0.000  | 9.887          | 0.000    |      | 0        | N.D.   |       |           |
| 28) Carbon tetrachloride      | 0.000  | 9.929          | 0.000    |      | 0        | N.D.   |       |           |
| 30) 1,2-Dichloroethane        | 10.050 | 10.103         | 0.969    | 62   | 120      | N.D.   |       |           |
| 31) Benzene                   | 10.127 | 10.127         | 0.976    | 78   | 571      | N.D.   |       |           |
| 32) Cyclohexene               | 0.000  | 10.248         | 0.000    |      | 0        | N.D.   |       |           |
| 33) n-Butyl alcohol           | 0.000  | 10.460         | 0.000    |      | 0        | N.D.   |       |           |
| 34) Trichloroethylene         | 0.000  | 10.768         | 0.000    |      | 0        | N.D.   |       |           |
| 35) 1,2-Dichloropropane       | 0.000  | 11.004         | 0.000    |      | 0        | N.D.   |       |           |
| 36) Methylcyclohexane         | 0.000  | 11.019         | 0.000    |      | 0        | N.D.   |       |           |
| 37) Dibromomethane            | 0.000  | 11.146         | 0.000    |      | 0        | N.D.   |       |           |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V408.D  
Acq On : 28 Jan 2010 12:19 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114003|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 29 09:15:52 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc       | Units |    |
|-------------------------------|--------|--------|--------|------|----------|------------|-------|----|
| 38) Bromodichloromethane      | 0.000  | 11.256 | 0.000  |      | 0        | N.D.       |       |    |
| 39) 2-Chloroethylvinyl ether  | 0.000  | 11.468 | 0.000  |      | 0        | N.D.       |       |    |
| 40) cis-1,3-Dichloropropylene | 0.000  | 11.705 | 0.000  |      | 0        | N.D.       |       |    |
| 42) 4-Methyl-2-pentanone      | 0.000  | 11.786 | 0.000  |      | 0        | N.D.       |       |    |
| 44) Toluene                   | 12.090 | 12.090 | 0.892  | 91   | 284808   | 15.66 ug/L |       | 99 |
| 45) trans-1,3-Dichloroprop... | 0.000  | 12.239 | 0.000  |      | 0m       | N.D. d     |       |    |
| 46) 1,1,2-Trichloroethane     | 0.000  | 12.465 | 0.000  |      | 0        | N.D.       |       |    |
| 47) 2-Hexanone                | 12.674 | 12.631 | 0.936  | 43   | 110      | N.D.       |       |    |
| 48) 1,3-Dichloropropane       | 0.000  | 12.656 | 0.000  |      | 0        | N.D.       |       |    |
| 49) Tetrachloroethylene       | 0.000  | 12.691 | 0.000  |      | 0        | N.D.       |       |    |
| 50) Dibromochloromethane      | 12.695 | 12.928 | 0.937  | 129  | 113      | N.D.       |       |    |
| 51) 1,2-Dibromoethane         | 0.000  | 13.094 | 0.000  |      | 0        | N.D.       |       |    |
| 52) Chlorobenzene             | 13.579 | 13.579 | 1.002  | 112  | 242      | N.D.       |       |    |
| 53) 1,1,1,2-Tetrachloroethane | 0.000  | 13.636 | 0.000  |      | 0        | N.D.       |       |    |
| 54) Ethylbenzene              | 13.643 | 13.639 | 1.007  | 91   | 4173     | N.D.       |       |    |
| 55) m,p-Xylenes               | 13.749 | 13.749 | 1.015  | 106  | 4788     | 0.62 ug/L  |       | 89 |
| 56) o-Xylene                  | 14.184 | 14.184 | 1.047  | 106  | 830      | N.D.       |       |    |
| 57) Styrene                   | 14.184 | 14.184 | 1.047  | 104  | 5420     | 0.47 ug/L  |       | 99 |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D.       |       |    |
| 60) Isopropylbenzene          | 0.000  | 14.537 | 0.000  |      | 0m       | N.D. d     |       |    |
| 62) 1,1,2,2-Tetrachloroethane | 0.000  | 14.810 | 0.000  |      | 0m       | N.D. d     |       |    |
| 63) 1,2,3-Trichloropropane    | 0.000  | 14.898 | 0.000  |      | 0        | N.D.       |       |    |
| 64) Bromobenzene              | 0.000  | 14.951 | 0.000  |      | 0        | N.D.       |       |    |
| 65) n-Propylbenzene           | 0.000  | 14.965 | 0.000  |      | 0m       | N.D. d     |       |    |
| 66) 1,3,5-Trimethylbenzene    | 15.117 | 15.114 | 0.947  | 105  | 725      | N.D.       |       |    |
| 67) 2-Chlorotoluene           | 0.000  | 15.117 | 0.000  |      | 0        | N.D.       |       |    |
| 68) 4-Chlorotoluene           | 0.000  | 15.216 | 0.000  |      | 0m       | N.D. d     |       |    |
| 69) tert-Butylbenzene         | 0.000  | 15.489 | 0.000  |      | 0m       | N.D. d     |       |    |
| 70) 1,2,4-Trimethylbenzene    | 15.527 | 15.527 | 0.973  | 105  | 555      | N.D.       |       |    |
| 71) sec-Butylbenzene          | 0.000  | 15.711 | 0.000  |      | 0m       | N.D. d     |       |    |
| 72) 4-Isopropyltoluene        | 0.000  | 15.832 | 0.000  |      | 0m       | N.D. d     |       |    |
| 73) 1,3-Dichlorobenzene       | 15.909 | 15.902 | 0.997  | 146  | 130      | N.D.       |       |    |
| 74) 1,4-Dichlorobenzene       | 15.994 | 15.991 | 1.002  | 146  | 640      | N.D.       |       |    |
| 75) n-Butylbenzene            | 0.000  | 16.277 | 0.000  |      | 0m       | N.D. d     |       |    |
| 76) 1,2-Dichlorobenzene       | 0.000  | 16.422 | 0.000  |      | 0        | N.D.       |       |    |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D.       |       |    |
| 78) 1,2,4-Trichlorobenzene    | 18.378 | 18.371 | 1.151  | 180  | 631      | N.D.       |       |    |
| 79) Hexachlorobutadiene       | 0.000  | 18.548 | 0.000  |      | 0        | N.D.       |       |    |
| 80) Naphthalene               | 18.762 | 18.762 | 1.175  | 128  | 2823     | N.D.       |       |    |
| 81) 1,2,3-Trichlorobenzene    | 19.116 | 19.116 | 1.198  | 180  | 183      | N.D.       |       |    |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D.       |       |    |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D.       |       |    |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D.       |       |    |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D.       |       |    |
| 87) Isopropyl Alcohol         | 0.000  | 7.175  | 0.000  |      | 0m       | N.D. d     |       |    |
| 88) Allyl chloride            | 7.677  | 7.546  | 0.740  | 41   | 405      | N.D.       |       |    |
| 89) tert-Butyl Alcohol        | 0.000  | 7.673  | 0.000  |      | 0        | N.D.       |       |    |
| 90) Acrylonitrile             | 0.000  | 7.928  | 0.000  |      | 0        | N.D.       |       |    |
| 91) Isopropyl ether           | 0.000  | 8.483  | 0.000  |      | 0        | N.D.       |       |    |
| 92) 2-Chloro-1,3-butadiene    | 0.000  | 8.617  | 0.000  |      | 0        | N.D.       |       |    |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D.       |       |    |
| 94) Ethyl acetate             | 9.081  | 9.088  | 0.875  | 43   | 6874     | N.D.       |       |    |



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V408.D  
Acq On : 28 Jan 2010 12:19 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114003|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 29 09:15:52 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.  | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|-------|--------|--------|------|----------|------|-------|
| 95) Propionitrile              | 0.000 | 9.148  | 0.000  |      | 0        | N.D. |       |
| 96) Methacrylonitrile          | 9.392 | 9.332  | 0.905  | 41   | 232      | N.D. |       |
| 97) Tetrahydrofuran            | 9.470 | 9.466  | 0.913  | 42   | 241      | N.D. |       |
| 98) Isobutyl alcohol           | 0.000 | 9.770  | 0.000  |      | 0        | N.D. |       |
| 99) Methyl tert-amyl ether     | 0.000 | 10.138 | 0.000  |      | 0        | N.D. |       |
| 100) Methyl methacrylate       | 0.000 | 10.969 | 0.000  |      | 0        | N.D. |       |
| 101) 1,4-Dioxane               | 0.000 | 11.089 | 0.000  |      | 0        | N.D. |       |
| 102) 2-Nitropropane            | 0.000 | 11.443 | 0.000  |      | 0        | N.D. |       |
| 104) Ethyl methacrylate        | 0.000 | 12.235 | 0.000  |      | 0        | N.D. |       |
| 106) 1-Chlorohexane            | 0.000 | 13.438 | 0.000  |      | 0        | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 0.000 | 14.573 | 0.000  |      | 0m       | N.D. | d     |
| 108) Cyclohexanone             | 0.000 | 14.693 | 0.000  |      | 0m       | N.D. | d     |
| 109) trans-1,4-Dichloro-2-b... | 0.000 | 14.856 | 0.000  |      | 0m       | N.D. | d     |
| 110) Pentachloroethane         | 0.000 | 15.559 | 0.000  |      | 0        | N.D. |       |
| 111) Benzyl chloride           | 0.000 | 16.100 | 0.000  |      | 0m       | N.D. | d     |
| 112) bis(2-Chloroisopropyl)... | 0.000 | 16.497 | 0.000  |      | 0m       | N.D. | d     |

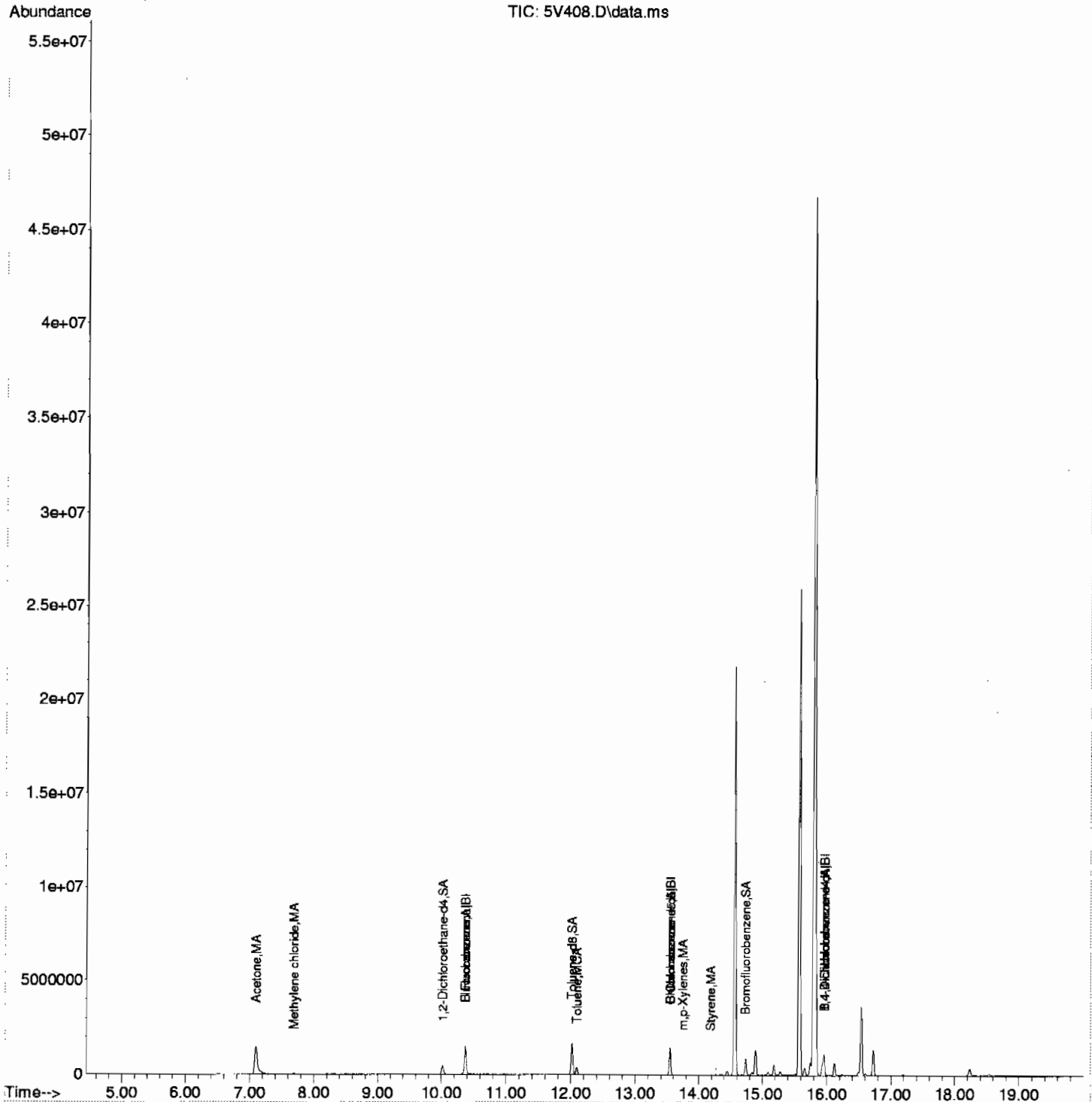
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

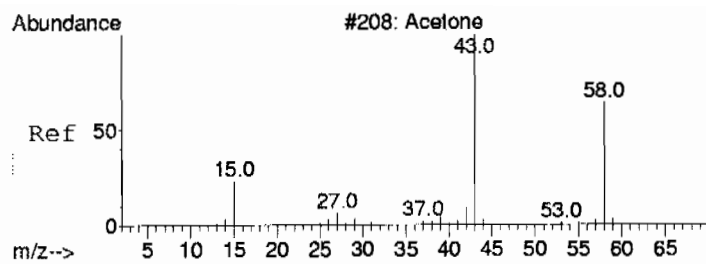
Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V408.D  
Acq On : 28 Jan 2010 12:19 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114003|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 29 09:15:52 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

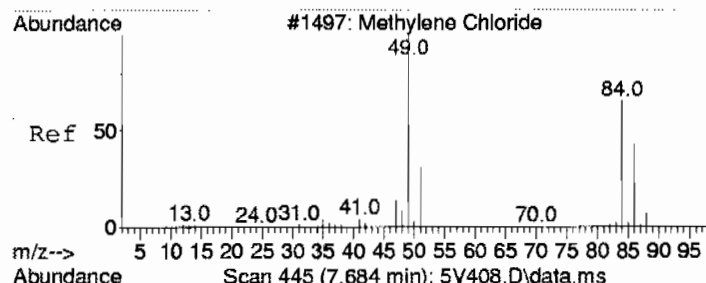
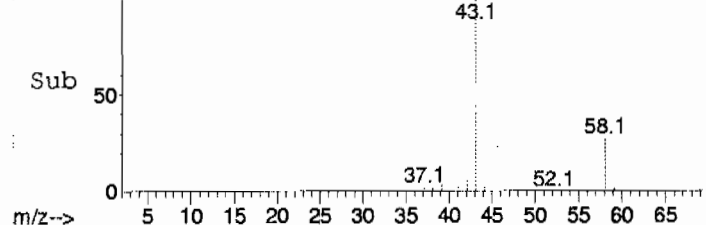
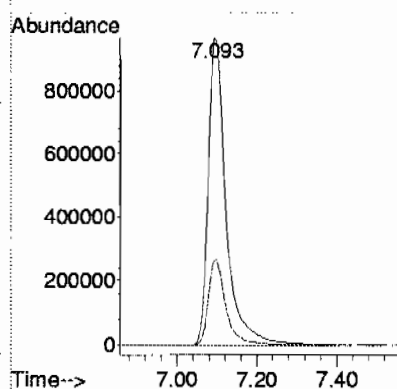
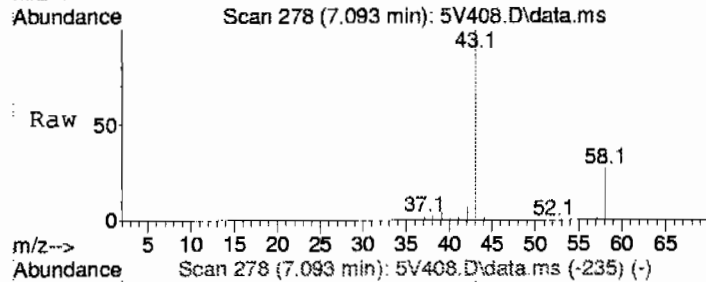
SubList :





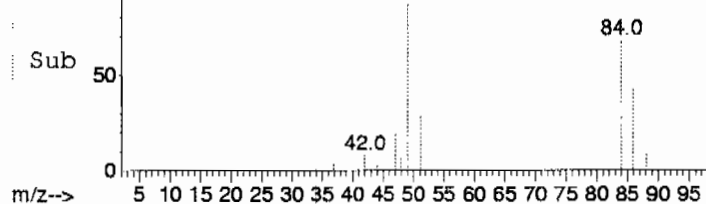
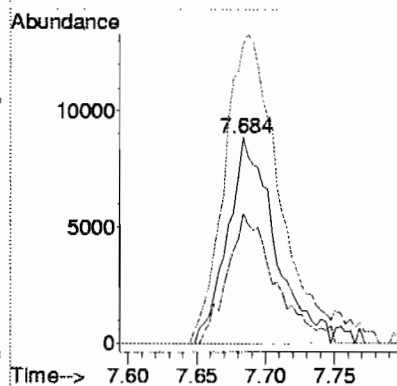
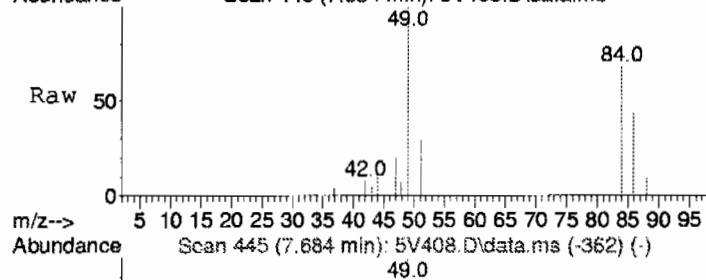
#9  
Acetone  
Concen: 600.89 ug/L  
RT: 7.093 min Scan# 278  
Delta R.T. -0.007 min  
Lab File: 5V408.D  
Acq: 28 Jan 2010 12:19 pm

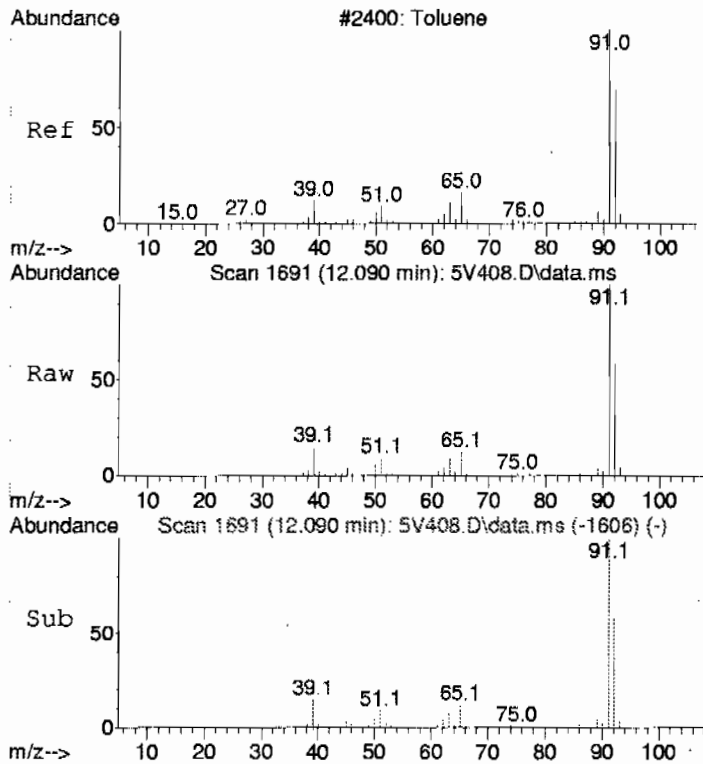
Tgt Ion: 43 Resp: 3039552  
Ion Ratio Lower Upper  
43 100  
58 27.2 0.0 59.5



#15  
Methylene chloride  
Concen: 3.67 ug/L  
RT: 7.684 min Scan# 445  
Delta R.T. -0.007 min  
Lab File: 5V408.D  
Acq: 28 Jan 2010 12:19 pm

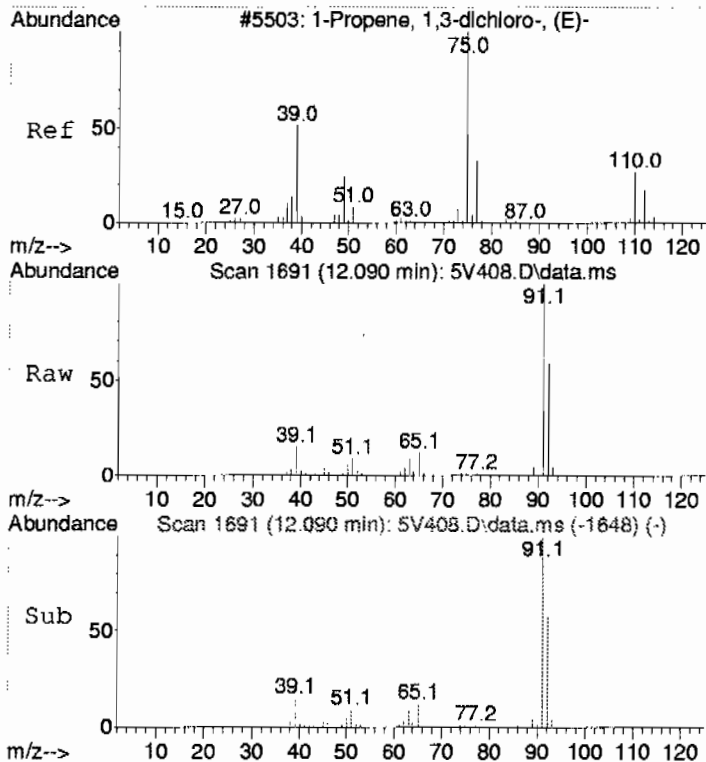
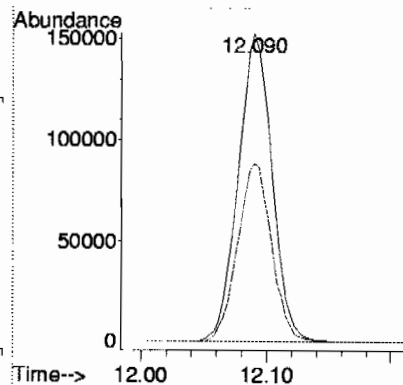
Tgt Ion: 84 Resp: 21107  
Ion Ratio Lower Upper  
84 100  
86 64.6 33.2 93.2  
49 179.9 125.4 185.4





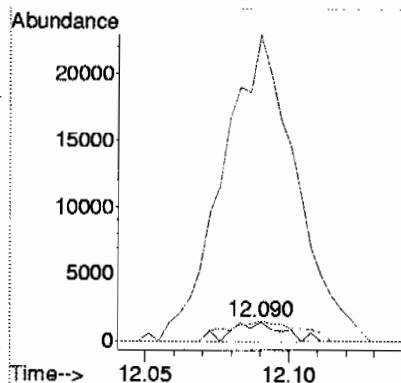
#44  
Toluene  
Concen: 15.66 ug/L  
RT: 12.090 min Scan# 1691  
Delta R.T. 0.000 min  
Lab File: 5V408.D  
Acq: 28 Jan 2010 12:19 pm

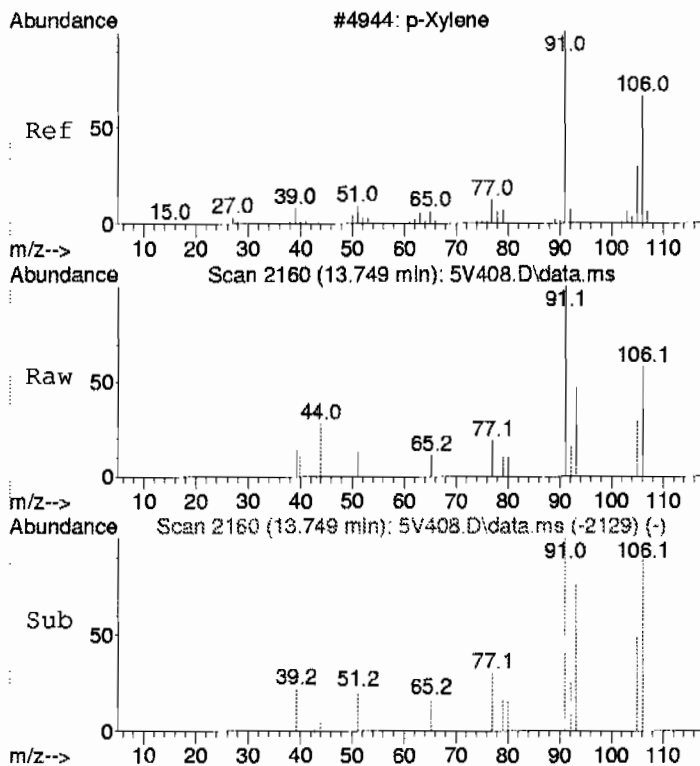
Tgt Ion: 91 Resp: 284808  
Ion Ratio Lower Upper  
91 100  
92 58.2 28.7 88.7



#45 BEFORE analyst DELETION  
trans-1,3-Dichloropropylene  
Concen: 0.32 ug/L  
RT: 12.090 min Scan# 1691  
Delta R.T. -0.149 min  
Lab File: 5V408.D  
Acq: 28 Jan 2010 12:19 pm

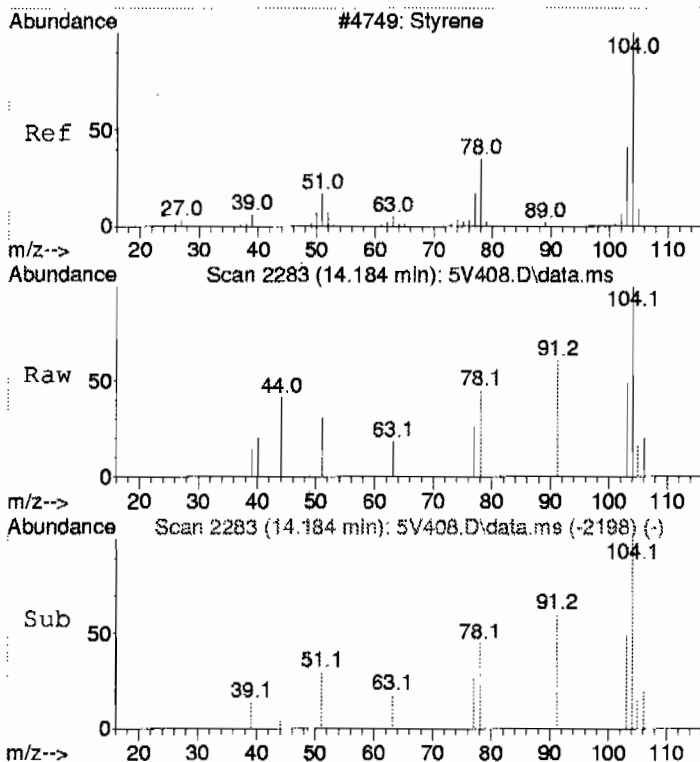
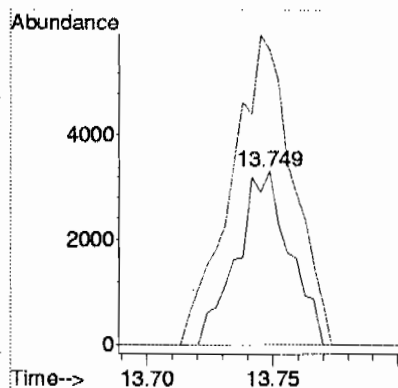
Tgt Ion: 75 Resp: 1745  
Ion Ratio Lower Upper  
75 100  
39 2341.5 31.9 91.9#  
77 151.3 2.0 62.0#





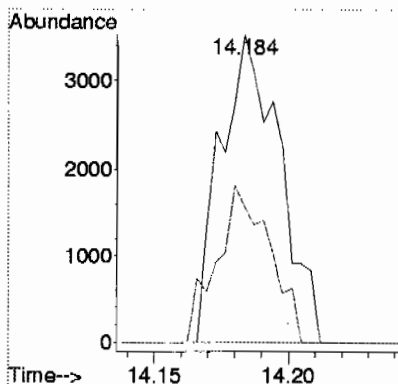
#55  
m,p-Xylenes  
Concen: 0.62 ug/L  
RT: 13.749 min Scan# 2160  
Delta R.T. -0.000 min  
Lab File: 5V408.D  
Acq: 28 Jan 2010 12:19 pm

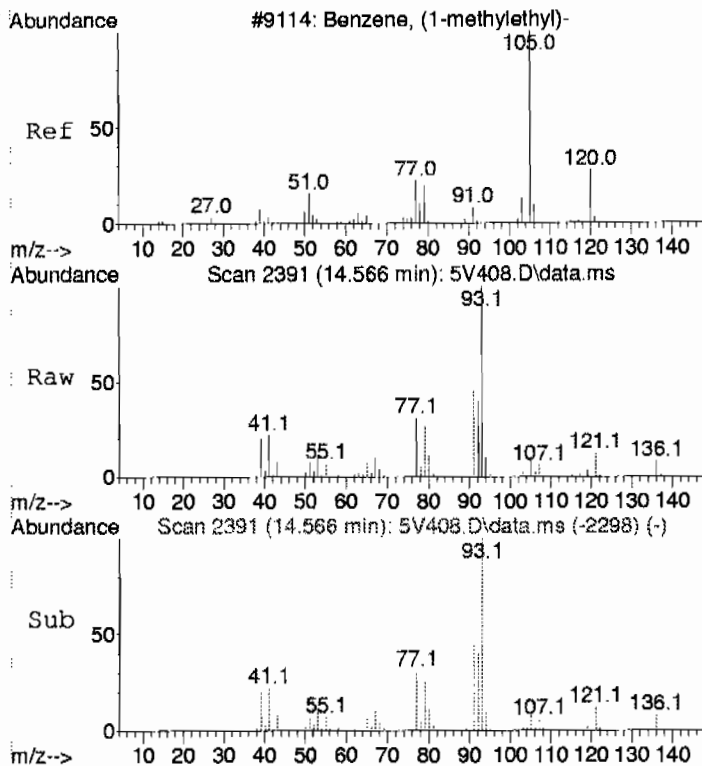
Tgt Ion:106 Resp: 4788  
Ion Ratio Lower Upper  
106 100  
91 209.5 162.6 222.6



#57  
Styrene  
Concen: 0.47 ug/L  
RT: 14.184 min Scan# 2283  
Delta R.T. -0.000 min  
Lab File: 5V408.D  
Acq: 28 Jan 2010 12:19 pm

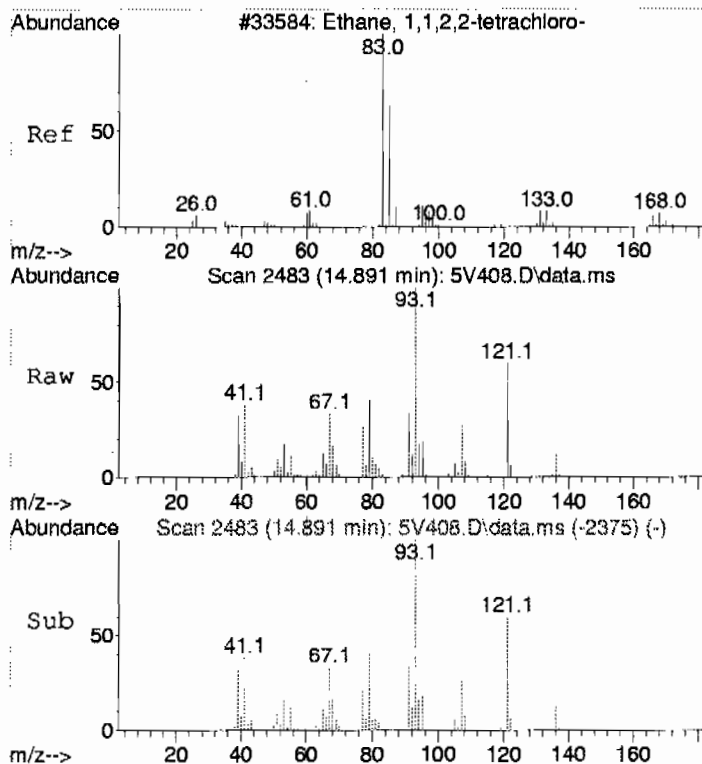
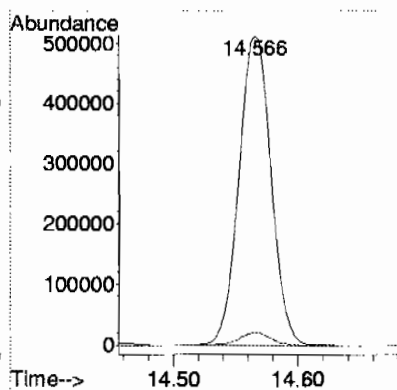
Tgt Ion:104 Resp: 5420  
Ion Ratio Lower Upper  
104 100  
78 45.8 16.3 76.3





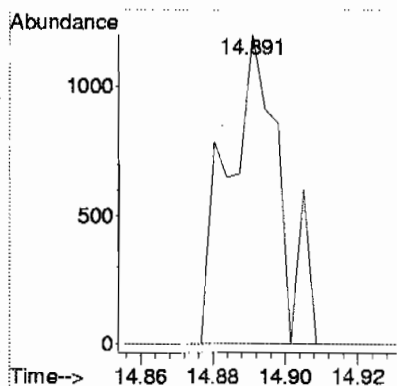
#60 BEFORE analyst DELETION  
Isopropylbenzene  
Concen: 69.08 ug/L  
RT: 14.566 min Scan# 2391  
Delta R.T. 0.029 min  
Lab File: 5V408.D  
Acq: 28 Jan 2010 12:19 pm

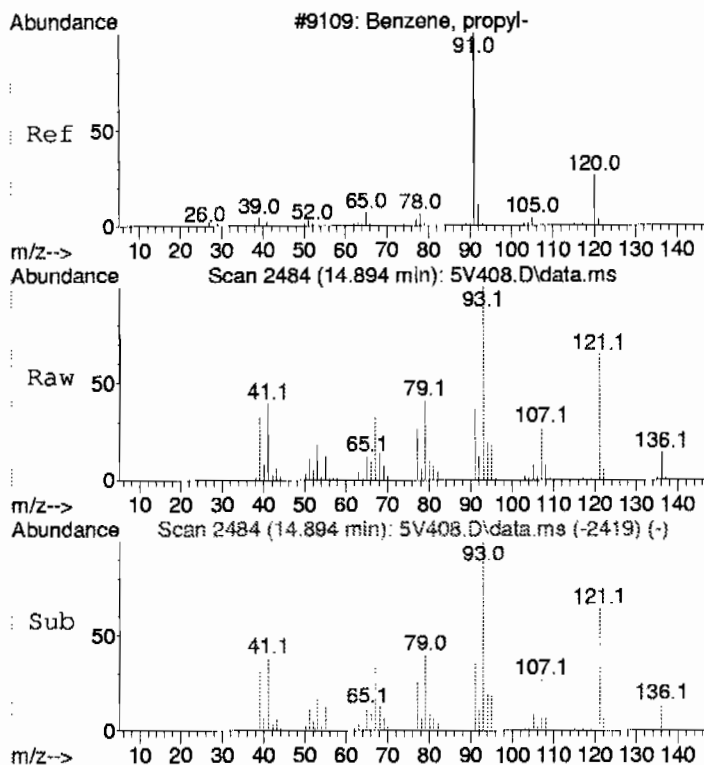
Tgt Ion: 105 Resp: 916561  
Ion Ratio Lower Upper  
105 100  
120 4.0 0.0 57.9



#62 BEFORE analyst DELETION  
1,1,2,2-Tetrachloroethane  
Concen: 0.36 ug/L  
RT: 14.891 min Scan# 2483  
Delta R.T. 0.081 min  
Lab File: 5V408.D  
Acq: 28 Jan 2010 12:19 pm

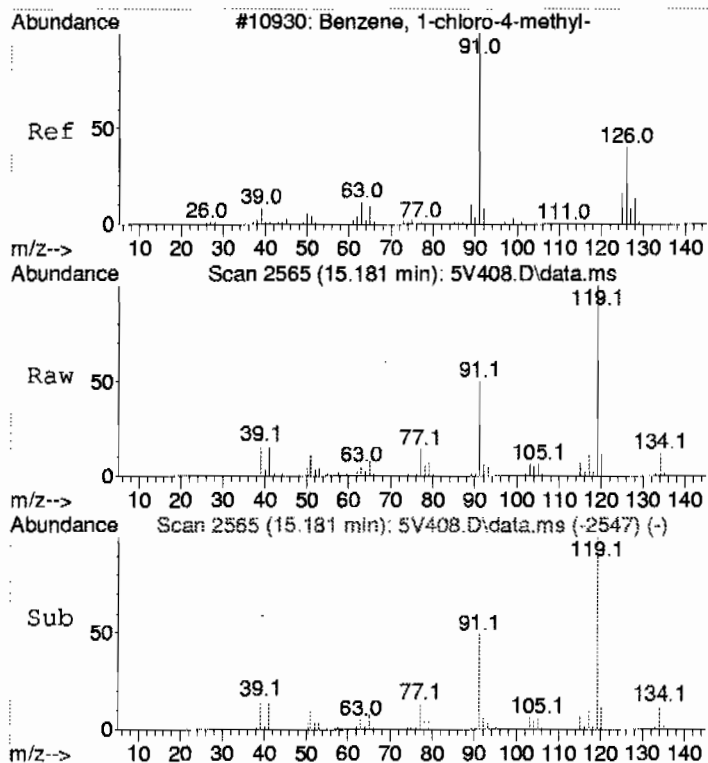
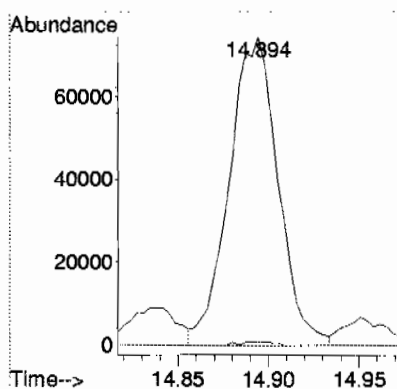
Tgt Ion: 83 Resp: 1203  
Ion Ratio Lower Upper  
83 100  
85 0.0 33.6 93.6#





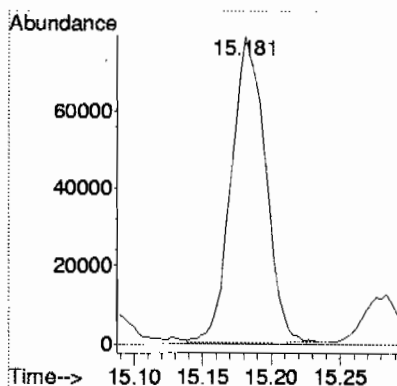
#65 BEFORE analyst DELETION  
n-Propylbenzene  
Concen: 8.75 ug/L  
RT: 14.894 min Scan# 2484  
Delta R.T. -0.071 min  
Lab File: 5V408.D  
Acq: 28 Jan 2010 12:19 pm

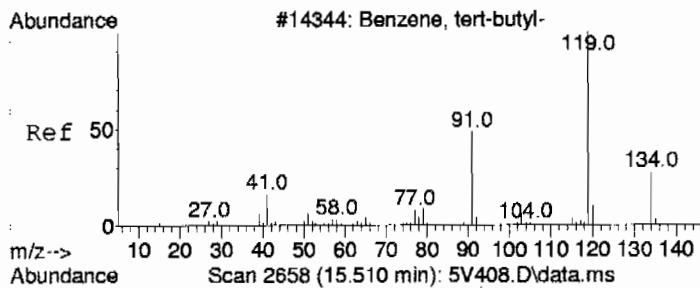
Tgt Ion: 91 Resp: 139311  
Ion Ratio Lower Upper  
91 100  
120 0.7 0.0 53.6



#68 BEFORE analyst DELETION  
4-Chlorotoluene  
Concen: 13.72 ug/L  
RT: 15.181 min Scan# 2565  
Delta R.T. -0.035 min  
Lab File: 5V408.D  
Acq: 28 Jan 2010 12:19 pm

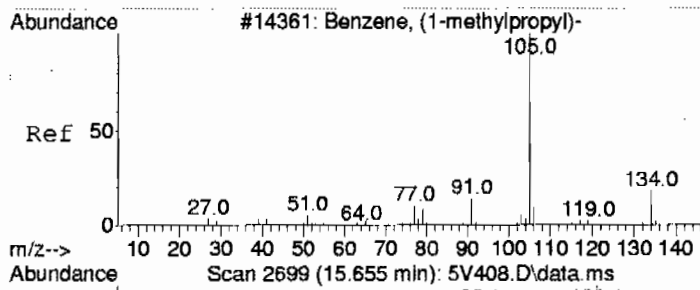
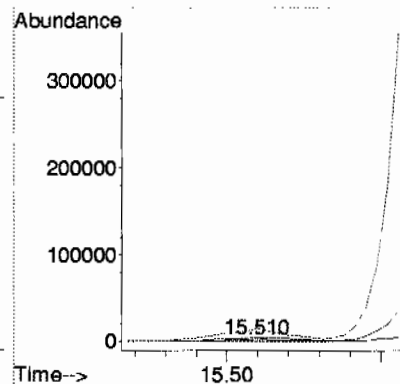
Tgt Ion: 91 Resp: 135531  
Ion Ratio Lower Upper  
91 100  
126 0.0 3.9 63.9#





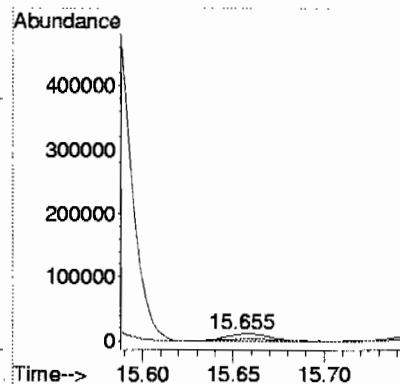
#69 BEFORE analyst DELETION  
tert-Butylbenzene  
Concen: 1.25 ug/L  
RT: 15.510 min Scan# 2658  
Delta R.T. 0.021 min  
Lab File: 5V408.D  
Acq: 28 Jan 2010 12:19 pm

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 134     | 100   |       |        |
| 119     | 247.8 | 395.2 | 455.2# |
| 91      | 707.8 | 251.7 | 311.7# |

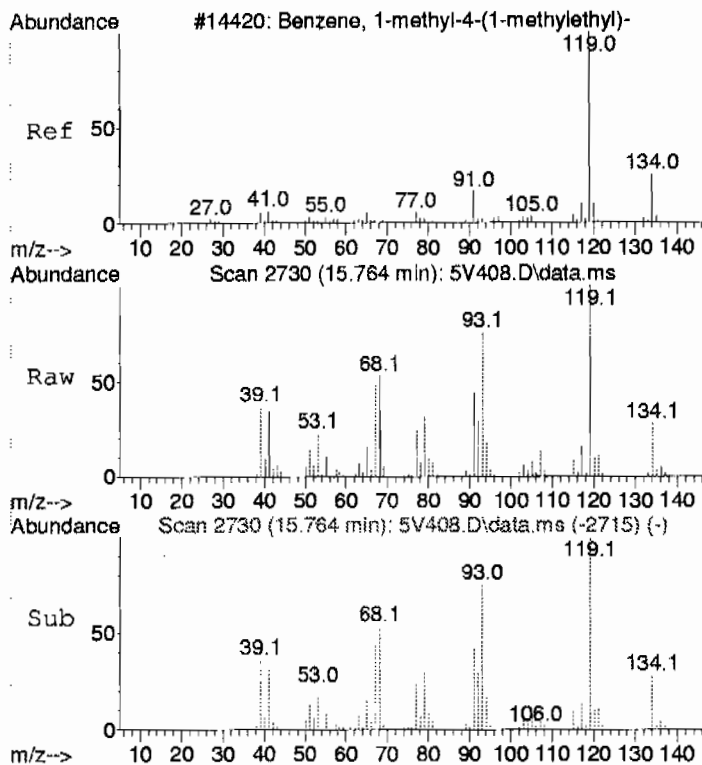


#71 BEFORE analyst DELETION  
sec-Butylbenzene  
Concen: 1.33 ug/L  
RT: 15.655 min Scan# 2699  
Delta R.T. -0.056 min  
Lab File: 5V408.D  
Acq: 28 Jan 2010 12:19 pm

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 134     | 34.8  | 0.0   | 51.4  |

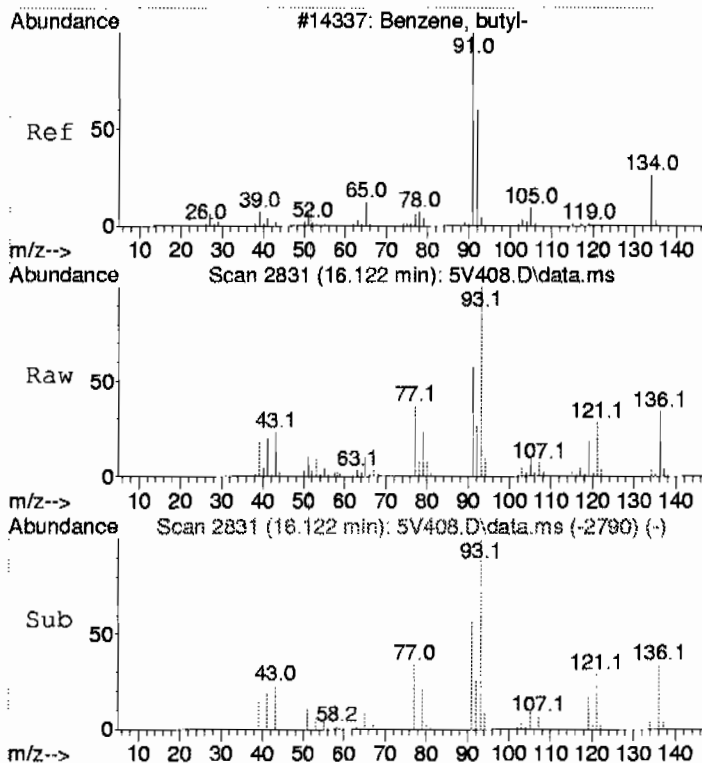
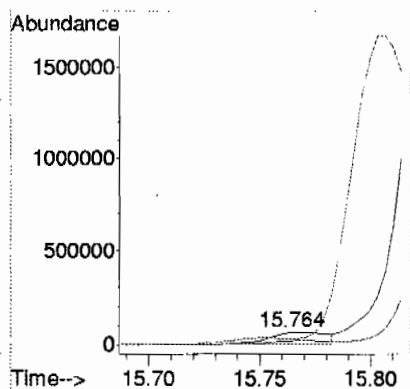






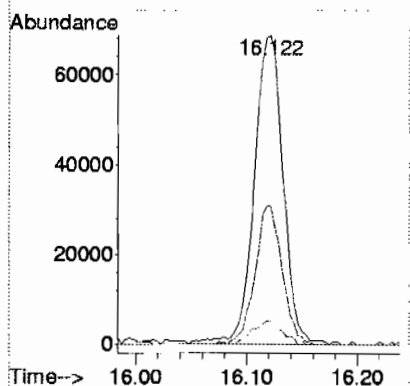
#72 BEFORE analyst DELETION  
4-Isopropyltoluene  
Concen: 9.98 ug/L  
RT: 15.764 min Scan# 2730  
Delta R.T. -0.068 min  
Lab File: 5V408.D  
Acq: 28 Jan 2010 12:19 pm

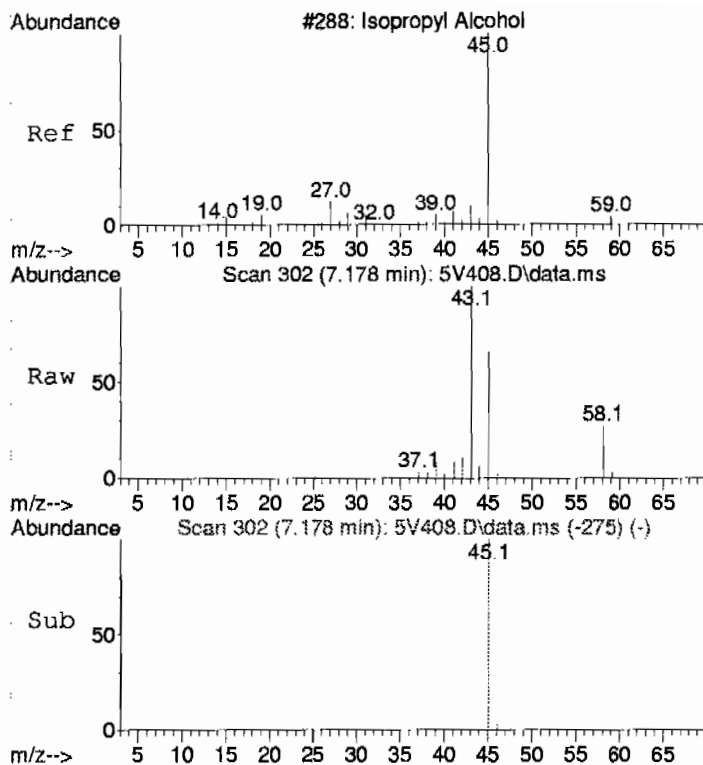
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 119     | 100   |       |       |
| 134     | 33.4  | 0.0   | 58.7  |
| 91      | 50.0  | 0.0   | 51.7  |



#75 BEFORE analyst DELETION  
n-Butylbenzene  
Concen: 11.23 ug/L  
RT: 16.122 min Scan# 2831  
Delta R.T. -0.155 min  
Lab File: 5V408.D  
Acq: 28 Jan 2010 12:19 pm

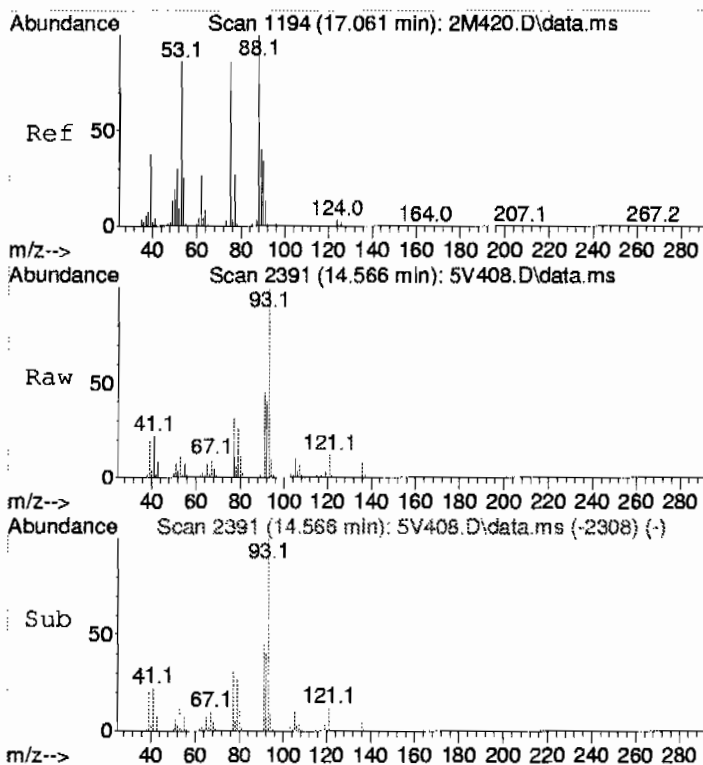
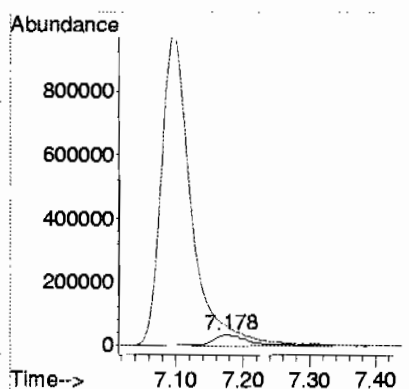
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 42.1  | 25.0  | 85.0  |
| 134     | 7.8   | 0.0   | 57.7  |





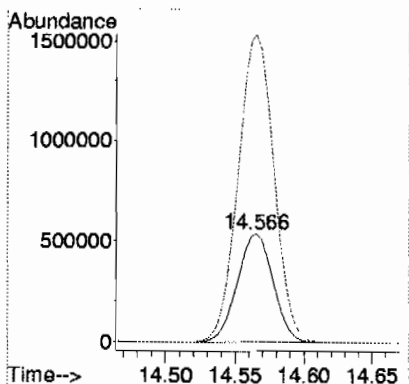
#87 BEFORE analyst DELETION  
Isopropyl Alcohol  
Concen: 284.48 ug/L  
RT: 7.178 min Scan# 302  
Delta R.T. 0.003 min  
Lab File: 5V408.D  
Acq: 28 Jan 2010 12:19 pm

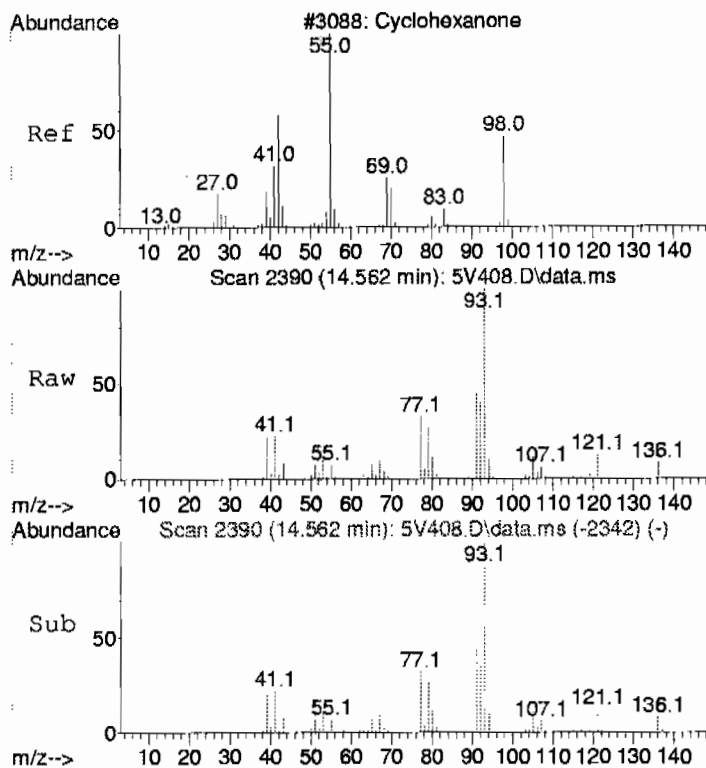
Tgt Ion: 45 Resp: 114272  
Ion Ratio Lower Upper  
45 100  
43 0.0 0.0 50.1



#107 BEFORE analyst DELETION  
cis-1,4-Dichloro-2-butene  
Concen: 868.23 ug/L  
RT: 14.566 min Scan# 2391  
Delta R.T. -0.007 min  
Lab File: 5V408.D  
Acq: 28 Jan 2010 12:19 pm

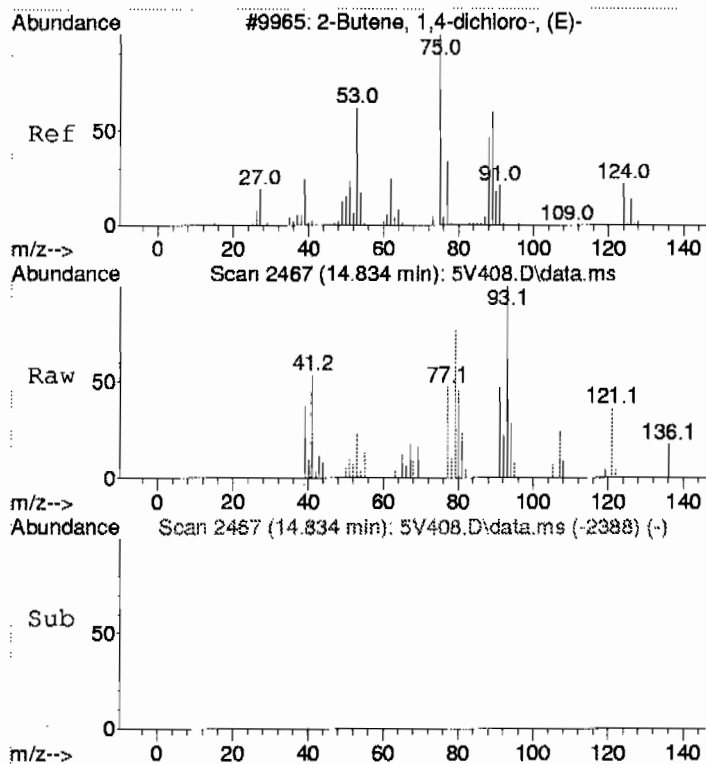
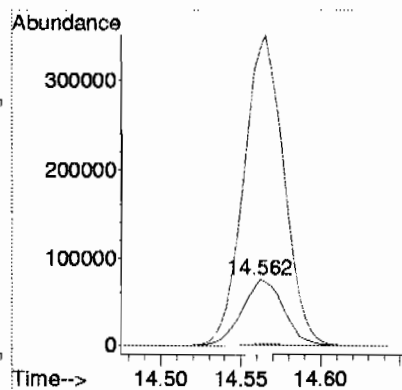
Tgt Ion: 53 Resp: 962563  
Ion Ratio Lower Upper  
53 100  
88 0.2 50.2 110.2#  
77 285.2 0.0 59.6#





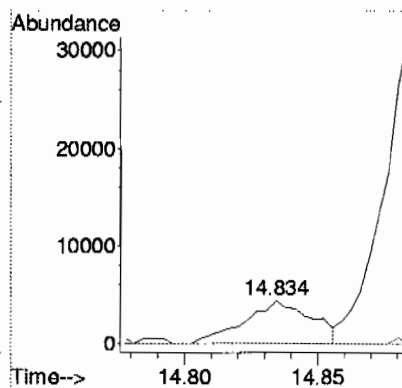
#108 BEFORE analyst DELETION  
Cyclohexanone  
Concen: 424.88 ug/L  
RT: 14.562 min Scan# 2390  
Delta R.T. -0.131 min  
Lab File: 5V408.D  
Acq: 28 Jan 2010 12:19 pm

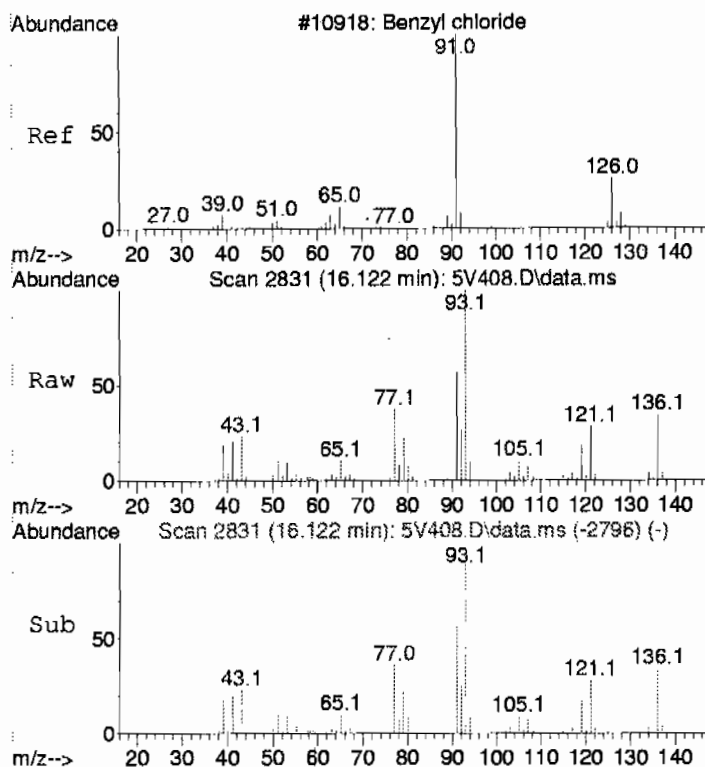
Tgt Ion: 42 Resp: 134855  
Ion Ratio Lower Upper  
42 100  
55 456.1 104.7 164.7#  
98 1.2 21.5 81.5#



#109 BEFORE analyst DELETION  
trans-1,4-Dichloro-2-butene  
Concen: 7.22 ug/L  
RT: 14.834 min Scan# 2467  
Delta R.T. -0.022 min  
Lab File: 5V408.D  
Acq: 28 Jan 2010 12:19 pm

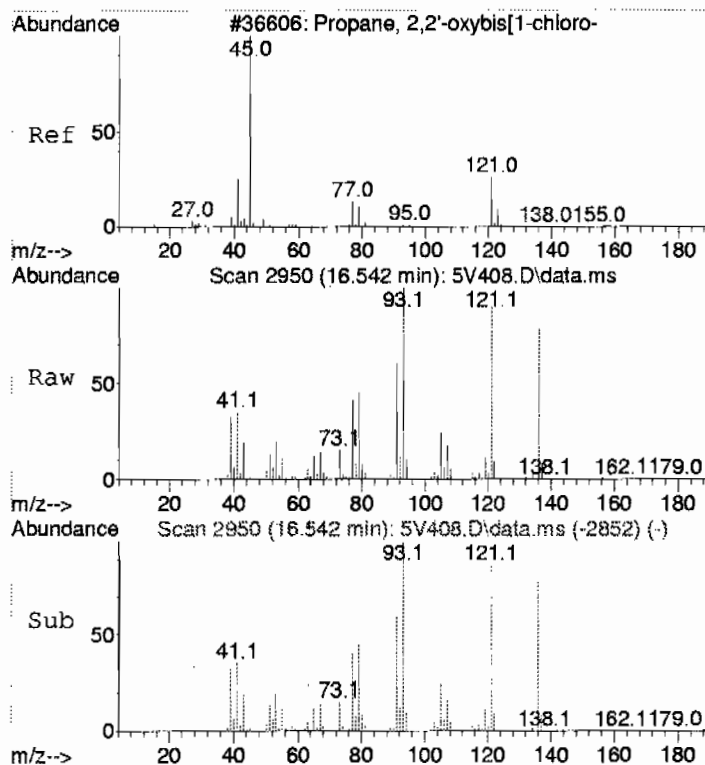
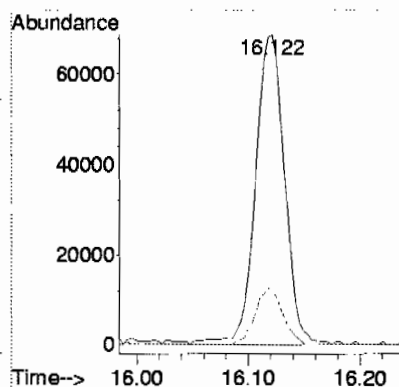
Tgt Ion: 53 Resp: 7675  
Ion Ratio Lower Upper  
53 100  
88 0.0 7.6 67.6#  
75 0.0 86.0 146.0#





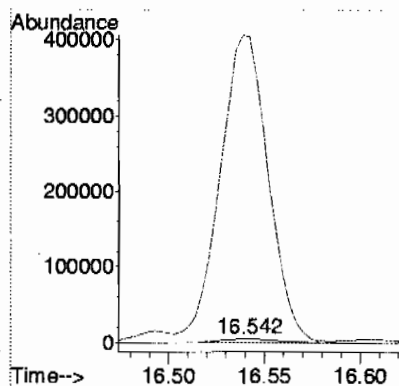
#111 BEFORE analyst DELETION  
Benzyl chloride  
Concen: 25.36 ug/L  
RT: 16.122 min Scan# 2831  
Delta R.T. 0.022 min  
Lab File: 5V408.D  
Acq: 28 Jan 2010 12:19 pm

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 91      | 100   | 124364 |       |       |
| 126     | 0.0   | 0.0    | 51.6  |       |
| 65      | 17.4  | 0.0    | 41.9  |       |



#112 BEFORE analyst DELETION  
bis(2-Chloroisopropyl)ether  
Concen: 5.55 ug/L  
RT: 16.542 min Scan# 2950  
Delta R.T. 0.045 min  
Lab File: 5V408.D  
Acq: 28 Jan 2010 12:19 pm

| Tgt Ion | Ratio  | Resp  | Lower | Upper |
|---------|--------|-------|-------|-------|
| 45      | 100    | 10813 |       |       |
| 121     | 6585.7 | 0.0   | 49.2# |       |



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V408.D  
Acq On : 28 Jan 2010 12:19 pm  
Operator : DXK1  
Sample : |245114003|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 8 Sample Multiplier: 1

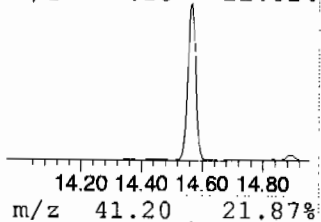
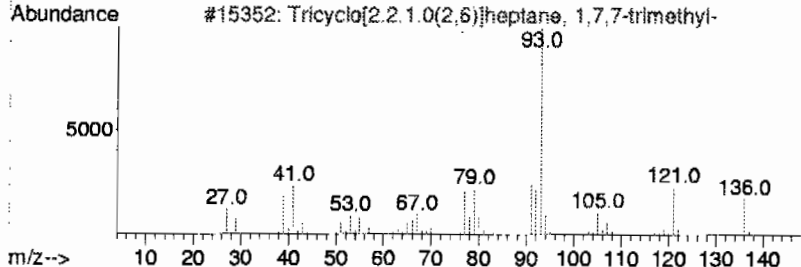
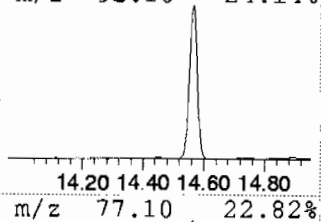
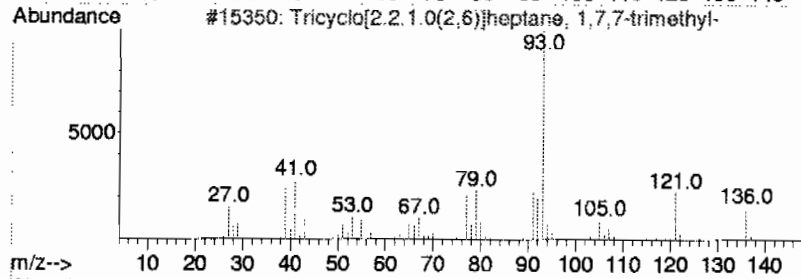
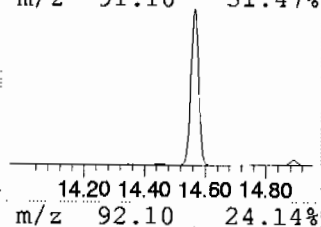
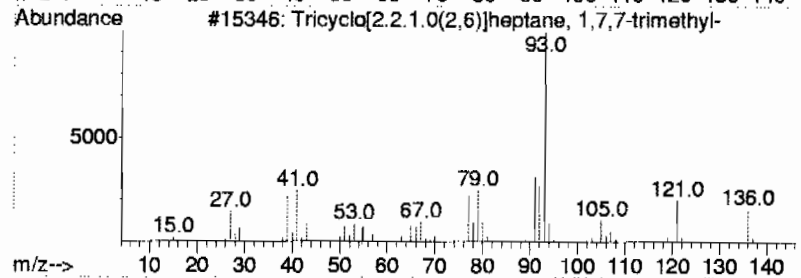
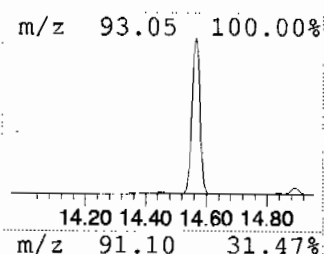
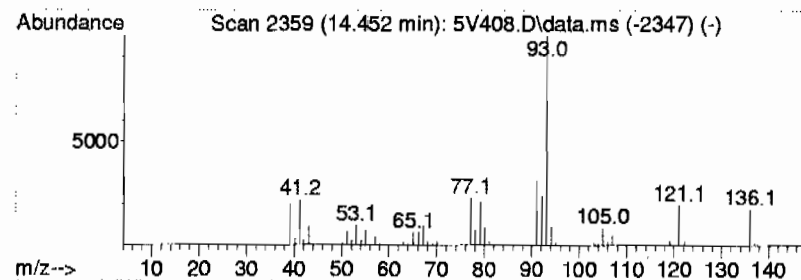
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

\*\*\*\*\*  
Peak Number 1 Tricyclo[2.2.1.0(2,6)]hepta... Concentration Rank 14

| R.T.      | EstConc                             | Area   | Relative to ISTD   | R.T.        |      |
|-----------|-------------------------------------|--------|--------------------|-------------|------|
| 14.452    | 6.02 ug/L                           | 313608 | B Chlorobenzene-d5 | 13.547      |      |
| Hit# of 5 | Tentative ID                        | MW     | MolForm            | CAS#        | Qual |
| 1         | Tricyclo[2.2.1.0(2,6)]heptane, 1... | 136    | C10H16             | 000508-32-7 | 96   |
| 2         | Tricyclo[2.2.1.0(2,6)]heptane, 1... | 136    | C10H16             | 000508-32-7 | 96   |
| 3         | Tricyclo[2.2.1.0(2,6)]heptane, 1... | 136    | C10H16             | 000508-32-7 | 96   |
| 4         | 1S-.alpha.-Pinene                   | 136    | C10H16             | 007785-26-4 | 95   |
| 5         | 3-Carene                            | 136    | C10H16             | 013466-78-9 | 93   |



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V408.D  
Acq On : 28 Jan 2010 12:19 pm  
Operator : DXK1  
Sample : |245114003|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 8 Sample Multiplier: 1

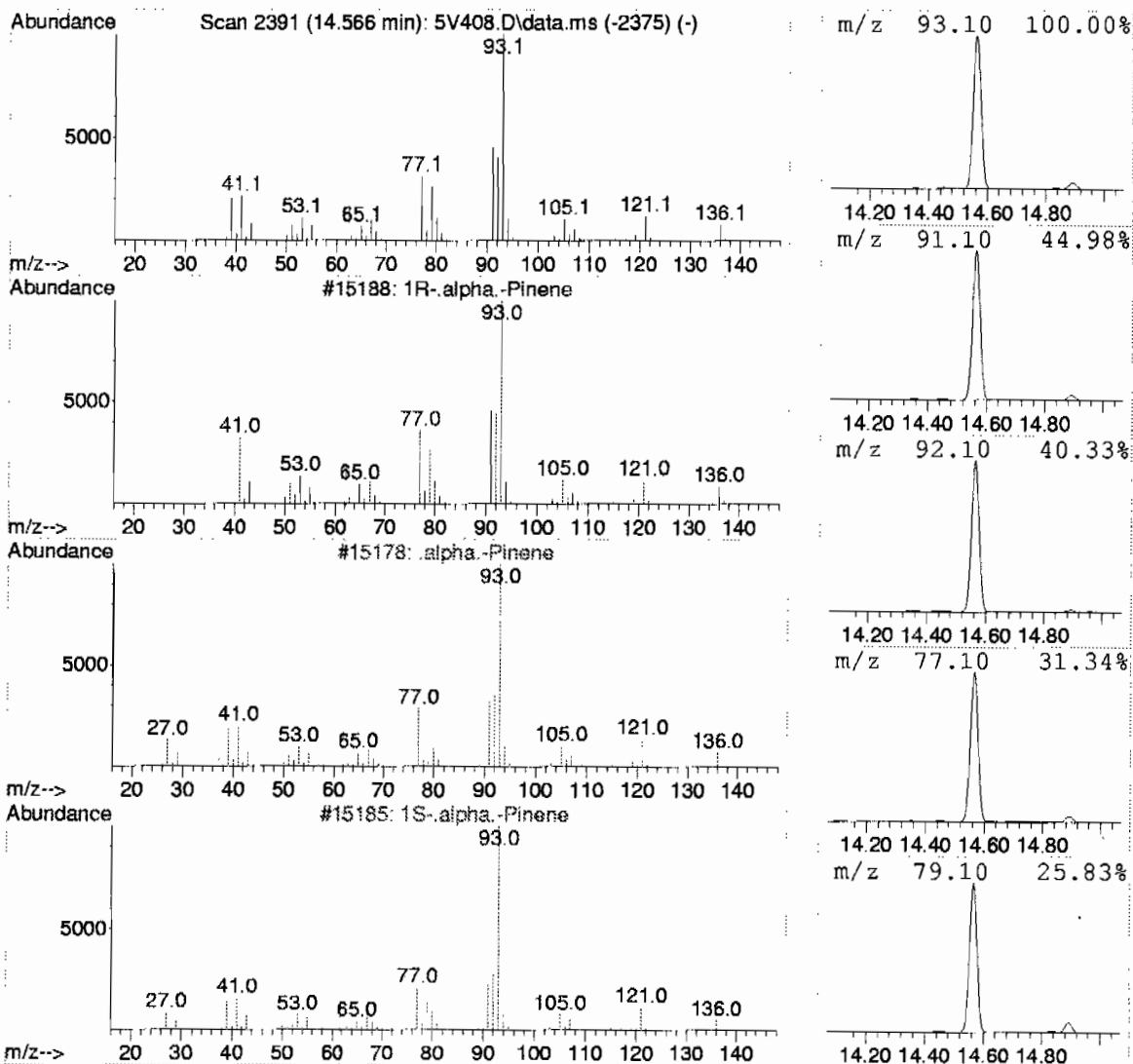
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

\*\*\*\*\*  
Peak Number 2 1R-.alpha.-Pinene Concentration Rank 3

| R.T.      | EstConc                             | Area     | Relative to ISTD   | R.T.        |      |
|-----------|-------------------------------------|----------|--------------------|-------------|------|
| 14.566    | 751.03 ug/L                         | 39109300 | B Chlorobenzene-d5 | 13.547      |      |
| Hit# of 5 | Tentative ID                        | MW       | MolForm            | CAS#        | Qual |
| 1         | 1R-.alpha.-Pinene                   | 136      | C10H16             | 007785-70-8 | 97   |
| 2         | .alpha.-Pinene                      | 136      | C10H16             | 000080-56-8 | 96   |
| 3         | 1S-.alpha.-Pinene                   | 136      | C10H16             | 007785-26-4 | 95   |
| 4         | 1R-.alpha.-Pinene                   | 136      | C10H16             | 007785-70-8 | 95   |
| 5         | Bicyclo[3.1.1]hept-2-ene, 2,6,6-... | 136      | C10H16             | 002437-95-8 | 94   |



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V408.D  
Acq On : 28 Jan 2010 12:19 pm  
Operator : DXK1  
Sample : |245114003|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

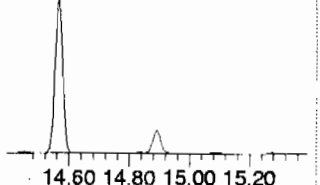
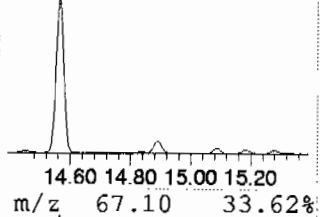
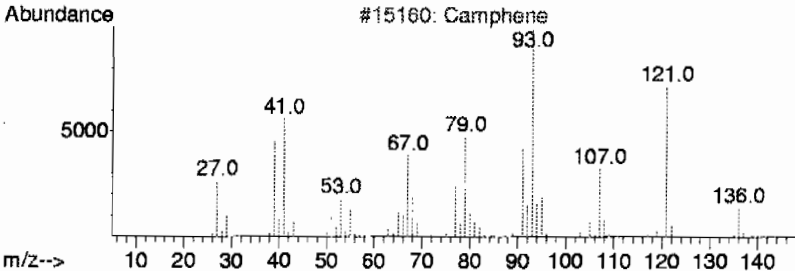
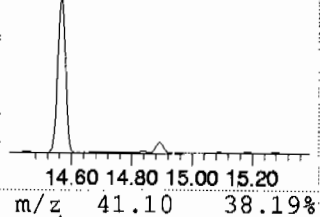
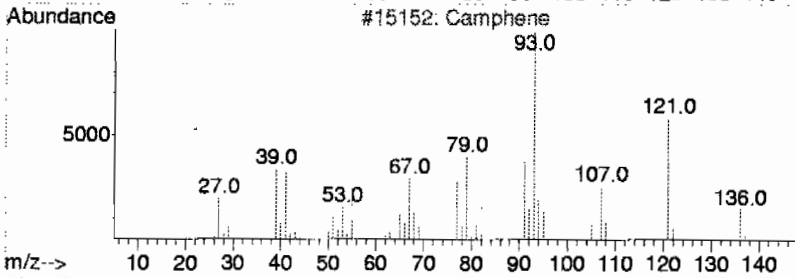
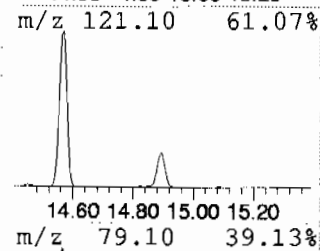
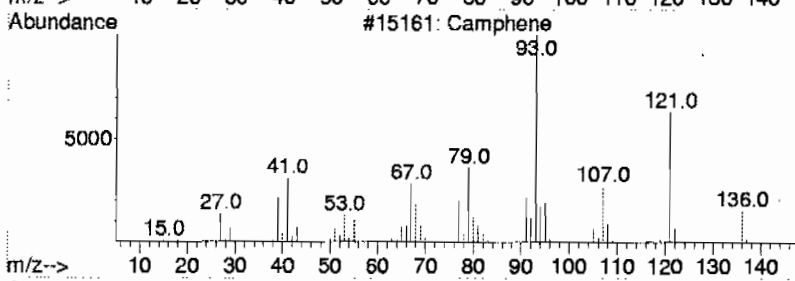
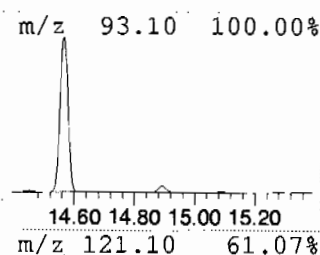
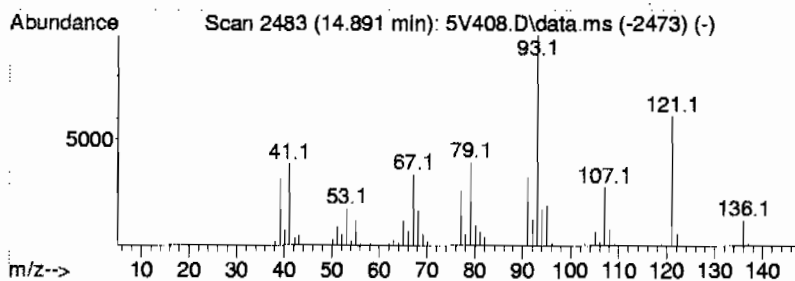
SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

\*\*\*\*\*  
Peak Number 3 Camphene Concentration Rank 7

| R.T.   | EstConc    | Area    | Relative to ISTD       | R.T.   |
|--------|------------|---------|------------------------|--------|
| 14.891 | 28.12 ug/L | 1570200 | 1,4-Dichlorobenzene-d4 | 15.962 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | Camphene                            | 136 | C10H16  | 000079-92-5 | 97   |
| 2    |    |   | Camphene                            | 136 | C10H16  | 000079-92-5 | 97   |
| 3    |    |   | Camphene                            | 136 | C10H16  | 000079-92-5 | 96   |
| 4    |    |   | Bicyclo[2.2.1]heptane, 2,2-dimet... | 136 | C10H16  | 005794-04-7 | 95   |
| 5    |    |   | Camphene                            | 136 | C10H16  | 000079-92-5 | 91   |



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V408.D  
Acq On : 28 Jan 2010 12:19 pm  
Operator : DXK1  
Sample : |245114003|946008|1|VOA|1|VOA8260BS|  
Misc : LANTL 5.0g N/A SOIL  
ALS Vial : 8 Sample Multiplier: 1

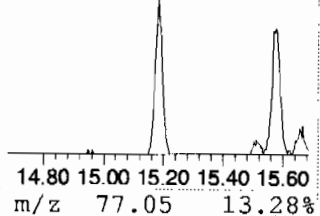
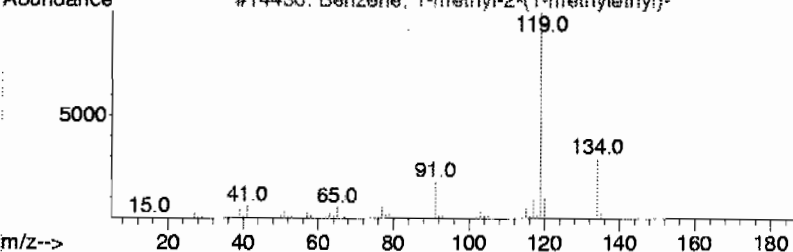
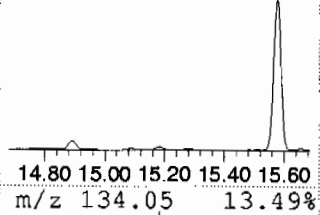
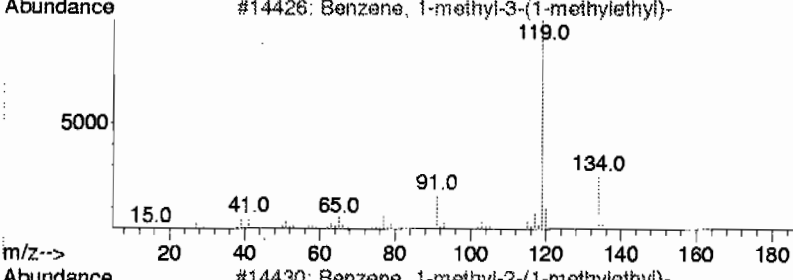
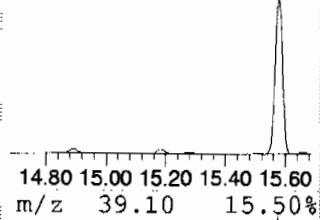
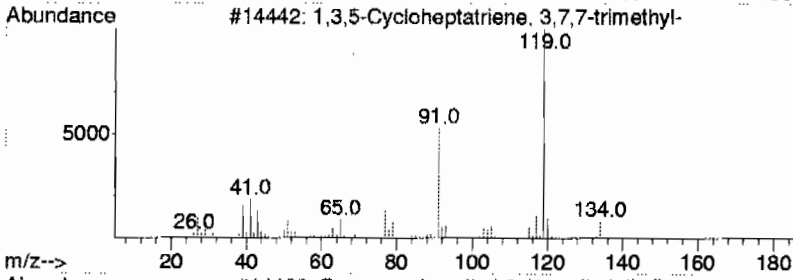
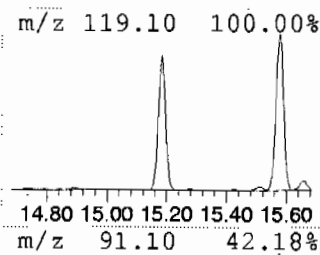
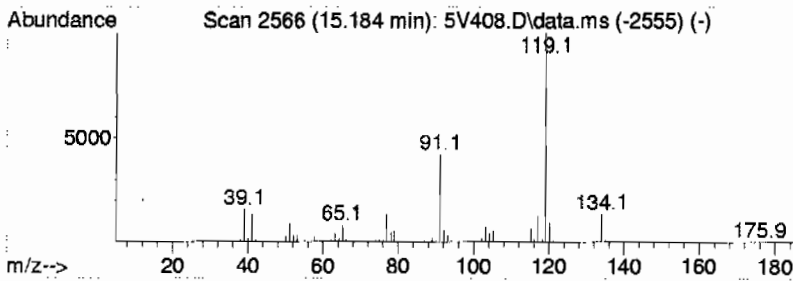
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

\*\*\*\*\*  
Peak Number 6 1,3,5-Cycloheptatriene, 3,7... Concentration Rank 13

| R.T.    | EstConc    | Area                                | Relative to ISTD       | R.T.    |             |      |
|---------|------------|-------------------------------------|------------------------|---------|-------------|------|
| 15.184  | 11.05 ug/L | 616717                              | 1,4-Dichlorobenzene-d4 | 15.962  |             |      |
| Hit# of | 5          | Tentative ID                        | MW                     | MolForm | CAS#        | Qual |
| 1       |            | 1,3,5-Cycloheptatriene, 3,7,7-tr... | 134                    | C10H14  | 003479-89-8 | 95   |
| 2       |            | Benzene, 1-methyl-3-(1-methyleth... | 134                    | C10H14  | 000535-77-3 | 94   |
| 3       |            | Benzene, 1-methyl-2-(1-methyleth... | 134                    | C10H14  | 000527-84-4 | 94   |
| 4       |            | Benzene, 1-methyl-4-(1-methyleth... | 134                    | C10H14  | 000099-87-6 | 93   |
| 5       |            | Benzene, 1-methyl-2-(1-methyleth... | 134                    | C10H14  | 000527-84-4 | 91   |





Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V408.D  
Acq On : 28 Jan 2010 12:19 pm  
Operator : DXK1  
Sample : |245114003|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 8 Sample Multiplier: 1

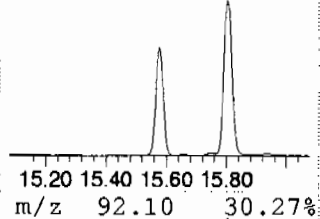
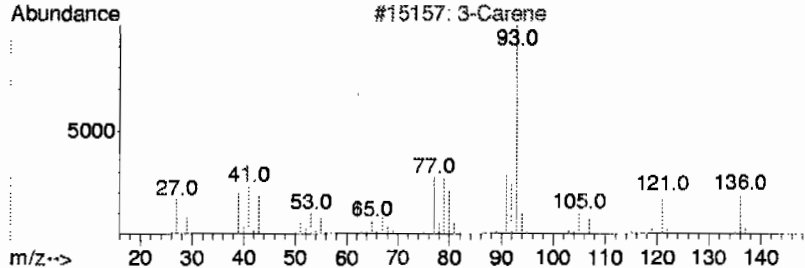
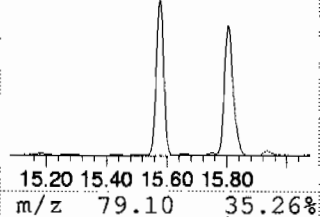
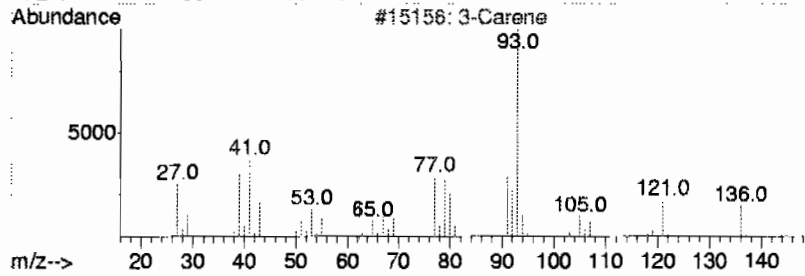
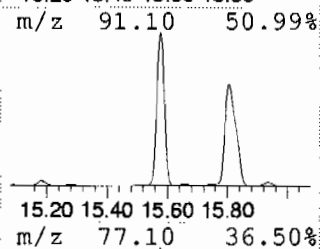
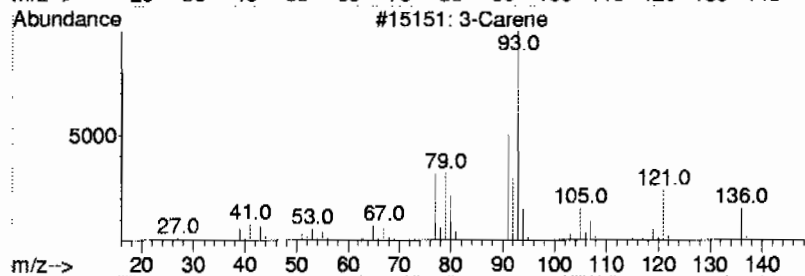
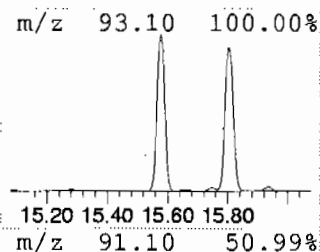
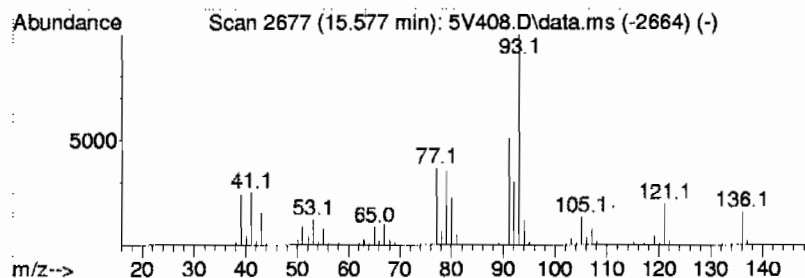
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

\*\*\*\*\*  
Peak Number 7 3-Carene Concentration Rank 2

| R.T.   | EstConc     | Area     | Relative to ISTD       |     |         | R.T.        |      |
|--------|-------------|----------|------------------------|-----|---------|-------------|------|
| 15.577 | 800.51 ug/L | 44696800 | 1,4-Dichlorobenzene-d4 |     |         | 15.962      |      |
| Hit#   | of          | 5        | Tentative ID           | MW  | MolForm | CAS#        | Qual |
| 1      |             |          | 3-Carene               | 136 | C10H16  | 013466-78-9 | 97   |
| 2      |             |          | 3-Carene               | 136 | C10H16  | 013466-78-9 | 96   |
| 3      |             |          | 3-Carene               | 136 | C10H16  | 013466-78-9 | 95   |
| 4      |             |          | 1R-.alpha.-Pinene      | 136 | C10H16  | 007785-70-8 | 95   |
| 5      |             |          | 1S-.alpha.-Pinene      | 136 | C10H16  | 007785-26-4 | 94   |



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V408.D  
Acq On : 28 Jan 2010 12:19 pm  
Operator : DXK1  
Sample : |245114003|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 8 Sample Multiplier: 1

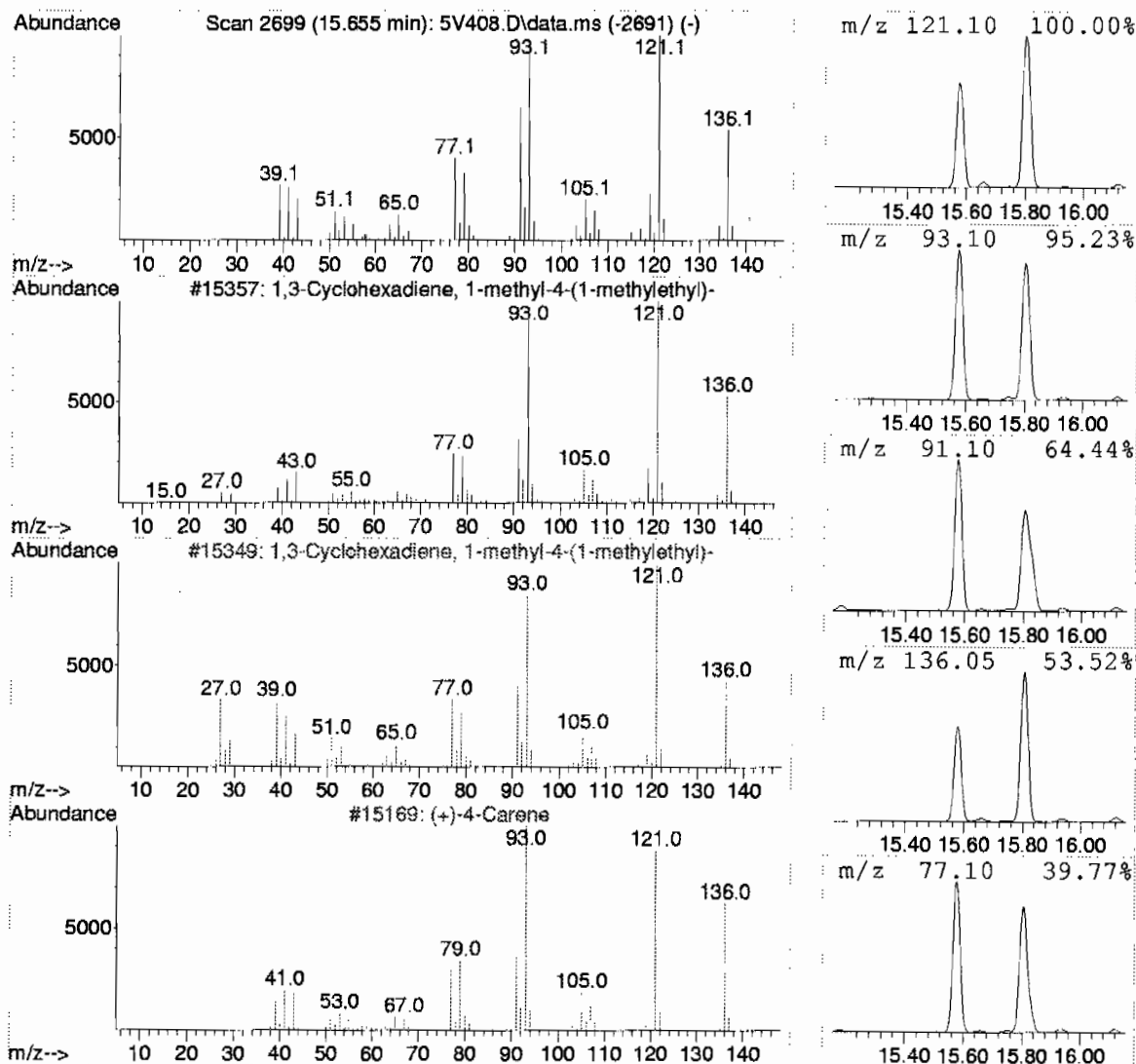
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

\*\*\*\*\*  
Peak Number 8 1,3-Cyclohexadiene, 1-methy... Concentration Rank 16

| R.T.   | EstConc   | Area                                | Relative to ISTD       | R.T.        |      |
|--------|-----------|-------------------------------------|------------------------|-------------|------|
| 15.655 | 5.91 ug/L | 330008                              | 1,4-Dichlorobenzene-d4 | 15.962      |      |
| Hit#   | of 5      | Tentative ID                        | MW MolForm             | CAS#        | Qual |
| 1      |           | 1,3-Cyclohexadiene, 1-methyl-4-(... | 136 C10H16             | 000099-86-5 | 97   |
| 2      |           | 1,3-Cyclohexadiene, 1-methyl-4-(... | 136 C10H16             | 000099-86-5 | 96   |
| 3      |           | (+)-4-Carene                        | 136 C10H16             | 029050-33-7 | 95   |
| 4      |           | Bicyclo[4.1.0]hept-2-ene, 3,7,7-... | 136 C10H16             | 000554-61-0 | 94   |
| 5      |           | Cyclohexene, 1-methyl-4-(1-methy... | 136 C10H16             | 000586-62-9 | 94   |



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V408.D  
Acq On : 28 Jan 2010 12:19 pm  
Operator : DXK1  
Sample : |245114003|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 8 Sample Multiplier: 1

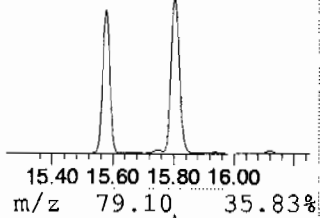
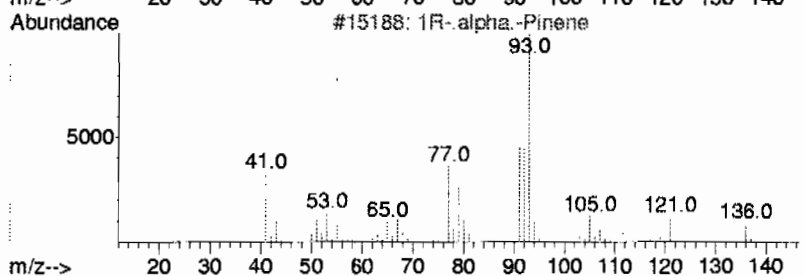
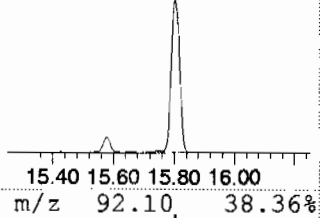
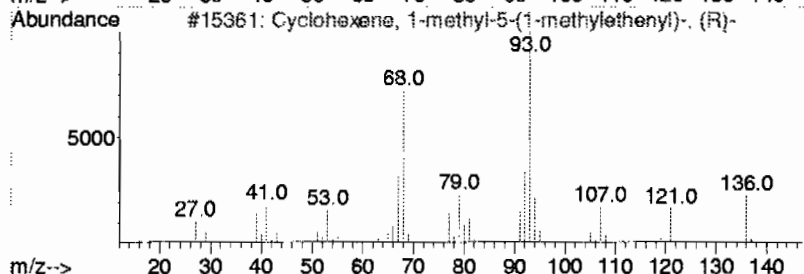
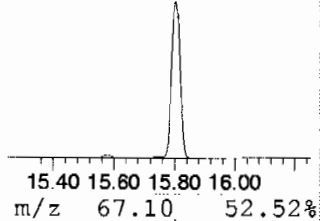
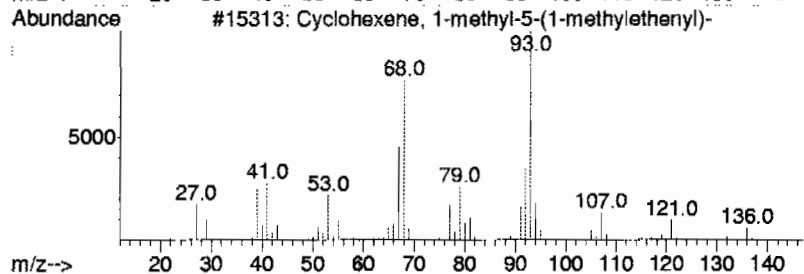
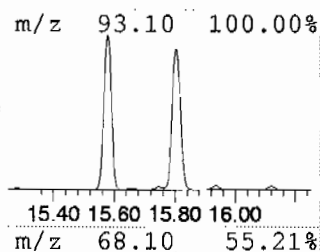
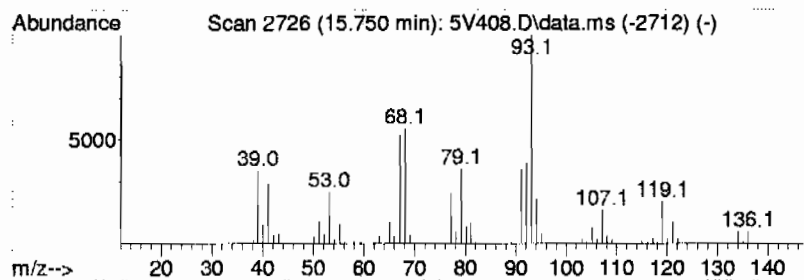
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

\*\*\*\*\*  
Peak Number 11 Cyclohexene, 1-methyl-5-(1-... Concentration Rank 15

| R.T.      | EstConc                             | Area   | Relative to ISTD       | R.T.        |      |
|-----------|-------------------------------------|--------|------------------------|-------------|------|
| 15.750    | 6.00 ug/L                           | 334895 | 1,4-Dichlorobenzene-d4 | 15.962      |      |
| Hit# of 5 | Tentative ID                        | MW     | MolForm                | CAS#        | Qual |
| 1         | Cyclohexene, 1-methyl-5-(1-methy... | 136    | C10H16                 | 013898-73-2 | 93   |
| 2         | Cyclohexene, 1-methyl-5-(1-methy... | 136    | C10H16                 | 001461-27-4 | 74   |
| 3         | 1R-.alpha.-Pinene                   | 136    | C10H16                 | 007785-70-8 | 55   |
| 4         | 4-Carene, (1S,3S,6R)-(-)-           | 136    | C10H16                 | 005208-50-4 | 49   |
| 5         | .alpha.-Pinene                      | 136    | C10H16                 | 000080-56-8 | 46   |



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V408.D  
Acq On : 28 Jan 2010 12:19 pm  
Operator : DXK1  
Sample : |245114003|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 8 Sample Multiplier: 1

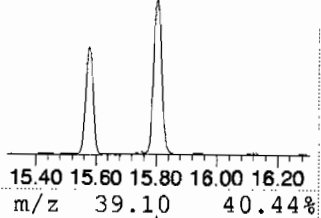
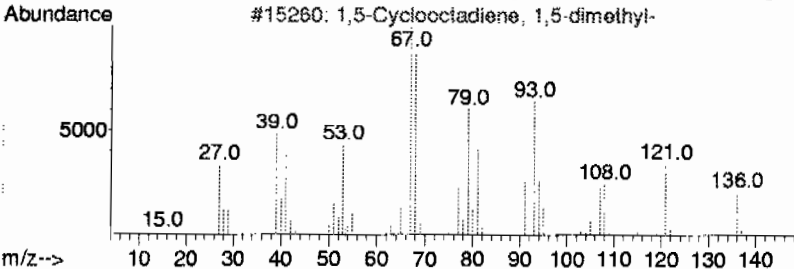
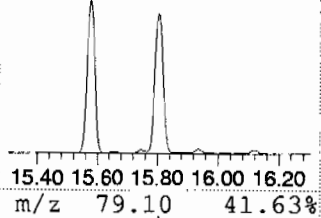
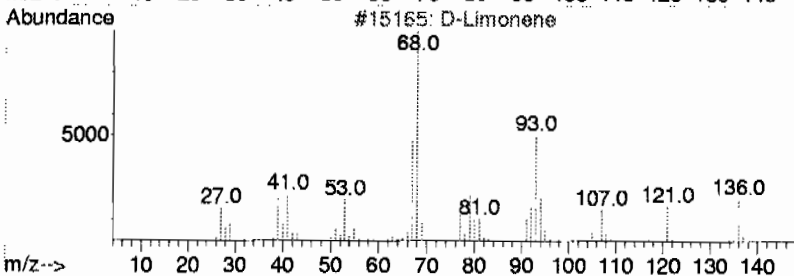
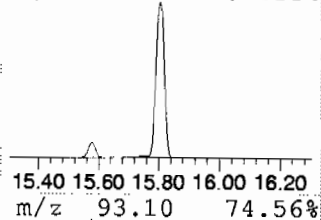
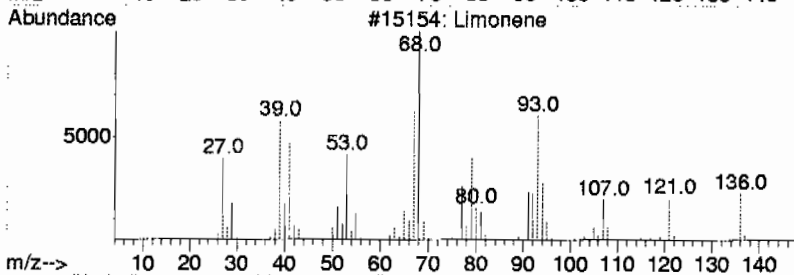
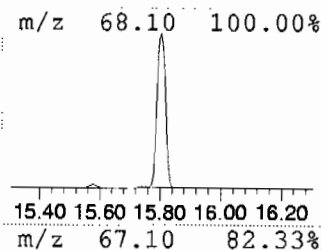
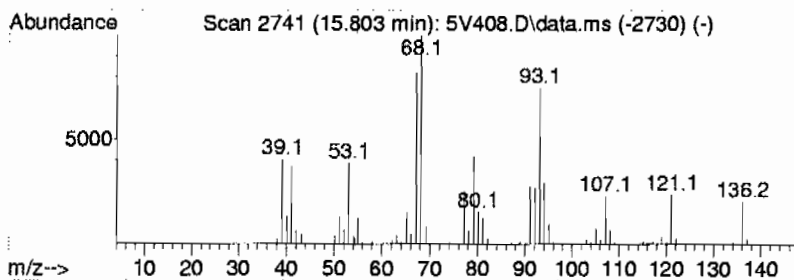
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

\*\*\*\*\*  
Peak Number 12 Limonene Concentration Rank 1

| R.T.      | EstConc                           | Area     | Relative to ISTD       | R.T.        |      |
|-----------|-----------------------------------|----------|------------------------|-------------|------|
| 15.803    | 1178.83 ug/L                      | 65820400 | 1,4-Dichlorobenzene-d4 | 15.962      |      |
| Hit# of 5 | Tentative ID                      | MW       | MolForm                | CAS#        | Qual |
| 1         | Limonene                          | 136      | C10H16                 | 000138-86-3 | 95   |
| 2         | D-Limonene                        | 136      | C10H16                 | 005989-27-5 | 90   |
| 3         | 1,5-Cyclooctadiene, 1,5-dimethyl- | 136      | C10H16                 | 003760-14-3 | 81   |
| 4         | Limonene                          | 136      | C10H16                 | 000138-86-3 | 76   |
| 5         | 1,5-Cyclooctadiene, 1,5-dimethyl- | 136      | C10H16                 | 003760-14-3 | 72   |



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V408.D  
Acq On : 28 Jan 2010 12:19 pm  
Operator : DXK1  
Sample : |245114003|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 8 Sample Multiplier: 1

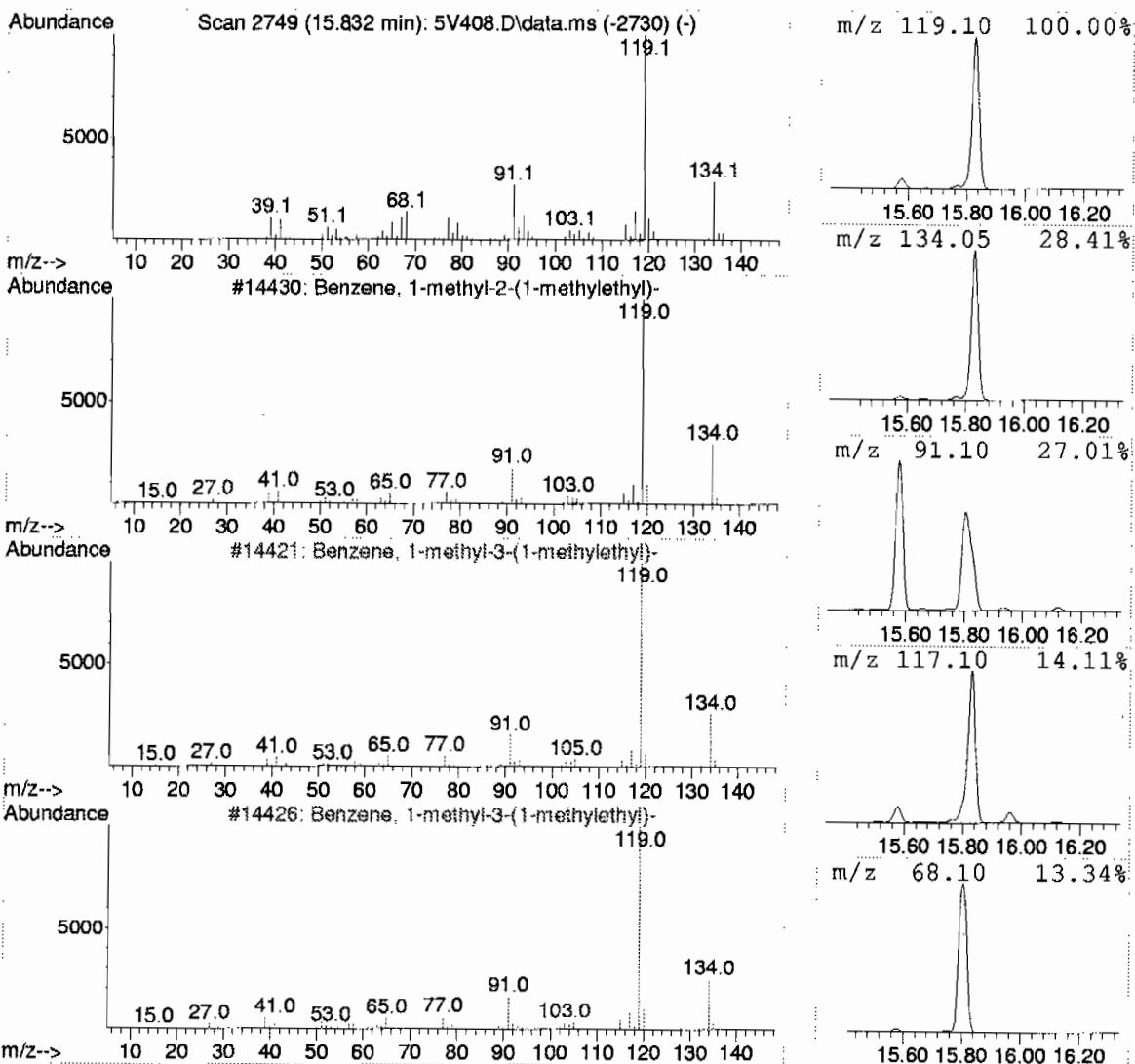
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

\*\*\*\*\*  
Peak Number 13 Benzene, 1-methyl-2-(1-meth... Concentration Rank 4

| R.T.      | EstConc                             | Area     | Relative to ISTD       | R.T.        |      |
|-----------|-------------------------------------|----------|------------------------|-------------|------|
| 15.832    | 618.97 ug/L                         | 34560600 | 1,4-Dichlorobenzene-d4 | 15.962      |      |
| Hit# of 5 | Tentative ID                        | MW       | MolForm                | CAS#        | Qual |
| 1         | Benzene, 1-methyl-2-(1-methyleth... | 134      | C10H14                 | 000527-84-4 | 93   |
| 2         | Benzene, 1-methyl-3-(1-methyleth... | 134      | C10H14                 | 000535-77-3 | 93   |
| 3         | Benzene, 1-methyl-3-(1-methyleth... | 134      | C10H14                 | 000535-77-3 | 93   |
| 4         | Benzene, 1-methyl-3-(1-methyleth... | 134      | C10H14                 | 000535-77-3 | 90   |
| 5         | 1,3,8-p-Menthatriene                | 134      | C10H14                 | 021195-59-5 | 90   |



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V408.D  
Acq On : 28 Jan 2010 12:19 pm  
Operator : DXK1  
Sample : |245114003|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

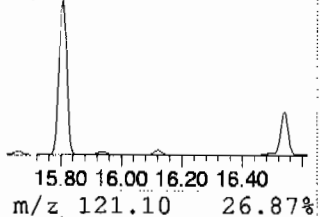
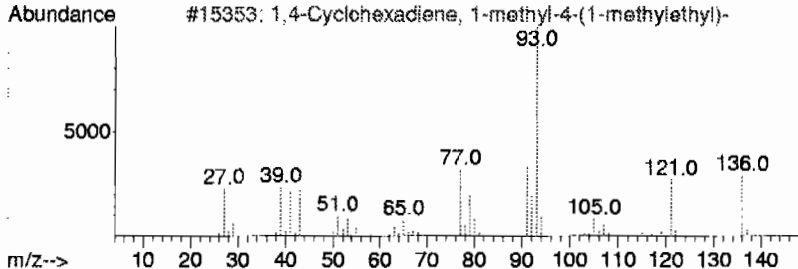
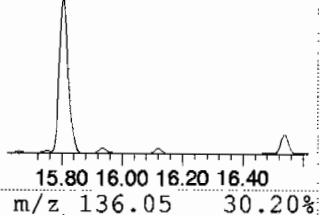
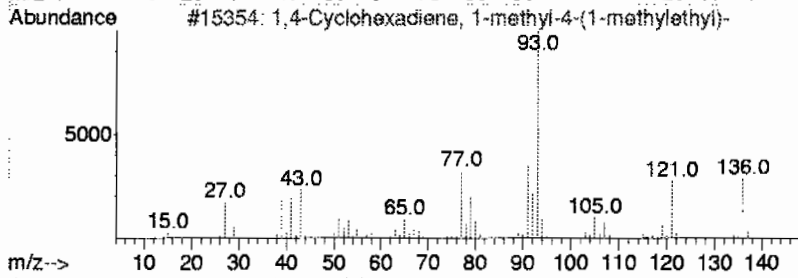
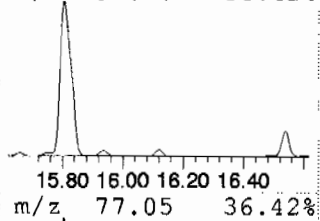
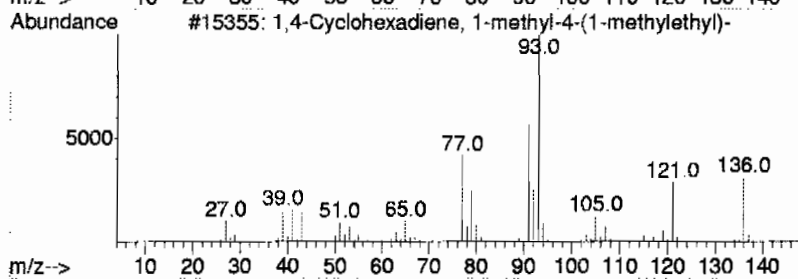
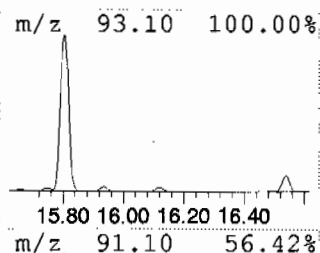
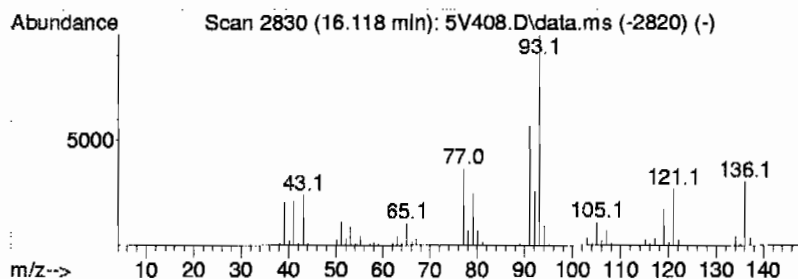
SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

\*\*\*\*\*  
Peak Number 14 1,4-Cyclohexadiene, 1-methy... Concentration Rank 11

| R.T.   | EstConc    | Area   | Relative to ISTD         | R.T.   |
|--------|------------|--------|--------------------------|--------|
| 16.118 | 15.06 ug/L | 841111 | B 1,4-Dichlorobenzene-d4 | 15.962 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | 1,4-Cyclohexadiene, 1-methyl-4-(... | 136 | C10H16  | 000099-85-4 | 96   |
| 2    |    | 1,4-Cyclohexadiene, 1-methyl-4-(... | 136 | C10H16  | 000099-85-4 | 95   |
| 3    |    | 1,4-Cyclohexadiene, 1-methyl-4-(... | 136 | C10H16  | 000099-85-4 | 95   |
| 4    |    | 4-Carene, (1S,3R,6R)-(-)-           | 136 | C10H16  | 005208-49-1 | 91   |
| 5    |    | Bicyclo[4.1.0]hept-3-ene, 3,7,7-... | 136 | C10H16  | 000498-15-7 | 91   |



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V408.D  
Acq On : 28 Jan 2010 12:19 pm  
Operator : DXK1  
Sample : |245114003|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 8 Sample Multiplier: 1

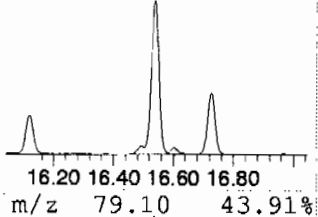
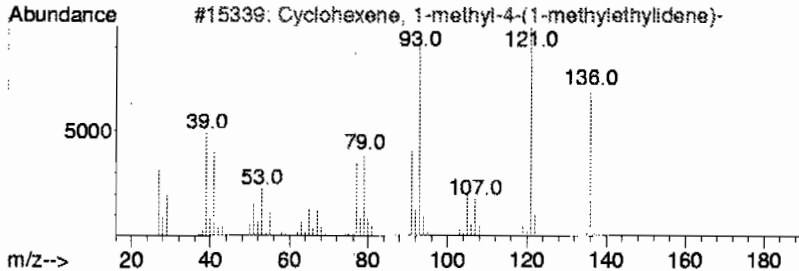
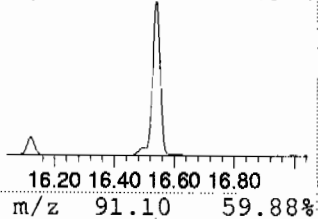
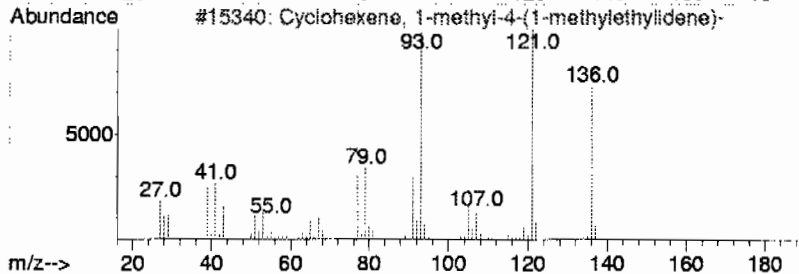
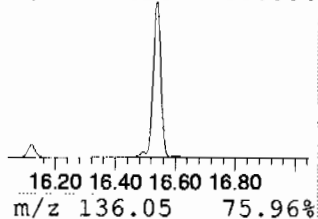
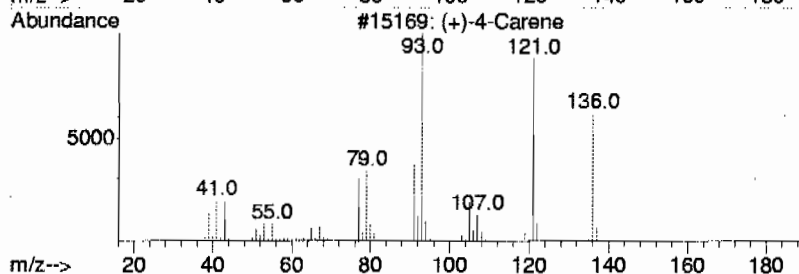
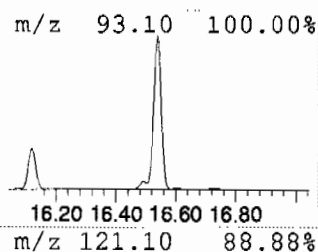
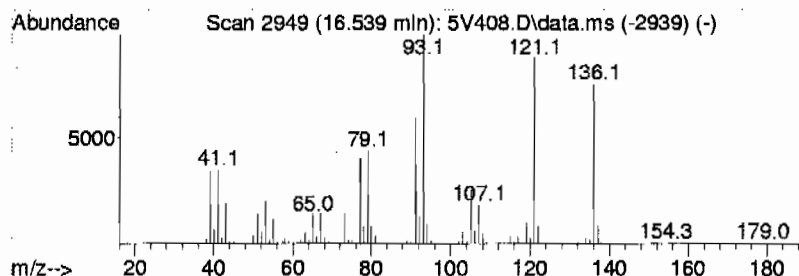
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

\*\*\*\*\*  
Peak Number 16 (+)-4-Carene Concentration Rank 5

| R.T.      | EstConc                             | Area    | Relative to ISTD         | R.T.        |      |
|-----------|-------------------------------------|---------|--------------------------|-------------|------|
| 16.539    | 99.81 ug/L                          | 5572740 | B 1,4-Dichlorobenzene-d4 | 15.962      |      |
| Hit# of 5 | Tentative ID                        | MW      | MolForm                  | CAS#        | Qual |
| 1         | (+)-4-Carene                        | 136     | C10H16                   | 029050-33-7 | 97   |
| 2         | Cyclohexene, 1-methyl-4-(1-methy... | 136     | C10H16                   | 000586-62-9 | 96   |
| 3         | Cyclohexene, 1-methyl-4-(1-methy... | 136     | C10H16                   | 000586-62-9 | 96   |
| 4         | Cyclohexene, 1-methyl-4-(1-methy... | 136     | C10H16                   | 000586-62-9 | 95   |
| 5         | Bicyclo[4.1.0]hept-2-ene, 3,7,7-... | 136     | C10H16                   | 000554-61-0 | 94   |



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V408.D  
Acq On : 28 Jan 2010 12:19 pm  
Operator : DXK1  
Sample : |245114003|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 8 Sample Multiplier: 1

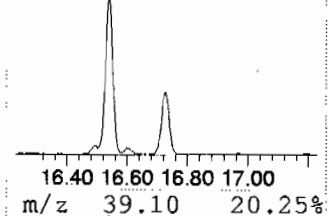
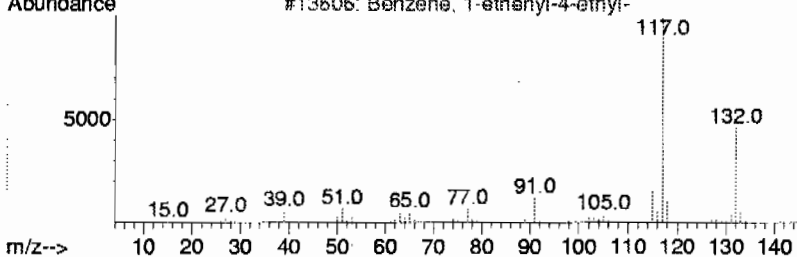
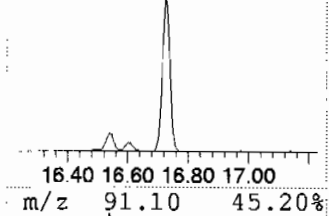
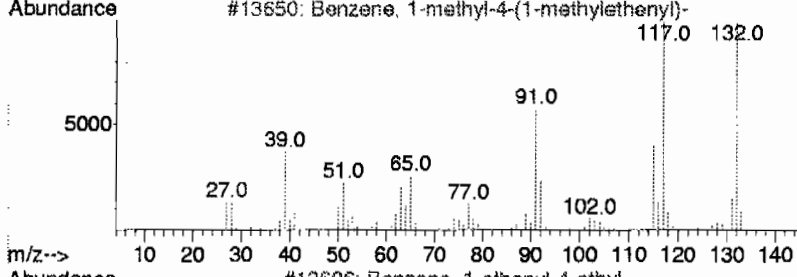
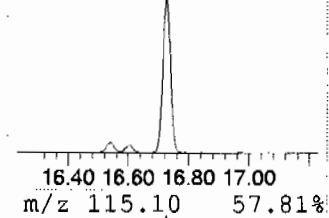
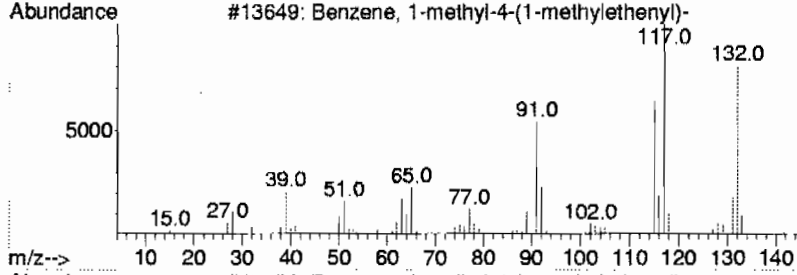
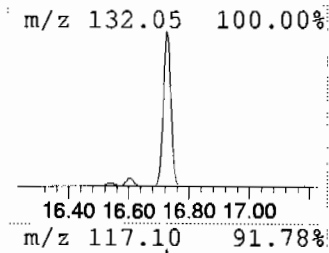
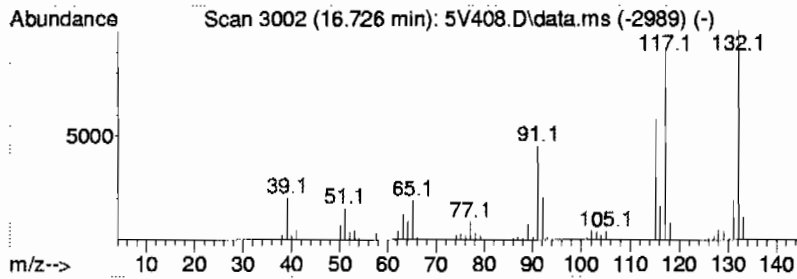
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

\*\*\*\*\*  
Peak Number 18 Benzene, 1-methyl-4-(1-meth... Concentration Rank 6

| R.T.      | EstConc                             | Area    | Relative to ISTD         | R.T.        |      |
|-----------|-------------------------------------|---------|--------------------------|-------------|------|
| 16.726    | 42.49 ug/L                          | 2372640 | B 1,4-Dichlorobenzene-d4 | 15.962      |      |
| Hit# of 5 | Tentative ID                        | MW      | MolForm                  | CAS#        | Qual |
| 1         | Benzene, 1-methyl-4-(1-methyleth... | 132     | C10H12                   | 001195-32-0 | 96   |
| 2         | Benzene, 1-methyl-4-(1-methyleth... | 132     | C10H12                   | 001195-32-0 | 93   |
| 3         | Benzene, 1-ethenyl-4-ethyl-         | 132     | C10H12                   | 003454-07-7 | 91   |
| 4         | Benzene, 1-methyl-4-(1-methyleth... | 132     | C10H12                   | 001195-32-0 | 90   |
| 5         | Benzene, 4-ethenyl-1,2-dimethyl-    | 132     | C10H12                   | 027831-13-6 | 87   |





Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V408.D  
Acq On : 28 Jan 2010 12:19 pm  
Operator : DXK1  
Sample : |245114003|946008|1|VOA|1|VOA8260BS|  
Misc : LANTL 5.0g N/A SOIL  
ALS Vial : 8 Sample Multiplier: 1

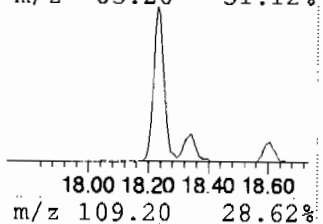
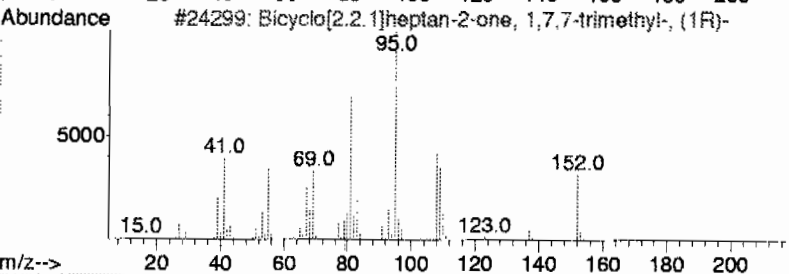
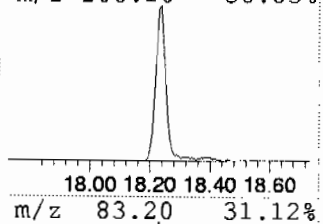
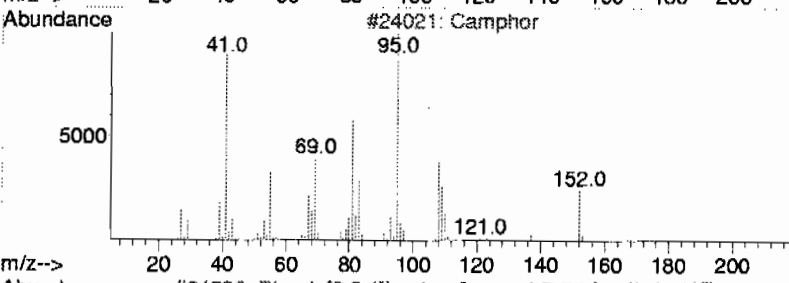
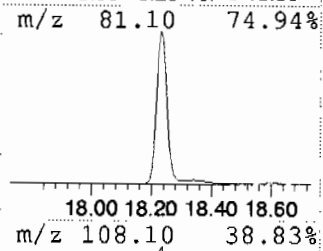
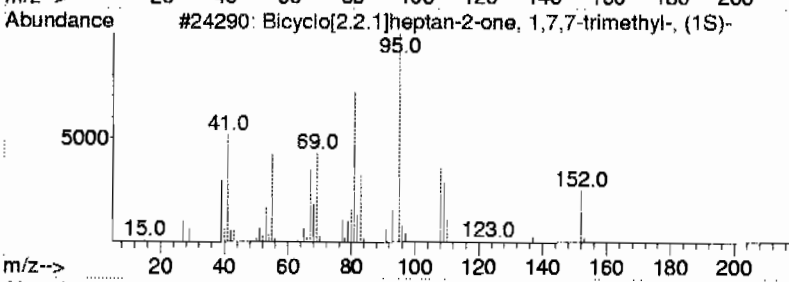
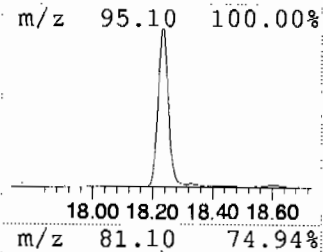
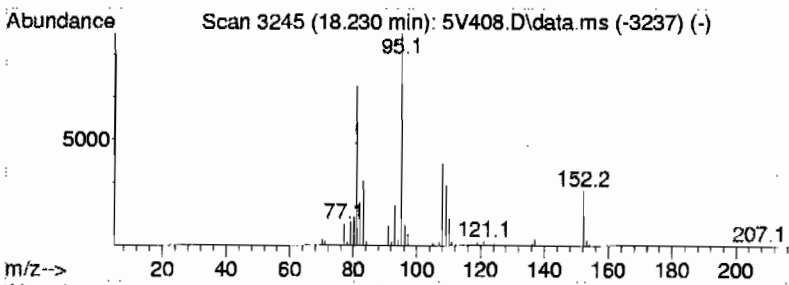
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

\*\*\*\*\*  
Peak Number 19 Bicyclo[2.2.1]heptan-2-one,... Concentration Rank 10

| R.T.      | EstConc                             | Area   | Relative to ISTD         |             | R.T.   |
|-----------|-------------------------------------|--------|--------------------------|-------------|--------|
| 18.230    | 15.56 ug/L                          | 869057 | B 1,4-Dichlorobenzene-d4 |             | 15.962 |
| Hit# of 5 | Tentative ID                        | MW     | MolForm                  | CAS#        | Qual   |
| 1         | Bicyclo[2.2.1]heptan-2-one, 1,7,... | 152    | C10H16O                  | 000464-48-2 | 97     |
| 2         | Camphor                             | 152    | C10H16O                  | 000076-22-2 | 97     |
| 3         | Bicyclo[2.2.1]heptan-2-one, 1,7,... | 152    | C10H16O                  | 000464-49-3 | 96     |
| 4         | Camphor                             | 152    | C10H16O                  | 000076-22-2 | 96     |
| 5         | Bicyclo[2.2.1]heptan-2-one, 1,7,... | 152    | C10H16O                  | 000464-49-3 | 96     |



Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V408.D  
Acq On : 28 Jan 2010 12:19 pm  
Operator : DXK1  
Sample : |245114003|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

| TIC Top Hit name   | RT     | EstConc | Units | Response | ---Internal Standard--- |        |         |      |
|--------------------|--------|---------|-------|----------|-------------------------|--------|---------|------|
|                    |        |         |       |          | #                       | RT     | Resp    | Conc |
| Tricyclo[2.2.1]... | 14.452 | 6.0     | ug/L  | 313608   | 4                       | 13.547 | 2603700 | 50.0 |
| LR-.alpha.-Pinene  | 14.566 | 751.0   | ug/L  | 39109300 | 4                       | 13.547 | 2603700 | 50.0 |
| Camphene           | 14.891 | 28.1    | ug/L  | 1570200  | 5                       | 15.962 | 2791770 | 50.0 |
| 1,3,5-Cyclohept... | 15.184 | 11.1    | ug/L  | 616717   | 5                       | 15.962 | 2791770 | 50.0 |
| 3-Carene           | 15.577 | 800.5   | ug/L  | 44696800 | 5                       | 15.962 | 2791770 | 50.0 |
| 1,3-Cyclohexadi... | 15.655 | 5.9     | ug/L  | 330008   | 5                       | 15.962 | 2791770 | 50.0 |
| Cyclohexene, 1-... | 15.750 | 6.0     | ug/L  | 334895   | 5                       | 15.962 | 2791770 | 50.0 |
| Limonene           | 15.803 | 1178.8  | ug/L  | 65820400 | 5                       | 15.962 | 2791770 | 50.0 |
| Benzene, 1-meth... | 15.832 | 619.0   | ug/L  | 34560600 | 5                       | 15.962 | 2791770 | 50.0 |
| 1,4-Cyclohexadi... | 16.118 | 15.1    | ug/L  | 841111   | 6                       | 15.962 | 2791770 | 50.0 |
| (+)-4-Carene       | 16.539 | 99.8    | ug/L  | 5572740  | 6                       | 15.962 | 2791770 | 50.0 |
| Benzene, 1-meth... | 16.726 | 42.5    | ug/L  | 2372640  | 6                       | 15.962 | 2791770 | 50.0 |
| Bicyclo[2.2.1]h... | 18.230 | 15.6    | ug/L  | 869057   | 6                       | 15.962 | 2791770 | 50.0 |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114004

Client ID: RE15-10-8412  
 Batch ID: 946008  
 Run Date: 01/28/2010 12:45  
 Prep Date: 01/28/2009 11:06  
 Data File: 012810V55V409.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 7.6  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.08   | ug/kg | 0.368   | 1.08    |
| 74-87-3    | Chloromethane               | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 75-01-4    | Vinyl chloride              | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 74-83-9    | Bromomethane                | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 75-00-3    | Chloroethane                | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 67-64-1    | Acetone                     | J         | 2.85   | ug/kg | 1.80    | 5.41    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 74-88-4    | Iodomethane                 | U         | 5.41   | ug/kg | 1.73    | 5.41    |
| 75-09-2    | Methylene chloride          | U         | 5.41   | ug/kg | 2.16    | 5.41    |
| 75-15-0    | Carbon disulfide            | U         | 5.41   | ug/kg | 1.35    | 5.41    |
| 156-60-5   | trans-1,2-Dichloroethylen   | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 78-93-3    | 2-Butanone                  | U         | 5.41   | ug/kg | 1.62    | 5.41    |
| 156-59-2   | cis-1,2-Dichloroethylen     | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 67-66-3    | Chloroform                  | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 74-97-5    | Bromochloromethane          | U         | 1.08   | ug/kg | 0.357   | 1.08    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 71-43-2    | Benzene                     | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 79-01-6    | Trichloroethylene           | U         | 1.08   | ug/kg | 0.357   | 1.08    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 75-27-4    | Bromodichloromethane        | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 74-95-3    | Dibromomethane              | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.41   | ug/kg | 1.35    | 5.41    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 108-88-3   | Toluene                     | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 591-78-6   | 2-Hexanone                  | U         | 5.41   | ug/kg | 1.62    | 5.41    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 127-18-4   | Tetrachloroethylene         | J         | 0.584  | ug/kg | 0.325   | 1.08    |
| 124-48-1   | Dibromochloromethane        | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 108-90-7   | Chlorobenzene               | U         | 1.08   | ug/kg | 0.325   | 1.08    |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114004  
 Client ID: RE15-10-8412  
 Batch ID: 946008  
 Run Date: 01/28/2010 12:45  
 Prep Date: 01/28/2009 11:06  
 Data File: 012810V55V409.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 7.6  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 179601-23-1 | m,p-Xylenes                           | J         | 0.400  | ug/kg | 0.325   | 2.16    |
| 95-47-6     | o-Xylene                              | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 100-42-5    | Styrene                               | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 75-25-2     | Bromoform                             | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 108-86-1    | Bromobenzene                          | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.41   | ug/kg | 1.73    | 5.41    |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.08   | ug/kg | 0.325   | 1.08    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.08   | ug/kg | 0.325   | 1.08    |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|-------|-----------|-------|-----|------|
|         | unknown siloxane                      | 16.55 | 11.3      | ug/kg | 0   | J    |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V409.D  
Acq On : 28 Jan 2010 12:45 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114004|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 29 09:41:48 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT   | QIon     | Response   | Conc   | Units | Dev (Min) |
|-------------------------------|--------|--------|----------|----------|------------|--------|-------|-----------|
| Internal Standards            |        |        |          |          |            |        |       |           |
| 1) Fluorobenzene              | 10.378 | 10.375 | 1.000    | 96       | 1808030    | 50.00  | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.551 | 13.547 | 1.000    | 117      | 1101613    | 50.00  | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.962 | 15.962 | 1.000    | 152      | 386320     | 50.00  | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.378 | 10.375 | 1.000    | 96       | 1808030    | 50.00  | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.551 | 13.547 | 1.000    | 117      | 1101613    | 50.00  | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.962 | 15.962 | 1.000    | 152      | 386320     | 50.00  | ug/L  | 0.00      |
| System Monitoring Compounds   |        |        |          |          |            |        |       |           |
| 29) 1,2-Dichloroethane-d4     | 10.025 | 10.021 | 0.966    | 65       | 456023     | 54.27  | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range  | 68 - 131 | Recovery | = 108.54%  |        |       |           |
| 43) Toluene-d8                | 12.016 | 12.016 | 0.887    | 98       | 1602488    | 53.34  | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range  | 75 - 129 | Recovery | = 106.68%  |        |       |           |
| 61) Bromofluorobenzene        | 14.739 | 14.739 | 0.923    | 95       | 819183     | 111.12 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range  | 68 - 133 | Recovery | = 222.24%# |        |       |           |
| Target Compounds              |        |        |          |          |            |        |       |           |
| Compound                      | R.T.   | Exp RT | Rel RT   | QIon     | Response   | Conc   | Units | QValue    |
| 2) Dichlorodifluoromethane    | 0.000  | 4.689  | 0.000    |          | 0          | N.D.   |       |           |
| 3) Chloromethane              | 5.101  | 5.051  | 0.492    | 50       | 372        | N.D.   |       |           |
| 4) Vinyl chloride             | 0.000  | 5.283  | 0.000    |          | 0          | N.D.   |       |           |
| 5) Bromomethane               | 0.000  | 5.877  | 0.000    |          | 0          | N.D.   |       |           |
| 6) Chloroethane               | 0.000  | 6.018  | 0.000    |          | 0          | N.D.   |       |           |
| 7) Trichlorofluoromethane     | 0.000  | 6.391  | 0.000    |          | 0          | N.D.   |       |           |
| 8) Ethyl ether                | 0.000  | 6.733  | 0.000    |          | 0          | N.D.   |       |           |
| 9) Acetone                    | 7.107  | 7.100  | 0.685    | 43       | 17839      | 2.63   | ug/L  | 86        |
| 10) 1,1-Dichloroethylene      | 0.000  | 7.125  | 0.000    |          | 0          | N.D.   |       |           |
| 11) Iodomethane               | 0.000  | 7.373  | 0.000    |          | 0          | N.D.   |       |           |
| 12) Acetonitrile              | 7.687  | 7.450  | 0.741    | 41       | 330        | N.D.   |       |           |
| 13) Methyl acetate            | 7.496  | 7.493  | 0.722    | 43       | 250        | N.D.   |       |           |
| 14) Carbon disulfide          | 7.518  | 7.511  | 0.724    | 76       | 685        | N.D.   |       |           |
| 15) Methylene chloride        | 7.687  | 7.691  | 0.741    | 84       | 14329      | N.D.   |       |           |
| 16) tert-Butyl methyl ether   | 0.000  | 7.984  | 0.000    |          | 0          | N.D.   |       |           |
| 17) trans-1,2-Dichloroethy... | 0.000  | 8.030  | 0.000    |          | 0          | N.D.   |       |           |
| 18) Vinyl acetate             | 8.324  | 8.458  | 0.802    | 43       | 863        | N.D.   |       |           |
| 19) 1,1-Dichloroethane        | 0.000  | 8.511  | 0.000    |          | 0          | N.D.   |       |           |
| 20) 2-Butanone                | 9.088  | 9.077  | 0.876    | 43       | 768        | N.D.   |       |           |
| 21) cis-1,2-Dichloroethylene  | 0.000  | 9.144  | 0.000    |          | 0          | N.D.   |       |           |
| 22) 2,2-Dichloropropane       | 0.000  | 9.173  | 0.000    |          | 0          | N.D.   |       |           |
| 23) Bromochloromethane        | 0.000  | 9.417  | 0.000    |          | 0          | N.D.   |       |           |
| 24) Chloroform                | 0.000  | 9.452  | 0.000    |          | 0          | N.D.   |       |           |
| 25) 1,1,1-Trichloroethane     | 0.000  | 9.735  | 0.000    |          | 0          | N.D.   |       |           |
| 26) Cyclohexane               | 0.000  | 9.830  | 0.000    |          | 0          | N.D.   |       |           |
| 27) 1,1-Dichloropropene       | 0.000  | 9.887  | 0.000    |          | 0          | N.D.   |       |           |
| 28) Carbon tetrachloride      | 0.000  | 9.929  | 0.000    |          | 0          | N.D.   |       |           |
| 30) 1,2-Dichloroethane        | 10.042 | 10.103 | 0.968    | 62       | 145        | N.D.   |       |           |
| 31) Benzene                   | 10.131 | 10.127 | 0.976    | 78       | 124        | N.D.   |       |           |
| 32) Cyclohexene               | 0.000  | 10.248 | 0.000    |          | 0          | N.D.   |       |           |
| 33) n-Butyl alcohol           | 0.000  | 10.460 | 0.000    |          | 0          | N.D.   |       |           |
| 34) Trichloroethylene         | 0.000  | 10.768 | 0.000    |          | 0          | N.D.   |       |           |
| 35) 1,2-Dichloropropane       | 0.000  | 11.004 | 0.000    |          | 0          | N.D.   |       |           |
| 36) Methylcyclohexane         | 0.000  | 11.019 | 0.000    |          | 0          | N.D.   |       |           |
| 37) Dibromomethane            | 0.000  | 11.146 | 0.000    |          | 0          | N.D.   |       |           |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V409.D  
Acq On : 28 Jan 2010 12:45 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114004|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 29 09:41:48 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc        | Units |
|-------------------------------|--------|--------|--------|------|----------|-------------|-------|
| 38) Bromodichloromethane      | 0.000  | 11.256 | 0.000  |      | 0        | N.D.        |       |
| 39) 2-Chloroethylvinyl ether  | 0.000  | 11.468 | 0.000  |      | 0        | N.D.        |       |
| 40) cis-1,3-Dichloropropylene | 0.000  | 11.705 | 0.000  |      | 0        | N.D.        |       |
| 42) 4-Methyl-2-pentanone      | 0.000  | 11.786 | 0.000  |      | 0        | N.D.        |       |
| 44) Toluene                   | 12.094 | 12.090 | 0.892  | 91   | 3655     | N.D.        |       |
| 45) trans-1,3-Dichloroprop... | 0.000  | 12.239 | 0.000  |      | 0        | N.D.        |       |
| 46) 1,1,2-Trichloroethane     | 0.000  | 12.465 | 0.000  |      | 0        | N.D.        |       |
| 47) 2-Hexanone                | 12.642 | 12.631 | 0.933  | 43   | 230      | N.D.        |       |
| 48) 1,3-Dichloropropane       | 0.000  | 12.656 | 0.000  |      | 0        | N.D.        |       |
| 49) Tetrachloroethylene       | 12.695 | 12.691 | 0.937  | 164  | 2667     | 0.54 ug/L   | 90    |
| 50) Dibromochloromethane      | 0.000  | 12.928 | 0.000  |      | 0m       | N.D.        | d     |
| 51) 1,2-Dibromoethane         | 13.257 | 13.094 | 0.978  | 107  | 864      | N.D.        |       |
| 52) Chlorobenzene             | 0.000  | 13.579 | 0.000  |      | 0        | N.D.        |       |
| 53) 1,1,1,2-Tetrachloroethane | 0.000  | 13.636 | 0.000  |      | 0        | N.D.        |       |
| 54) Ethylbenzene              | 13.635 | 13.639 | 1.006  | 91   | 2447     | N.D.        |       |
| 55) m,p-Xylenes               | 13.742 | 13.749 | 1.014  | 106  | 4146     | 0.37 ug/L # | 1     |
| 56) o-Xylene                  | 14.187 | 14.184 | 1.047  | 106  | 1345     | N.D.        |       |
| 57) Styrene                   | 0.000  | 14.184 | 0.000  |      | 0        | N.D.        |       |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D.        |       |
| 60) Isopropylbenzene          | 14.573 | 14.537 | 0.913  | 105  | 881      | N.D.        |       |
| 62) 1,1,2,2-Tetrachloroethane | 0.000  | 14.810 | 0.000  |      | 0m       | N.D.        | d     |
| 63) 1,2,3-Trichloropropane    | 0.000  | 14.898 | 0.000  |      | 0m       | N.D.        | d     |
| 64) Bromobenzene              | 0.000  | 14.951 | 0.000  |      | 0        | N.D.        |       |
| 65) n-Propylbenzene           | 0.000  | 14.965 | 0.000  |      | 0m       | N.D.        | d     |
| 66) 1,3,5-Trimethylbenzene    | 15.046 | 15.114 | 0.943  | 105  | 107      | N.D.        |       |
| 67) 2-Chlorotoluene           | 0.000  | 15.117 | 0.000  |      | 0        | N.D.        |       |
| 68) 4-Chlorotoluene           | 15.220 | 15.216 | 0.953  | 91   | 141      | N.D.        |       |
| 69) tert-Butylbenzene         | 0.000  | 15.489 | 0.000  |      | 0        | N.D.        |       |
| 70) 1,2,4-Trimethylbenzene    | 15.520 | 15.527 | 0.972  | 105  | 374      | N.D.        |       |
| 71) sec-Butylbenzene          | 15.573 | 15.711 | 0.976  | 105  | 1064     | N.D.        |       |
| 72) 4-Isopropyltoluene        | 0.000  | 15.832 | 0.000  |      | 0m       | N.D.        | d     |
| 73) 1,3-Dichlorobenzene       | 0.000  | 15.902 | 0.000  |      | 0        | N.D.        |       |
| 74) 1,4-Dichlorobenzene       | 15.991 | 15.991 | 1.002  | 146  | 112      | N.D.        |       |
| 75) n-Butylbenzene            | 16.281 | 16.277 | 1.020  | 91   | 113      | N.D.        |       |
| 76) 1,2-Dichlorobenzene       | 16.422 | 16.422 | 1.029  | 146  | 109      | N.D.        |       |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D.        |       |
| 78) 1,2,4-Trichlorobenzene    | 0.000  | 18.371 | 0.000  |      | 0        | N.D.        |       |
| 79) Hexachlorobutadiene       | 0.000  | 18.548 | 0.000  |      | 0        | N.D.        |       |
| 80) Naphthalene               | 0.000  | 18.762 | 0.000  |      | 0        | N.D.        |       |
| 81) 1,2,3-Trichlorobenzene    | 0.000  | 19.116 | 0.000  |      | 0        | N.D.        |       |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D.        |       |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D.        |       |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D.        |       |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D.        |       |
| 87) Isopropyl Alcohol         | 7.203  | 7.175  | 0.694  | 45   | 525      | N.D.        |       |
| 88) Allyl chloride            | 7.687  | 7.546  | 0.741  | 41   | 330      | N.D.        |       |
| 89) tert-Butyl Alcohol        | 7.677  | 7.673  | 0.740  | 59   | 248      | N.D.        |       |
| 90) Acrylonitrile             | 0.000  | 7.928  | 0.000  |      | 0        | N.D.        |       |
| 91) Isopropyl ether           | 0.000  | 8.483  | 0.000  |      | 0        | N.D.        |       |
| 92) 2-Chloro-1,3-butadiene    | 0.000  | 8.617  | 0.000  |      | 0        | N.D.        |       |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D.        |       |
| 94) Ethyl acetate             | 9.088  | 9.088  | 0.876  | 43   | 768      | N.D.        |       |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V409.D  
Acq On : 28 Jan 2010 12:45 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114004|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 29 09:41:48 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|--------|--------|--------|------|----------|------|-------|
| 95) Propionitrile              | 0.000  | 9.148  | 0.000  |      | 0        | N.D. |       |
| 96) Methacrylonitrile          | 0.000  | 9.332  | 0.000  |      | 0        | N.D. |       |
| 97) Tetrahydrofuran            | 9.473  | 9.466  | 0.913  | 42   | 239      | N.D. |       |
| 98) Isobutyl alcohol           | 0.000  | 9.770  | 0.000  |      | 0        | N.D. |       |
| 99) Methyl tert-amyl ether     | 0.000  | 10.138 | 0.000  |      | 0        | N.D. |       |
| 100) Methyl methacrylate       | 0.000  | 10.969 | 0.000  |      | 0        | N.D. |       |
| 101) 1,4-Dioxane               | 0.000  | 11.089 | 0.000  |      | 0        | N.D. |       |
| 102) 2-Nitropropane            | 0.000  | 11.443 | 0.000  |      | 0        | N.D. |       |
| 104) Ethyl methacrylate        | 0.000  | 12.235 | 0.000  |      | 0        | N.D. |       |
| 106) 1-Chlorohexane            | 0.000  | 13.438 | 0.000  |      | 0        | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 14.576 | 14.573 | 0.913  | 53   | 794      | N.D. |       |
| 108) Cyclohexanone             | 0.000  | 14.693 | 0.000  |      | 0m       | N.D. | d     |
| 109) trans-1,4-Dichloro-2-b... | 0.000  | 14.856 | 0.000  |      | 0m       | N.D. | d     |
| 110) Pentachloroethane         | 0.000  | 15.559 | 0.000  |      | 0        | N.D. |       |
| 111) Benzyl chloride           | 0.000  | 16.100 | 0.000  |      | 0m       | N.D. | d     |
| 112) bis(2-Chloroisopropyl)... | 0.000  | 16.497 | 0.000  |      | 0m       | N.D. | d     |

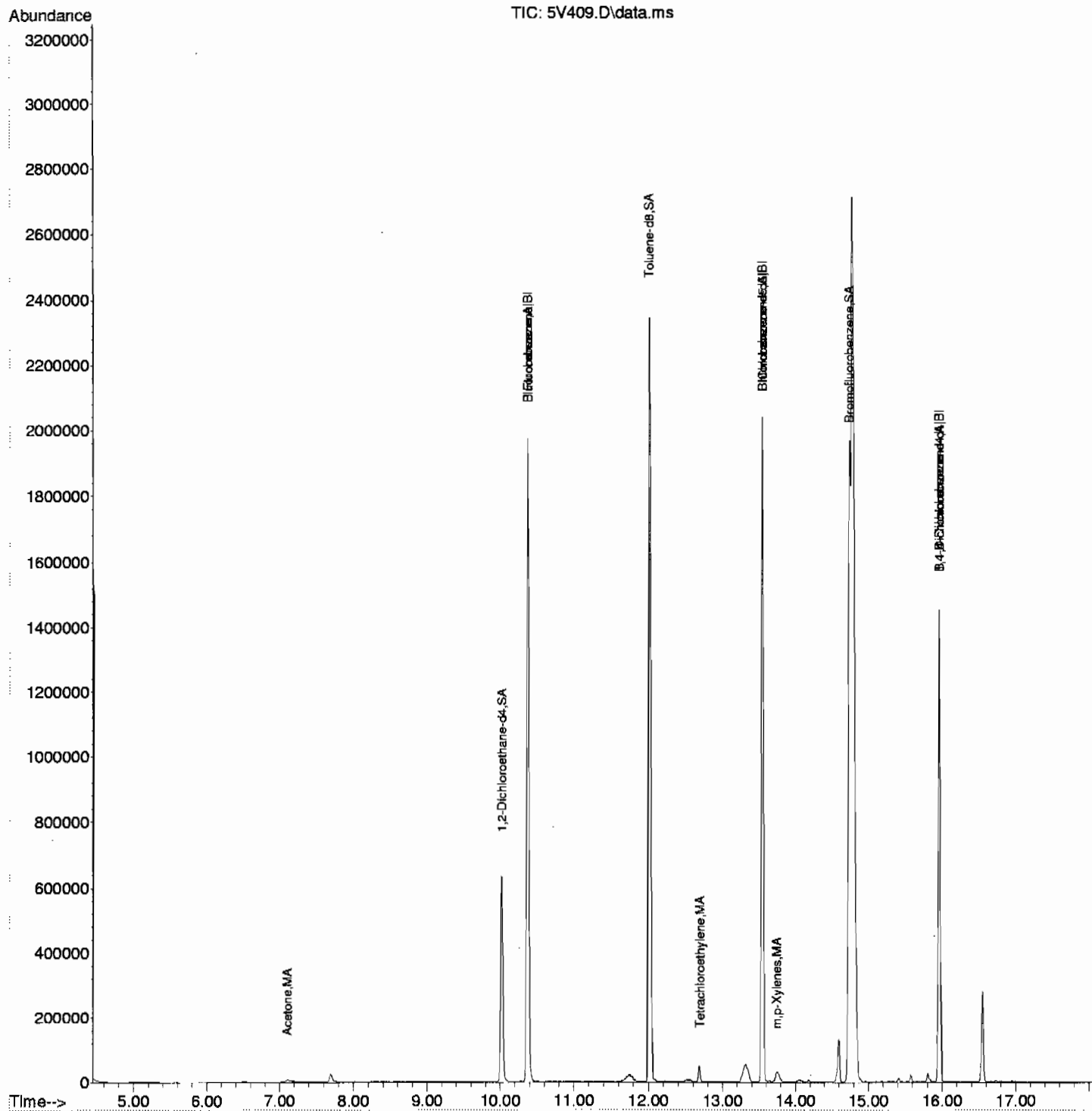
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

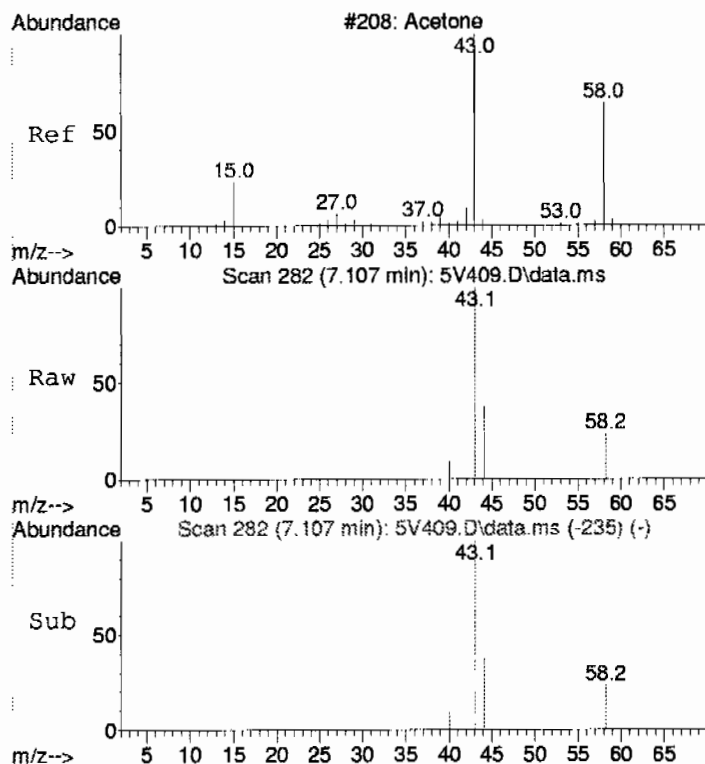
Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V409.D  
Acq On : 28 Jan 2010 12:45 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114004|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 29 09:41:48 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :







#9

Acetone

Concen: 2.63 ug/L

RT: 7.107 min Scan# 282

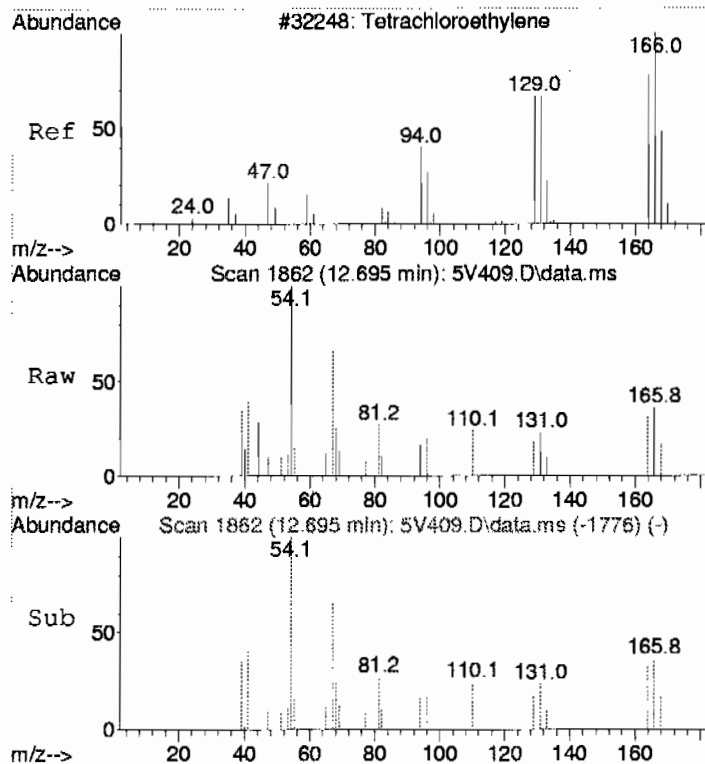
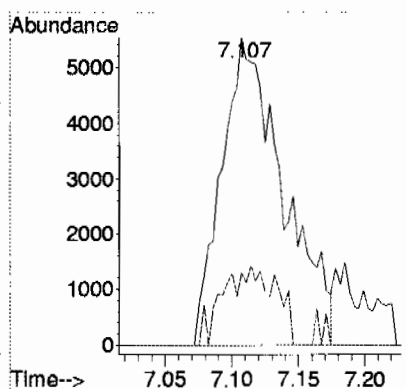
Delta R.T. 0.007 min

Lab File: 5V409.D

Acq: 28 Jan 2010 12:45 pm

Tgt Ion: 43 Resp: 17839

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 58  | 22.0  | 0.0   | 59.5  |



#49

Tetrachloroethylene

Concen: 0.54 ug/L

RT: 12.695 min Scan# 1862

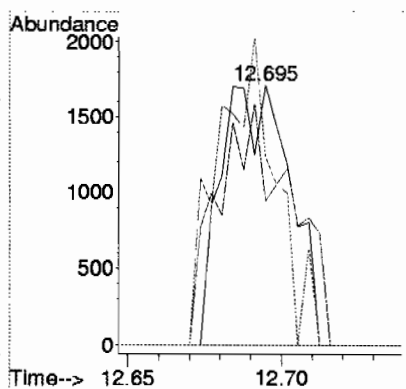
Delta R.T. 0.004 min

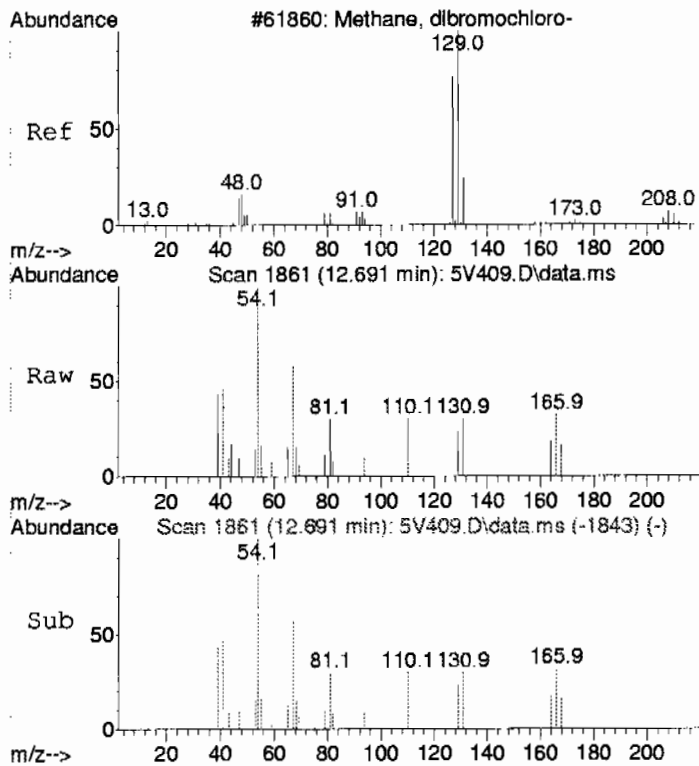
Lab File: 5V409.D

Acq: 28 Jan 2010 12:45 pm

Tgt Ion: 164 Resp: 2667

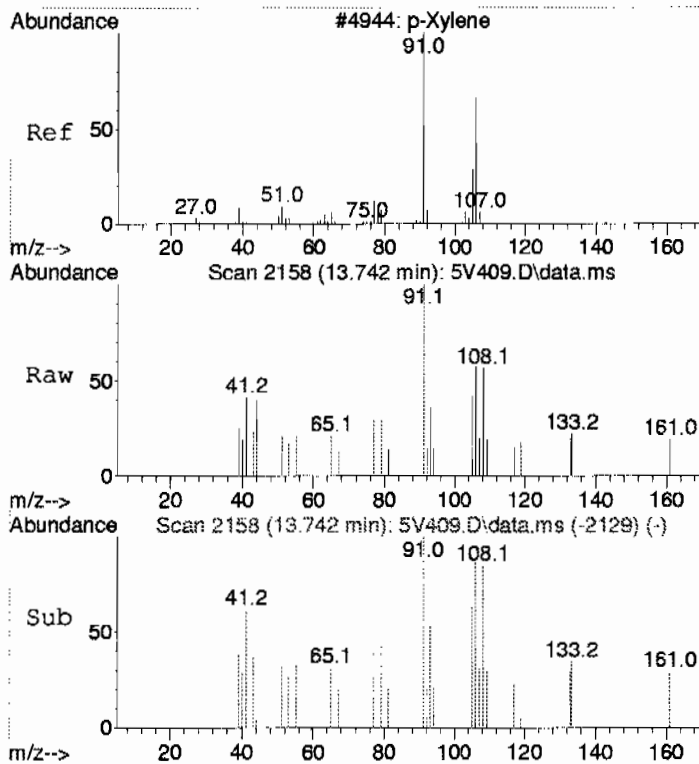
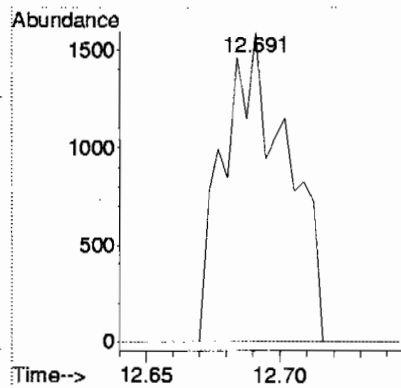
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 164 | 100   |       |       |
| 129 | 97.9  | 60.1  | 120.1 |
| 131 | 99.2  | 58.9  | 118.9 |





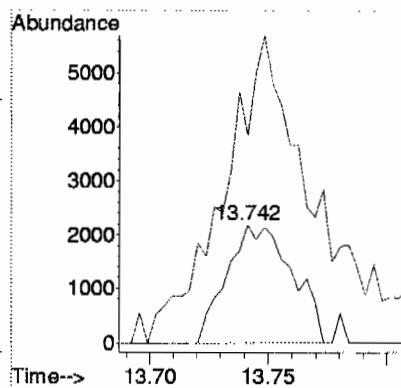
#50 BEFORE analyst DELETION  
Dibromochloromethane  
Concen: 0.50 ug/L  
RT: 12.691 min Scan# 1861  
Delta R.T. -0.237 min  
Lab File: 5V409.D  
Acq: 28 Jan 2010 12:45 pm

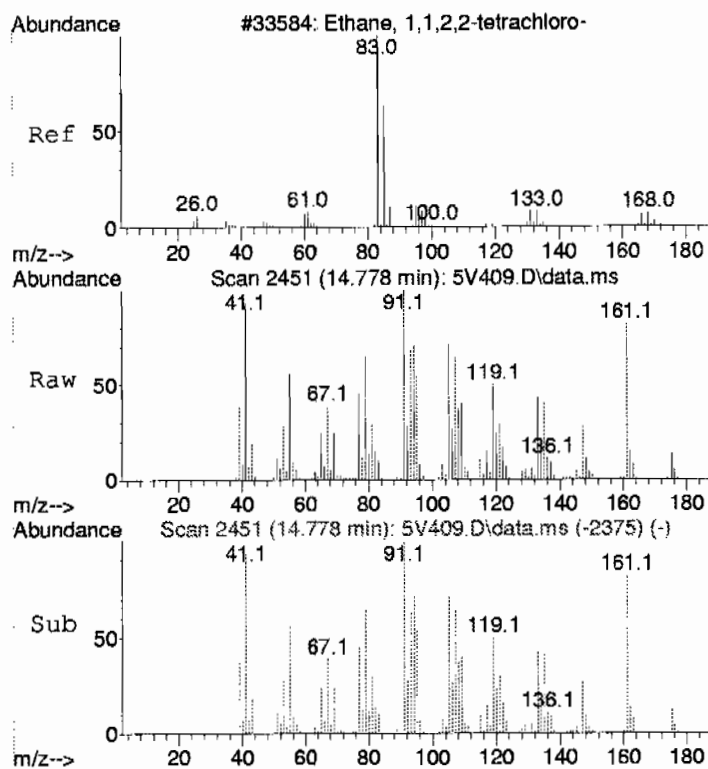
Tgt Ion:129 Resp: 2610  
Ion Ratio Lower Upper  
129 100  
127 0.0 48.5 108.5#



#55  
m,p-Xylenes  
Concen: 0.37 ug/L  
RT: 13.742 min Scan# 2158  
Delta R.T. -0.007 min  
Lab File: 5V409.D  
Acq: 28 Jan 2010 12:45 pm

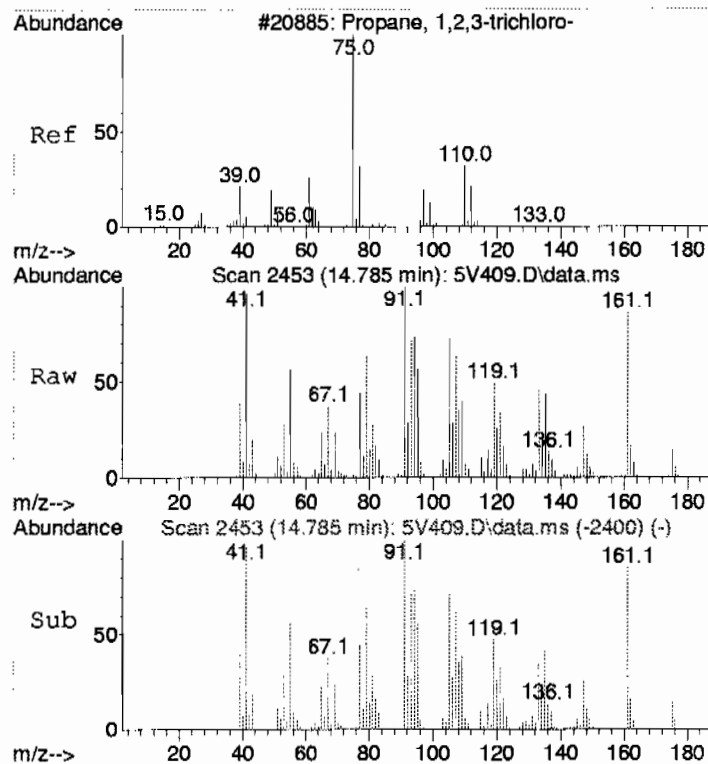
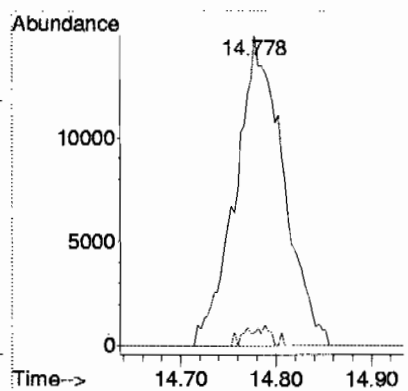
Tgt Ion:106 Resp: 4146  
Ion Ratio Lower Upper  
106 100  
91 372.4 162.6 222.6#





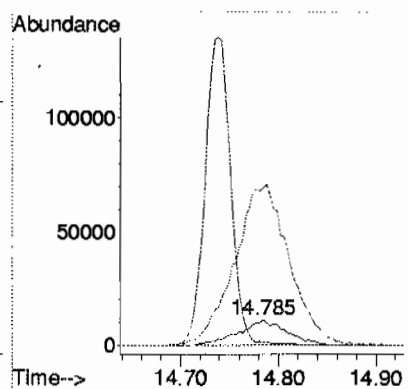
#62 BEFORE analyst DELETION  
1,1,2,2-Tetrachloroethane  
Concen: 11.60 ug/L  
RT: 14.778 min Scan# 2451  
Delta R.T. -0.032 min  
Lab File: 5V409.D  
Acq: 28 Jan 2010 12:45 pm

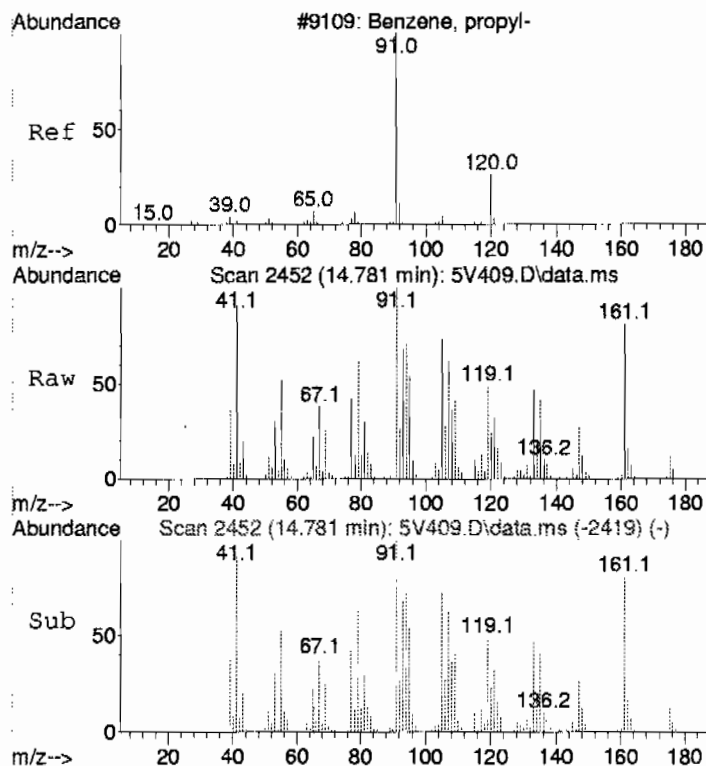
Tgt Ion: 83 Resp: 51833  
Ion Ratio Lower Upper  
83 100  
85 1.3 33.6 93.6#



#63 BEFORE analyst DELETION  
1,2,3-Trichloropropane  
Concen: 31.70 ug/L  
RT: 14.785 min Scan# 2453  
Delta R.T. -0.113 min  
Lab File: 5V409.D  
Acq: 28 Jan 2010 12:45 pm

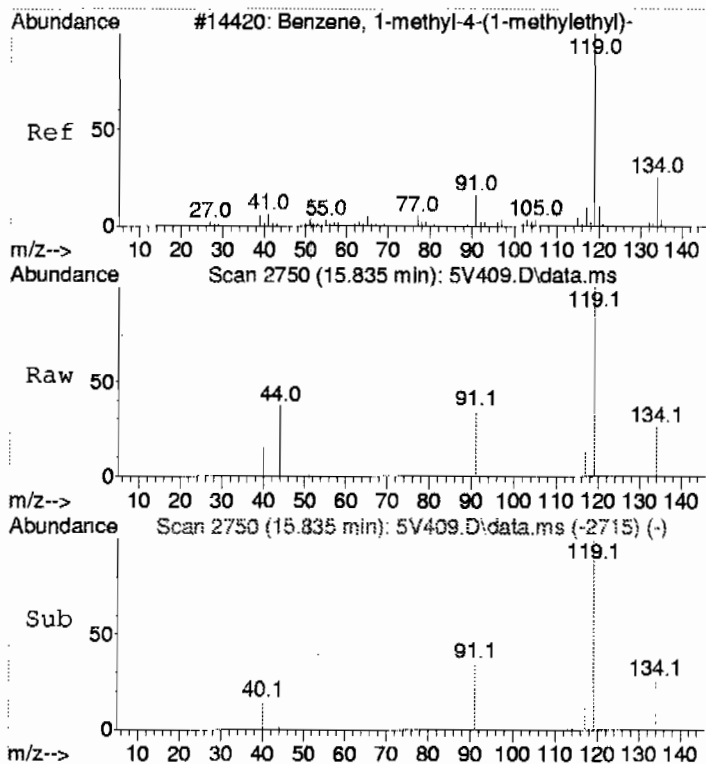
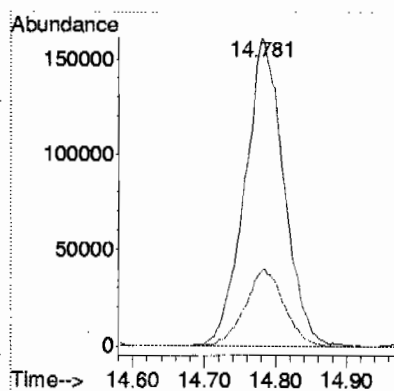
Tgt Ion: 110 Resp: 38136  
Ion Ratio Lower Upper  
110 100  
75 644.7 246.3 306.3#  
77 718.1 53.2 113.2#





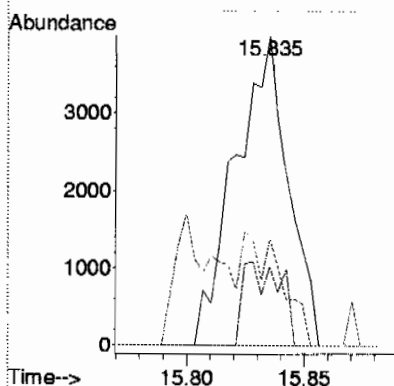
#65 BEFORE analyst DELETION  
n-Propylbenzene  
Concen: 28.91 ug/L  
RT: 14.781 min Scan# 2452  
Delta R.T. -0.184 min  
Lab File: 5V409.D  
Acq: 28 Jan 2010 12:45 pm

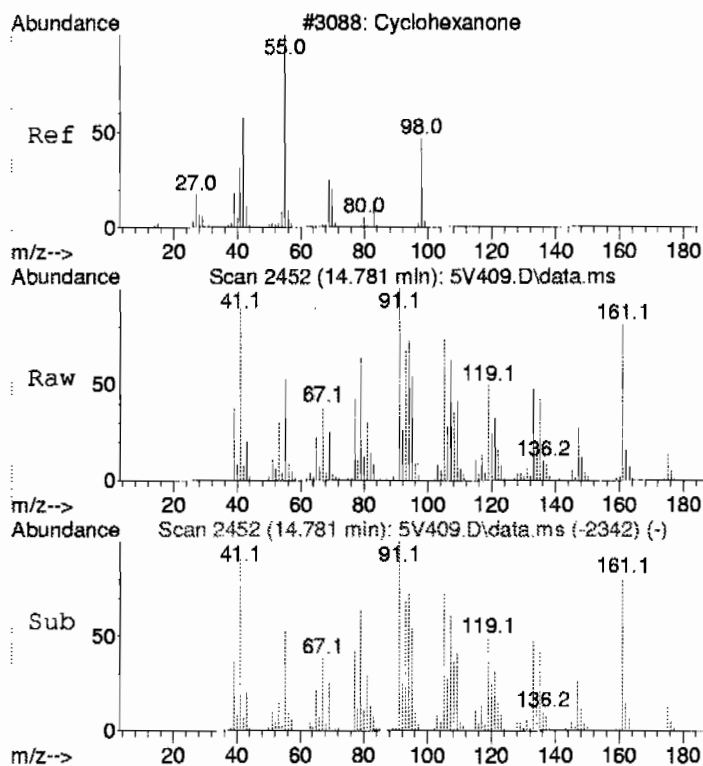
Tgt Ion: 91 Resp: 607662  
Ion Ratio Lower Upper  
91 100  
120 24.6 0.0 53.6



#72 BEFORE analyst DELETION  
4-Isopropyltoluene  
Concen: 0.41 ug/L  
RT: 15.835 min Scan# 2750  
Delta R.T. 0.003 min  
Lab File: 5V409.D  
Acq: 28 Jan 2010 12:45 pm

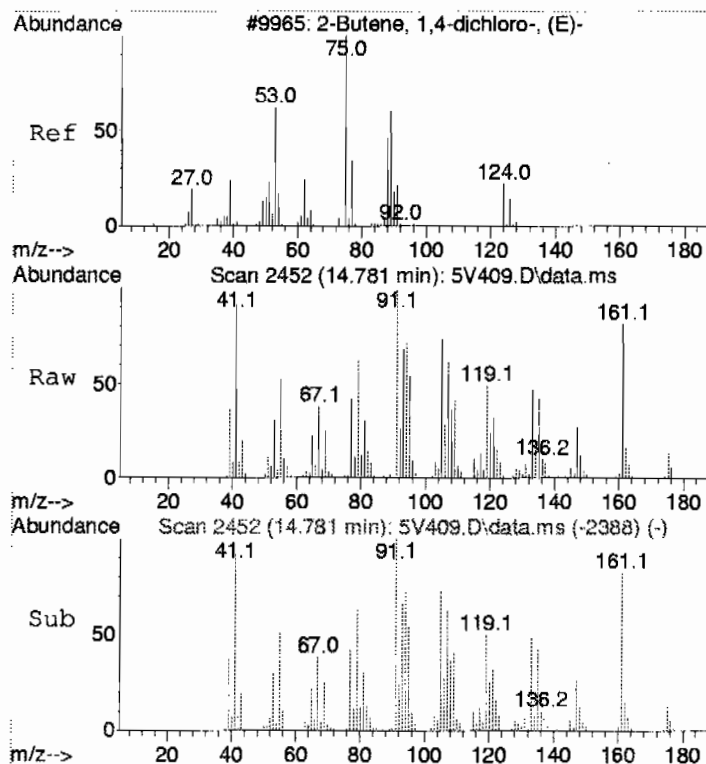
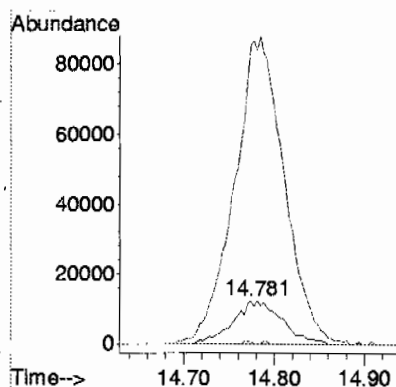
Tgt Ion: 119 Resp: 6235  
Ion Ratio Lower Upper  
119 100  
134 18.7 0.0 58.7  
91 26.6 0.0 51.7





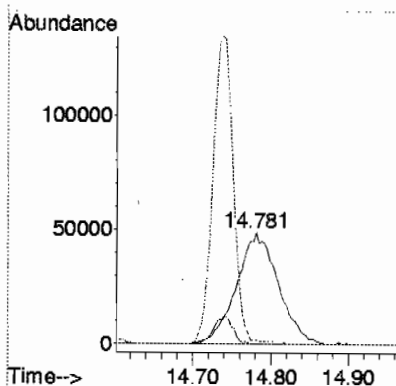
#108 BEFORE analyst DELETION  
Cyclohexanone  
Concen: 129.88 ug/L  
RT: 14.781 min Scan# 2452  
Delta R.T. 0.088 min  
Lab File: 5V409.D  
Acq: 28 Jan 2010 12:45 pm

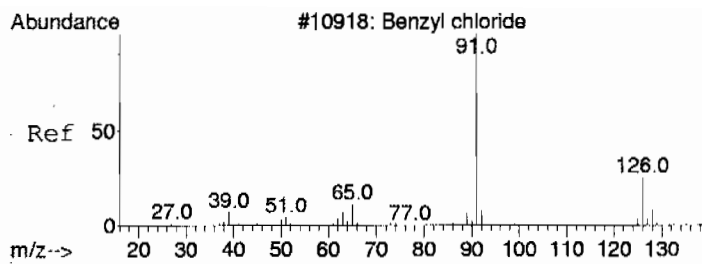
Tgt Ion: 42 Resp: 45671  
Ion Ratio Lower Upper  
42 100  
55 735.7 104.7 164.7#  
98 0.7 21.5 81.5#



#109 BEFORE analyst DELETION  
trans-1,4-Dichloro-2-butene  
Concen: 128.75 ug/L  
RT: 14.781 min Scan# 2452  
Delta R.T. -0.075 min  
Lab File: 5V409.D  
Acq: 28 Jan 2010 12:45 pm

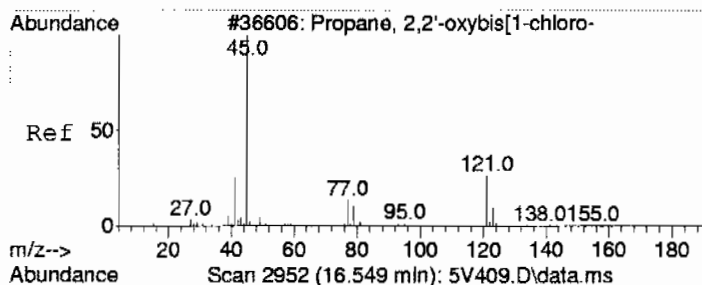
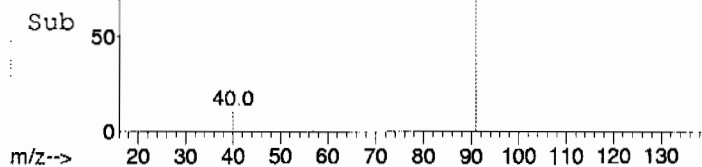
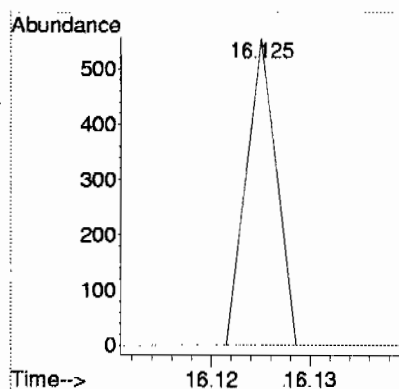
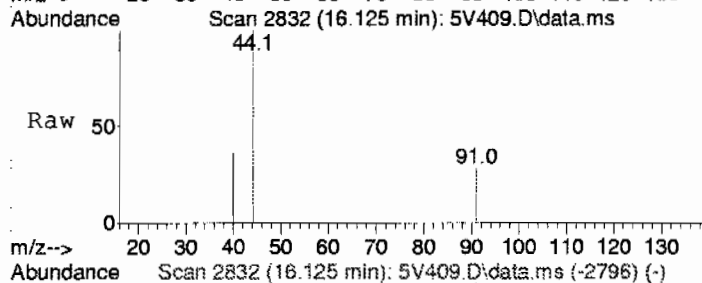
Tgt Ion: 53 Resp: 180576  
Ion Ratio Lower Upper  
53 100  
88 11.5 7.6 67.6  
75 136.1 86.0 146.0





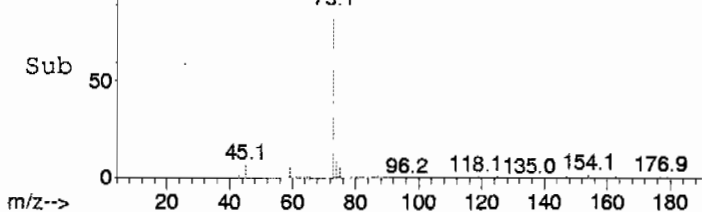
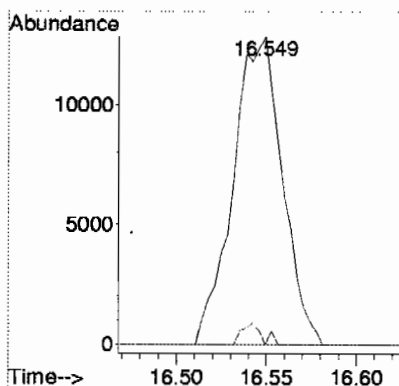
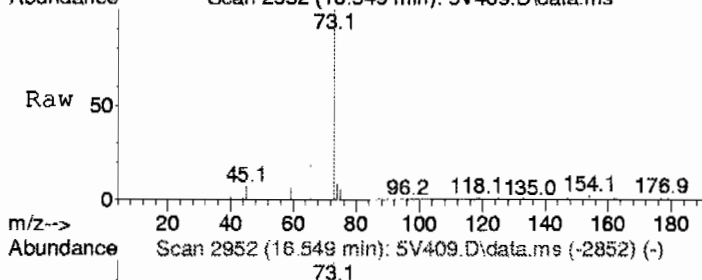
#111 BEFORE analyst DELETION  
Benzyl chloride  
Concen: 4.48 ug/L  
RT: 16.125 min Scan# 2832  
Delta R.T. 0.025 min  
Lab File: 5V409.D  
Acq: 28 Jan 2010 12:45 pm

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 126     | 0.0   | 0.0   | 51.6  |
| 65      | 0.0   | 0.0   | 41.9  |



#112 BEFORE analyst DELETION  
bis(2-Chloroisopropyl)ether  
Concen: 9.54 ug/L  
RT: 16.549 min Scan# 2952  
Delta R.T. 0.052 min  
Lab File: 5V409.D  
Acq: 28 Jan 2010 12:45 pm

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 45      | 100   |       |       |
| 121     | 2.9   | 0.0   | 49.2  |



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V409.D  
Acq On : 28 Jan 2010 12:45 pm  
Operator : DXK1  
Sample : |245114004|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

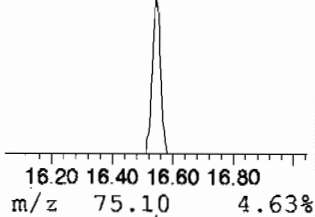
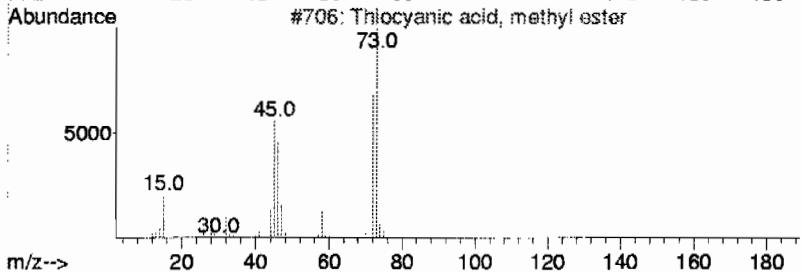
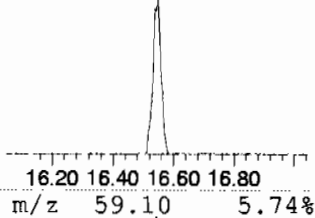
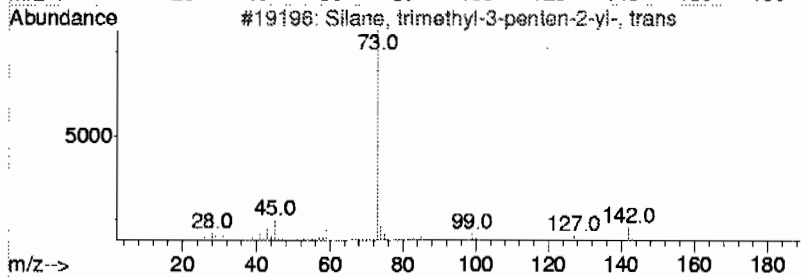
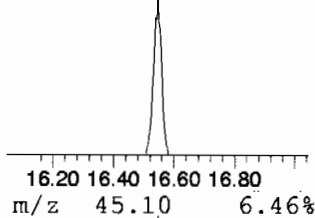
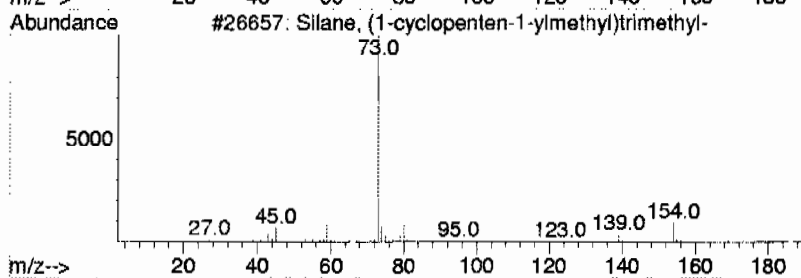
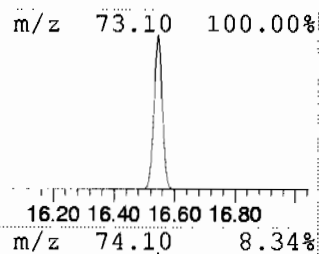
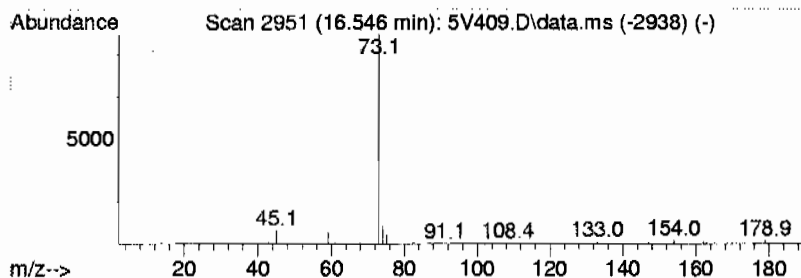
TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

\*\*\*\*\*  
Peak Number 1 unknown siloxane Concentration Rank 1

| R.T.   | EstConc    | Area   | Relative to ISTD         | R.T.   |
|--------|------------|--------|--------------------------|--------|
| 16.546 | 10.46 ug/L | 527092 | B 1,4-Dichlorobenzene-d4 | 15.962 |

| Hit# | of | 5 | Tentative ID                          | MW  | MolForm | CAS#        | Qual |
|------|----|---|---------------------------------------|-----|---------|-------------|------|
| 1    |    |   | Silane, (1-cyclopenten-1-yl)methyl... | 154 | C9H18Si | 075311-60-3 | 9    |
| 2    |    |   | Silane, trimethyl-3-penten-2-yl-...   | 142 | C8H18Si | 053264-56-5 | 9    |
| 3    |    |   | Thiocyanic acid, methyl ester         | 73  | C2H3NS  | 000556-64-9 | 4    |
| 4    |    |   | 1-Propene-1-thiol                     | 74  | C3H6S   | 000925-89-3 | 4    |
| 5    |    |   | Methane, isothiocyanato-              | 73  | C2H3NS  | 000556-61-6 | 4    |



Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V409.D  
Acq On : 28 Jan 2010 12:45 pm  
Operator : DXK1  
Sample : |245114004|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

| TIC Top Hit name | RT     | EstConc | Units | Response | --Internal Standard-- |        |         |      |
|------------------|--------|---------|-------|----------|-----------------------|--------|---------|------|
|                  |        |         |       |          | #                     | RT     | Resp    | Conc |
| unknown siloxane | 16.546 | 10.5    | ug/L  | 527092   | 6                     | 15.962 | 2519250 | 50.0 |



**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 2

SDG Number: 10-1324  
 Lab Sample ID: 245114005

Client ID: RE15-10-8441  
 Batch ID: 946008  
 Run Date: 01/28/2010 13:23  
 Prep Date: 01/28/2009 11:07  
 Data File: 012810V5SV410.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 9.6  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.    | Parname                     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.11   | ug/kg | 0.376   | 1.11    |
| 74-87-3    | Chloromethane               | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-01-4    | Vinyl chloride              | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 74-83-9    | Bromomethane                | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-00-3    | Chloroethane                | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 67-64-1    | Acetone                     | J         | 1.85   | ug/kg | 1.84    | 5.53    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 74-88-4    | Iodomethane                 | U         | 5.53   | ug/kg | 1.77    | 5.53    |
| 75-09-2    | Methylene chloride          | U         | 5.53   | ug/kg | 2.21    | 5.53    |
| 75-15-0    | Carbon disulfide            | U         | 5.53   | ug/kg | 1.38    | 5.53    |
| 156-60-5   | trans-1,2-Dichloroethylen   | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 78-93-3    | 2-Butanone                  | U         | 5.53   | ug/kg | 1.66    | 5.53    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 67-66-3    | Chloroform                  | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 74-97-5    | Bromochloromethane          | U         | 1.11   | ug/kg | 0.365   | 1.11    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 71-43-2    | Benzene                     | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 79-01-6    | Trichloroethylene           | U         | 1.11   | ug/kg | 0.365   | 1.11    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-27-4    | Bromodichloromethane        | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 74-95-3    | Dibromomethane              | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.53   | ug/kg | 1.38    | 5.53    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 108-88-3   | Toluene                     | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 591-78-6   | 2-Hexanone                  | U         | 5.53   | ug/kg | 1.66    | 5.53    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 127-18-4   | Tetrachloroethylene         | J         | 0.354  | ug/kg | 0.332   | 1.11    |
| 124-48-1   | Dibromochloromethane        | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 108-90-7   | Chlorobenzene               | U         | 1.11   | ug/kg | 0.332   | 1.11    |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114005  
 Client ID: RE15-10-8441  
 Batch ID: 946008  
 Run Date: 01/28/2010 13:23  
 Prep Date: 01/28/2009 11:07  
 Data File: 012810V5SV410.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXX1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 9.6  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.21   | ug/kg | 0.332   | 2.21    |
| 95-47-6     | o-Xylene                              | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 100-42-5    | Styrene                               | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-25-2     | Bromoform                             | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 108-86-1    | Bromobenzene                          | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.53   | ug/kg | 1.77    | 5.53    |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.332   | 1.11    |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V410.D  
Acq On : 28 Jan 2010 1:23 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114005|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 29 09:17:41 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT         | Rel RT   | QIon | Response | Conc  | Units |           |
|-------------------------------|--------|----------------|----------|------|----------|-------|-------|-----------|
| Internal Standards            |        |                |          |      |          |       |       | Dev (Min) |
| 1) Fluorobenzene              | 10.371 | 10.375         | 1.000    | 96   | 1923433  | 50.00 | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547 | 13.547         | 1.000    | 117  | 1156983  | 50.00 | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.959 | 15.962         | 1.000    | 152  | 411261   | 50.00 | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.371 | 10.375         | 1.000    | 96   | 1923433  | 50.00 | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547 | 13.547         | 1.000    | 117  | 1156983  | 50.00 | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.959 | 15.962         | 1.000    | 152  | 411261   | 50.00 | ug/L  | 0.00      |
| System Monitoring Compounds   |        |                |          |      |          |       |       | Dev (Min) |
| 29) 1,2-Dichloroethane-d4     | 10.021 | 10.021         | 0.966    | 65   | 466397   | 52.17 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 131 | Recovery | =    | 104.34%  |       |       |           |
| 43) Toluene-d8                | 12.016 | 12.016         | 0.887    | 98   | 1662530  | 52.69 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 75 - 129 | Recovery | =    | 105.38%  |       |       |           |
| 61) Bromofluorobenzene        | 14.739 | 14.739         | 0.924    | 95   | 498837   | 63.56 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 133 | Recovery | =    | 127.12%  |       |       |           |
| Target Compounds              |        |                |          |      |          |       |       | QValue    |
| 2) Dichlorodifluoromethane    | 0.000  | 4.689          | 0.000    |      | 0        | N.D.  |       |           |
| 3) Chloromethane              | 5.051  | 5.051          | 0.487    | 50   | 193      | N.D.  |       |           |
| 4) Vinyl chloride             | 5.252  | 5.283          | 0.506    | 62   | 169      | N.D.  |       |           |
| 5) Bromomethane               | 0.000  | 5.877          | 0.000    |      | 0        | N.D.  |       |           |
| 6) Chloroethane               | 0.000  | 6.018          | 0.000    |      | 0        | N.D.  |       |           |
| 7) Trichlorofluoromethane     | 0.000  | 6.391          | 0.000    |      | 0        | N.D.  |       |           |
| 8) Ethyl ether                | 0.000  | 6.733          | 0.000    |      | 0        | N.D.  |       |           |
| 9) Acetone                    | 7.125  | 7.100          | 0.687    | 43   | 12050    | 1.67  | ug/L  | 80        |
| 10) 1,1-Dichloroethylene      | 0.000  | 7.125          | 0.000    |      | 0        | N.D.  |       |           |
| 11) Iodomethane               | 0.000  | 7.373          | 0.000    |      | 0        | N.D.  |       |           |
| 12) Acetonitrile              | 7.677  | 7.450          | 0.740    | 41   | 108      | N.D.  |       |           |
| 13) Methyl acetate            | 7.486  | 7.493          | 0.722    | 43   | 240      | N.D.  |       |           |
| 14) Carbon disulfide          | 7.514  | 7.511          | 0.724    | 76   | 597      | N.D.  |       |           |
| 15) Methylene chloride        | 7.691  | 7.691          | 0.742    | 84   | 11781    | N.D.  |       |           |
| 16) tert-Butyl methyl ether   | 0.000  | 7.984          | 0.000    |      | 0        | N.D.  |       |           |
| 17) trans-1,2-Dichloroethy... | 0.000  | 8.030          | 0.000    |      | 0        | N.D.  |       |           |
| 18) Vinyl acetate             | 8.317  | 8.458          | 0.802    | 43   | 1552     | N.D.  |       |           |
| 19) 1,1-Dichloroethane        | 0.000  | 8.511          | 0.000    |      | 0        | N.D.  |       |           |
| 20) 2-Butanone                | 9.074  | 9.077          | 0.875    | 43   | 151      | N.D.  |       |           |
| 21) cis-1,2-Dichloroethylene  | 0.000  | 9.144          | 0.000    |      | 0        | N.D.  |       |           |
| 22) 2,2-Dichloropropane       | 0.000  | 9.173          | 0.000    |      | 0        | N.D.  |       |           |
| 23) Bromochloromethane        | 0.000  | 9.417          | 0.000    |      | 0        | N.D.  |       |           |
| 24) Chloroform                | 0.000  | 9.452          | 0.000    |      | 0        | N.D.  |       |           |
| 25) 1,1,1-Trichloroethane     | 0.000  | 9.735          | 0.000    |      | 0        | N.D.  |       |           |
| 26) Cyclohexane               | 0.000  | 9.830          | 0.000    |      | 0        | N.D.  |       |           |
| 27) 1,1-Dichloropropene       | 0.000  | 9.887          | 0.000    |      | 0        | N.D.  |       |           |
| 28) Carbon tetrachloride      | 0.000  | 9.929          | 0.000    |      | 0        | N.D.  |       |           |
| 30) 1,2-Dichloroethane        | 0.000  | 10.103         | 0.000    |      | 0        | N.D.  |       |           |
| 31) Benzene                   | 10.131 | 10.127         | 0.977    | 78   | 148      | N.D.  |       |           |
| 32) Cyclohexene               | 0.000  | 10.248         | 0.000    |      | 0        | N.D.  |       |           |
| 33) n-Butyl alcohol           | 0.000  | 10.460         | 0.000    |      | 0        | N.D.  |       |           |
| 34) Trichloroethylene         | 0.000  | 10.768         | 0.000    |      | 0        | N.D.  |       |           |
| 35) 1,2-Dichloropropane       | 0.000  | 11.004         | 0.000    |      | 0        | N.D.  |       |           |
| 36) Methylcyclohexane         | 0.000  | 11.019         | 0.000    |      | 0        | N.D.  |       |           |
| 37) Dibromomethane            | 0.000  | 11.146         | 0.000    |      | 0        | N.D.  |       |           |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V410.D  
Acq On : 28 Jan 2010 1:23 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114005|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 29 09:17:41 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc      | Units |
|-------------------------------|--------|--------|--------|------|----------|-----------|-------|
| 38) Bromodichloromethane      | 0.000  | 11.256 | 0.000  |      | 0        | N.D.      |       |
| 39) 2-Chloroethylvinyl ether  | 0.000  | 11.468 | 0.000  |      | 0        | N.D.      |       |
| 40) cis-1,3-Dichloropropylene | 0.000  | 11.705 | 0.000  |      | 0        | N.D.      |       |
| 42) 4-Methyl-2-pentanone      | 0.000  | 11.786 | 0.000  |      | 0        | N.D.      |       |
| 44) Toluene                   | 12.083 | 12.090 | 0.892  | 91   | 3869     | N.D.      |       |
| 45) trans-1,3-Dichloroprop... | 0.000  | 12.239 | 0.000  |      | 0        | N.D.      |       |
| 46) 1,1,2-Trichloroethane     | 0.000  | 12.465 | 0.000  |      | 0        | N.D.      |       |
| 47) 2-Hexanone                | 12.677 | 12.631 | 0.936  | 43   | 1803     | N.D.      |       |
| 48) 1,3-Dichloropropane       | 0.000  | 12.656 | 0.000  |      | 0        | N.D.      |       |
| 49) Tetrachloroethylene       | 12.688 | 12.691 | 0.937  | 164  | 1634     | 0.32 ug/L | 73    |
| 50) Dibromochloromethane      | 12.695 | 12.928 | 0.937  | 129  | 1069     | N.D.      |       |
| 51) 1,2-Dibromoethane         | 0.000  | 13.094 | 0.000  |      | 0        | N.D.      |       |
| 52) Chlorobenzene             | 0.000  | 13.579 | 0.000  |      | 0        | N.D.      |       |
| 53) 1,1,1,2-Tetrachloroethane | 0.000  | 13.636 | 0.000  |      | 0        | N.D.      |       |
| 54) Ethylbenzene              | 13.643 | 13.639 | 1.007  | 91   | 826      | N.D.      |       |
| 55) m,p-Xylenes               | 13.745 | 13.749 | 1.015  | 106  | 1050     | N.D.      |       |
| 56) o-Xylene                  | 14.180 | 14.184 | 1.047  | 106  | 253      | N.D.      |       |
| 57) Styrene                   | 0.000  | 14.184 | 0.000  |      | 0        | N.D.      |       |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D.      |       |
| 60) Isopropylbenzene          | 14.576 | 14.537 | 0.913  | 105  | 2377     | N.D.      |       |
| 62) 1,1,2,2-Tetrachloroethane | 14.608 | 14.810 | 0.915  | 83   | 136      | N.D.      |       |
| 63) 1,2,3-Trichloropropane    | 0.000  | 14.898 | 0.000  |      | 0        | N.D.      |       |
| 64) Bromobenzene              | 0.000  | 14.951 | 0.000  |      | 0        | N.D.      |       |
| 65) n-Propylbenzene           | 14.749 | 14.965 | 0.924  | 91   | 3598     | N.D.      |       |
| 66) 1,3,5-Trimethylbenzene    | 0.000  | 15.114 | 0.000  |      | 0        | N.D.      |       |
| 67) 2-Chlorotoluene           | 0.000  | 15.117 | 0.000  |      | 0        | N.D.      |       |
| 68) 4-Chlorotoluene           | 15.209 | 15.216 | 0.953  | 91   | 115      | N.D.      |       |
| 69) tert-Butylbenzene         | 0.000  | 15.489 | 0.000  |      | 0        | N.D.      |       |
| 70) 1,2,4-Trimethylbenzene    | 15.531 | 15.527 | 0.973  | 105  | 149      | N.D.      |       |
| 71) sec-Butylbenzene          | 0.000  | 15.711 | 0.000  |      | 0        | N.D.      |       |
| 72) 4-Isopropyltoluene        | 15.835 | 15.832 | 0.992  | 119  | 2144     | N.D.      |       |
| 73) 1,3-Dichlorobenzene       | 0.000  | 15.902 | 0.000  |      | 0        | N.D.      |       |
| 74) 1,4-Dichlorobenzene       | 15.991 | 15.991 | 1.002  | 146  | 153      | N.D.      |       |
| 75) n-Butylbenzene            | 16.281 | 16.277 | 1.020  | 91   | 125      | N.D.      |       |
| 76) 1,2-Dichlorobenzene       | 0.000  | 16.422 | 0.000  |      | 0        | N.D.      |       |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D.      |       |
| 78) 1,2,4-Trichlorobenzene    | 18.385 | 18.371 | 1.152  | 180  | 116      | N.D.      |       |
| 79) Hexachlorobutadiene       | 0.000  | 18.548 | 0.000  |      | 0        | N.D.      |       |
| 80) Naphthalene               | 18.754 | 18.762 | 1.175  | 128  | 715      | N.D.      |       |
| 81) 1,2,3-Trichlorobenzene    | 0.000  | 19.116 | 0.000  |      | 0        | N.D.      |       |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D.      |       |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D.      |       |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D.      |       |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D.      |       |
| 87) Isopropyl Alcohol         | 7.189  | 7.175  | 0.693  | 45   | 131      | N.D.      |       |
| 88) Allyl chloride            | 7.677  | 7.546  | 0.740  | 41   | 108      | N.D.      |       |
| 89) tert-Butyl Alcohol        | 0.000  | 7.673  | 0.000  |      | 0        | N.D.      |       |
| 90) Acrylonitrile             | 0.000  | 7.928  | 0.000  |      | 0        | N.D.      |       |
| 91) Isopropyl ether           | 0.000  | 8.483  | 0.000  |      | 0        | N.D.      |       |
| 92) 2-Chloro-1,3-butadiene    | 0.000  | 8.617  | 0.000  |      | 0        | N.D.      |       |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D.      |       |
| 94) Ethyl acetate             | 9.084  | 9.088  | 0.876  | 43   | 865      | N.D.      |       |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V410.D  
Acq On : 28 Jan 2010 1:23 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114005|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 29 09:17:41 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|--------|--------|--------|------|----------|------|-------|
| 95) Propionitrile              | 0.000  | 9.148  | 0.000  |      | 0        | N.D. |       |
| 96) Methacrylonitrile          | 9.470  | 9.332  | 0.913  | 41   | 1925     | N.D. |       |
| 97) Tetrahydrofuran            | 9.466  | 9.466  | 0.913  | 42   | 3387     | N.D. |       |
| 98) Isobutyl alcohol           | 9.823  | 9.770  | 0.947  | 41   | 114      | N.D. |       |
| 99) Methyl tert-amyl ether     | 0.000  | 10.138 | 0.000  |      | 0        | N.D. |       |
| 100) Methyl methacrylate       | 0.000  | 10.969 | 0.000  |      | 0        | N.D. |       |
| 101) 1,4-Dioxane               | 0.000  | 11.089 | 0.000  |      | 0        | N.D. |       |
| 102) 2-Nitropropane            | 0.000  | 11.443 | 0.000  |      | 0        | N.D. |       |
| 104) Ethyl methacrylate        | 0.000  | 12.235 | 0.000  |      | 0        | N.D. |       |
| 106) 1-Chlorohexane            | 0.000  | 13.438 | 0.000  |      | 0        | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 14.569 | 14.573 | 0.913  | 53   | 778      | N.D. |       |
| 108) Cyclohexanone             | 0.000  | 14.693 | 0.000  |      | 0        | N.D. |       |
| 109) trans-1,4-Dichloro-2-b... | 14.788 | 14.856 | 0.927  | 53   | 107      | N.D. |       |
| 110) Pentachloroethane         | 0.000  | 15.559 | 0.000  |      | 0        | N.D. |       |
| 111) Benzyl chloride           | 0.000  | 16.100 | 0.000  |      | 0        | N.D. |       |
| 112) bis(2-Chloroisopropyl)... | 0.000  | 16.497 | 0.000  |      | 0m       | N.D. | d     |

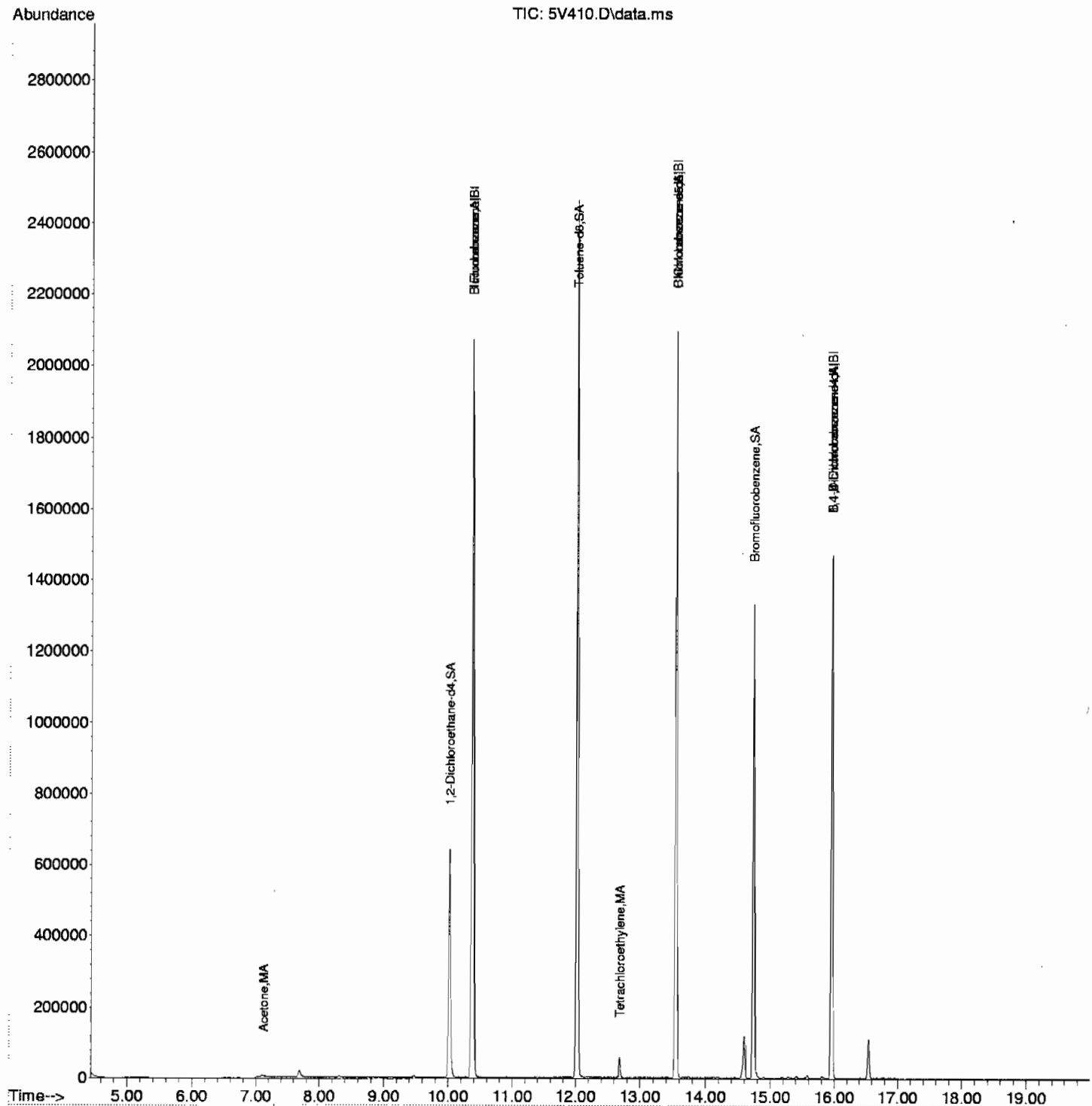
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

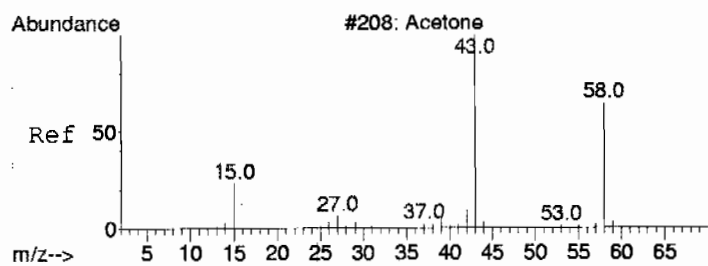
Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V410.D  
Acq On : 28 Jan 2010 1:23 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114005|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 29 09:17:41 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

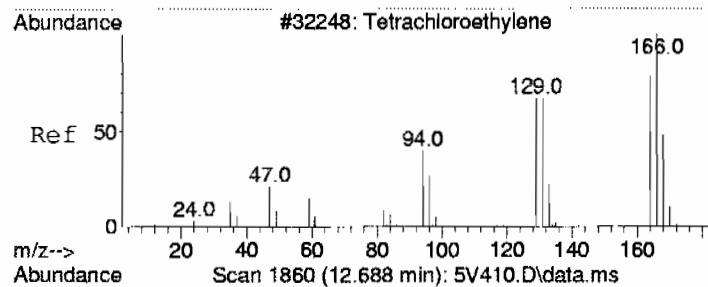
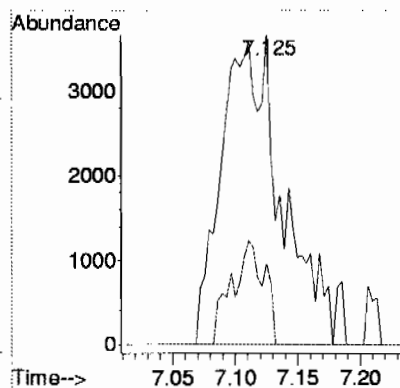
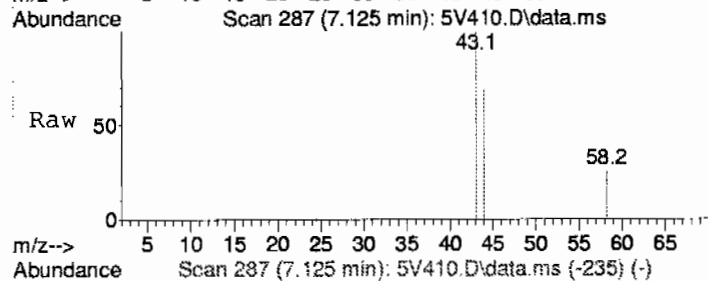
SubList :





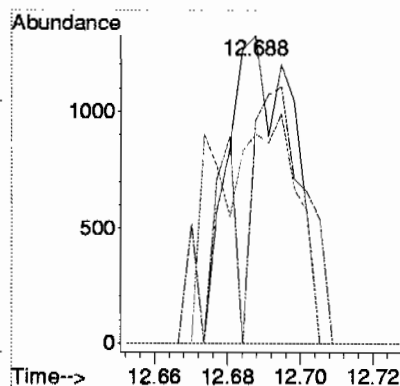
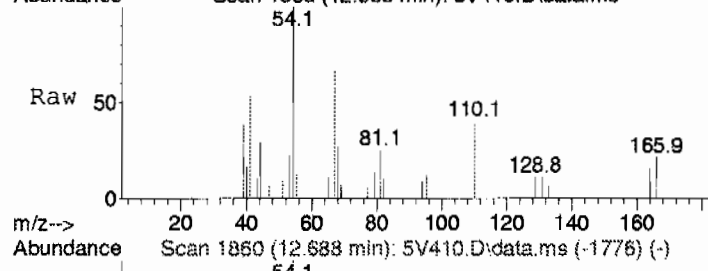
#9  
Acetone  
Concen: 1.67 ug/L  
RT: 7.125 min Scan# 287  
Delta R.T. 0.025 min  
Lab File: 5V410.D  
Acq: 28 Jan 2010 1:23 pm

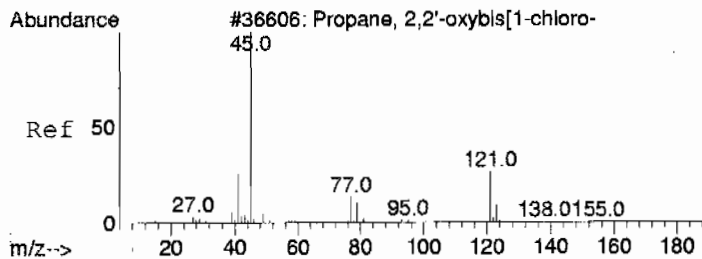
Tgt Ion: 43 Resp: 12050  
Ion Ratio Lower Upper  
43 100  
58 18.5 0.0 59.5



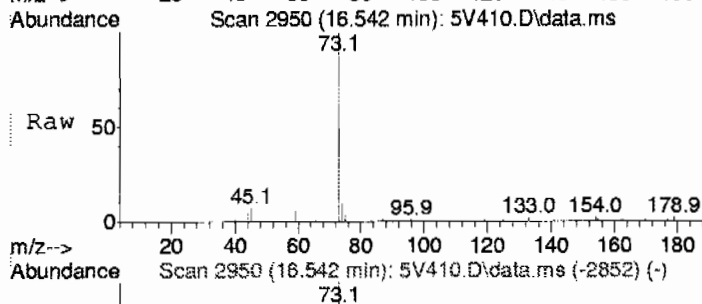
#49  
Tetrachloroethylene  
Concen: 0.32 ug/L  
RT: 12.688 min Scan# 1860  
Delta R.T. -0.003 min  
Lab File: 5V410.D  
Acq: 28 Jan 2010 1:23 pm

Tgt Ion: 164 Resp: 1634  
Ion Ratio Lower Upper  
164 100  
129 65.4 60.1 120.1  
131 62.8 58.9 118.9

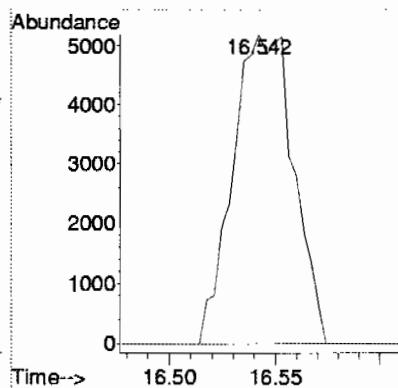
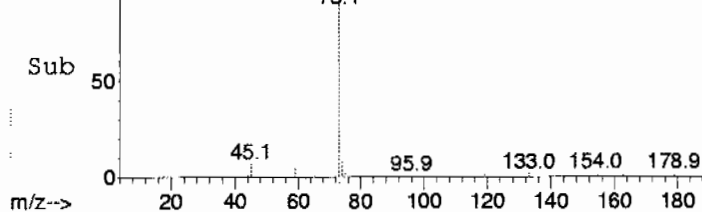




#112 BEFORE analyst DELETION  
bis(2-Chloroisopropyl) ether  
Concen: 3.77 ug/L  
RT: 16.542 min Scan# 2950  
Delta R.T. 0.045 min  
Lab File: 5V410.D  
Acq: 28 Jan 2010 1:23 pm



Tgt Ion: 45 Resp: 10345  
Ion Ratio Lower Upper  
45 100  
121 0.0 0.0 49.2





Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V410.D  
Acq On : 28 Jan 2010 1:23 pm  
Operator : DXK1  
Sample : |245114005|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V410.D  
Acq On : 28 Jan 2010 1:23 pm  
Operator : DXK1  
Sample : |245114005|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
|------------------|----|---------|-------|----------|---|----|------|------|
|------------------|----|---------|-------|----------|---|----|------|------|

---Internal Standard---

**Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 2

SDG Number: 10-1324  
Lab Sample ID: 245114007  
  
Client ID: RE15-10-8425  
Batch ID: 946008  
Run Date: 01/28/2010 14:14  
Prep Date: 01/28/2009 11:09  
Data File: 012810V5SV412.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/23/2010 09:20  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
% Moisture: 10.4  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.12   | ug/kg | 0.379   | 1.12    |
| 74-87-3    | Chloromethane               | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 75-01-4    | Vinyl chloride              | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 74-83-9    | Bromomethane                | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 75-00-3    | Chloroethane                | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 67-64-1    | Acetone                     | U         | 5.58   | ug/kg | 1.85    | 5.58    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 74-88-4    | Iodomethane                 | U         | 5.58   | ug/kg | 1.79    | 5.58    |
| 75-09-2    | Methylene chloride          | U         | 5.58   | ug/kg | 2.23    | 5.58    |
| 75-15-0    | Carbon disulfide            | U         | 5.58   | ug/kg | 1.40    | 5.58    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 78-93-3    | 2-Butanone                  | U         | 5.58   | ug/kg | 1.67    | 5.58    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 67-66-3    | Chloroform                  | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 74-97-5    | Bromochloromethane          | U         | 1.12   | ug/kg | 0.368   | 1.12    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 71-43-2    | Benzene                     | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 79-01-6    | Trichloroethylene           | U         | 1.12   | ug/kg | 0.368   | 1.12    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 75-27-4    | Bromodichloromethane        | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 74-95-3    | Dibromomethane              | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.58   | ug/kg | 1.40    | 5.58    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 108-88-3   | Toluene                     | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 591-78-6   | 2-Hexanone                  | U         | 5.58   | ug/kg | 1.67    | 5.58    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 124-48-1   | Dibromochloromethane        | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 108-90-7   | Chlorobenzene               | U         | 1.12   | ug/kg | 0.335   | 1.12    |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

Page 2 of 2

SDG Number: 10-1324  
 Lab Sample ID: 245114007

Client ID: RE15-10-8425  
 Batch ID: 946008  
 Run Date: 01/28/2010 14:14  
 Prep Date: 01/28/2009 11:09  
 Data File: 012810V55V412.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/23/2010 09:20  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 10.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.23   | ug/kg | 0.335   | 2.23    |
| 95-47-6     | o-Xylene                              | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 100-42-5    | Styrene                               | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 75-25-2     | Bromoform                             | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 108-86-1    | Bromobenzene                          | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.58   | ug/kg | 1.79    | 5.58    |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.12   | ug/kg | 0.335   | 1.12    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.12   | ug/kg | 0.335   | 1.12    |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V412.D  
Acq On : 28 Jan 2010 2:14 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114007|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 29 09:19:36 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT         | Rel RT   | QIon | Response | Conc  | Units |           |
|-------------------------------|--------|----------------|----------|------|----------|-------|-------|-----------|
| Internal Standards            |        |                |          |      |          |       |       | Dev (Min) |
| 1) Fluorobenzene              | 10.375 | 10.375         | 1.000    | 96   | 1821980  | 50.00 | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547 | 13.547         | 1.000    | 117  | 1172725  | 50.00 | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.962 | 15.962         | 1.000    | 152  | 506750   | 50.00 | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.375 | 10.375         | 1.000    | 96   | 1821980  | 50.00 | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547 | 13.547         | 1.000    | 117  | 1172725  | 50.00 | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.962 | 15.962         | 1.000    | 152  | 506750   | 50.00 | ug/L  | 0.00      |
| System Monitoring Compounds   |        |                |          |      |          |       |       | Dev (Min) |
| 29) 1,2-Dichloroethane-d4     | 10.021 | 10.021         | 0.966    | 65   | 452268   | 53.41 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 131 | Recovery | =    | 106.82%  |       |       |           |
| 43) Toluene-d8                | 12.016 | 12.016         | 0.887    | 98   | 1611851  | 50.40 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 75 - 129 | Recovery | =    | 100.80%  |       |       |           |
| 61) Bromofluorobenzene        | 14.735 | 14.739         | 0.923    | 95   | 585944   | 60.59 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 133 | Recovery | =    | 121.18%  |       |       |           |
| Target Compounds              |        |                |          |      |          |       |       | QValue    |
| 2) Dichlorodifluoromethane    | 0.000  | 4.689          | 0.000    |      | 0        | N.D.  |       |           |
| 3) Chloromethane              | 5.222  | 5.051          | 0.503    | 50   | 346      | N.D.  |       |           |
| 4) Vinyl chloride             | 0.000  | 5.283          | 0.000    |      | 0        | N.D.  |       |           |
| 5) Bromomethane               | 0.000  | 5.877          | 0.000    |      | 0        | N.D.  |       |           |
| 6) Chloroethane               | 0.000  | 6.018          | 0.000    |      | 0        | N.D.  |       |           |
| 7) Trichlorofluoromethane     | 0.000  | 6.391          | 0.000    |      | 0        | N.D.  |       |           |
| 8) Ethyl ether                | 0.000  | 6.733          | 0.000    |      | 0        | N.D.  |       |           |
| 9) Acetone                    | 7.114  | 7.100          | 0.686    | 43   | 4653     | N.D.  |       |           |
| 10) 1,1-Dichloroethylene      | 0.000  | 7.125          | 0.000    |      | 0        | N.D.  |       |           |
| 11) Iodomethane               | 0.000  | 7.373          | 0.000    |      | 0        | N.D.  |       |           |
| 12) Acetonitrile              | 7.673  | 7.450          | 0.740    | 41   | 107      | N.D.  |       |           |
| 13) Methyl acetate            | 0.000  | 7.493          | 0.000    |      | 0        | N.D.  |       |           |
| 14) Carbon disulfide          | 7.493  | 7.511          | 0.722    | 76   | 1428     | N.D.  |       |           |
| 15) Methylene chloride        | 7.694  | 7.691          | 0.742    | 84   | 10510    | N.D.  |       |           |
| 16) tert-Butyl methyl ether   | 0.000  | 7.984          | 0.000    |      | 0        | N.D.  |       |           |
| 17) trans-1,2-Dichloroethy... | 0.000  | 8.030          | 0.000    |      | 0        | N.D.  |       |           |
| 18) Vinyl acetate             | 8.310  | 8.458          | 0.801    | 43   | 1252     | N.D.  |       |           |
| 19) 1,1-Dichloroethane        | 0.000  | 8.511          | 0.000    |      | 0        | N.D.  |       |           |
| 20) 2-Butanone                | 0.000  | 9.077          | 0.000    |      | 0        | N.D.  |       |           |
| 21) cis-1,2-Dichloroethylene  | 0.000  | 9.144          | 0.000    |      | 0        | N.D.  |       |           |
| 22) 2,2-Dichloropropane       | 0.000  | 9.173          | 0.000    |      | 0        | N.D.  |       |           |
| 23) Bromochloromethane        | 0.000  | 9.417          | 0.000    |      | 0        | N.D.  |       |           |
| 24) Chloroform                | 0.000  | 9.452          | 0.000    |      | 0        | N.D.  |       |           |
| 25) 1,1,1-Trichloroethane     | 0.000  | 9.735          | 0.000    |      | 0        | N.D.  |       |           |
| 26) Cyclohexane               | 0.000  | 9.830          | 0.000    |      | 0        | N.D.  |       |           |
| 27) 1,1-Dichloropropene       | 0.000  | 9.887          | 0.000    |      | 0        | N.D.  |       |           |
| 28) Carbon tetrachloride      | 0.000  | 9.929          | 0.000    |      | 0        | N.D.  |       |           |
| 30) 1,2-Dichloroethane        | 0.000  | 10.103         | 0.000    |      | 0        | N.D.  |       |           |
| 31) Benzene                   | 10.127 | 10.127         | 0.976    | 78   | 355      | N.D.  |       |           |
| 32) Cyclohexene               | 10.368 | 10.248         | 0.999    | 67   | 247      | N.D.  |       |           |
| 33) n-Butyl alcohol           | 0.000  | 10.460         | 0.000    |      | 0        | N.D.  |       |           |
| 34) Trichloroethylene         | 0.000  | 10.768         | 0.000    |      | 0        | N.D.  |       |           |
| 35) 1,2-Dichloropropane       | 0.000  | 11.004         | 0.000    |      | 0        | N.D.  |       |           |
| 36) Methylcyclohexane         | 0.000  | 11.019         | 0.000    |      | 0        | N.D.  |       |           |
| 37) Dibromomethane            | 0.000  | 11.146         | 0.000    |      | 0        | N.D.  |       |           |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V412.D  
Acq On : 28 Jan 2010 2:14 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114007|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 29 09:19:36 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|-------------------------------|--------|--------|--------|------|----------|------|-------|
| 38) Bromodichloromethane      | 0.000  | 11.256 | 0.000  |      | 0        | N.D. |       |
| 39) 2-Chloroethylvinyl ether  | 0.000  | 11.468 | 0.000  |      | 0        | N.D. |       |
| 40) cis-1,3-Dichloropropylene | 0.000  | 11.705 | 0.000  |      | 0        | N.D. |       |
| 42) 4-Methyl-2-pentanone      | 0.000  | 11.786 | 0.000  |      | 0        | N.D. |       |
| 44) Toluene                   | 12.087 | 12.090 | 0.892  | 91   | 7945     | N.D. |       |
| 45) trans-1,3-Dichloroprop... | 0.000  | 12.239 | 0.000  |      | 0        | N.D. |       |
| 46) 1,1,2-Trichloroethane     | 0.000  | 12.465 | 0.000  |      | 0        | N.D. |       |
| 47) 2-Hexanone                | 0.000  | 12.631 | 0.000  |      | 0        | N.D. |       |
| 48) 1,3-Dichloropropane       | 0.000  | 12.656 | 0.000  |      | 0        | N.D. |       |
| 49) Tetrachloroethylene       | 0.000  | 12.691 | 0.000  |      | 0        | N.D. |       |
| 50) Dibromochloromethane      | 0.000  | 12.928 | 0.000  |      | 0        | N.D. |       |
| 51) 1,2-Dibromoethane         | 0.000  | 13.094 | 0.000  |      | 0        | N.D. |       |
| 52) Chlorobenzene             | 0.000  | 13.579 | 0.000  |      | 0        | N.D. |       |
| 53) 1,1,1,2-Tetrachloroethane | 0.000  | 13.636 | 0.000  |      | 0        | N.D. |       |
| 54) Ethylbenzene              | 13.639 | 13.639 | 1.007  | 91   | 1713     | N.D. |       |
| 55) m,p-Xylenes               | 13.749 | 13.749 | 1.015  | 106  | 324      | N.D. |       |
| 56) o-Xylene                  | 14.184 | 14.184 | 1.047  | 106  | 280      | N.D. |       |
| 57) Styrene                   | 0.000  | 14.184 | 0.000  |      | 0        | N.D. |       |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D. |       |
| 60) Isopropylbenzene          | 0.000  | 14.537 | 0.000  |      | 0m       | N.D. | d     |
| 62) 1,1,2,2-Tetrachloroethane | 0.000  | 14.810 | 0.000  |      | 0m       | N.D. | d     |
| 63) 1,2,3-Trichloropropane    | 14.820 | 14.898 | 0.928  | 110  | 364      | N.D. |       |
| 64) Bromobenzene              | 0.000  | 14.951 | 0.000  |      | 0        | N.D. |       |
| 65) n-Propylbenzene           | 0.000  | 14.965 | 0.000  |      | 0m       | N.D. | d     |
| 66) 1,3,5-Trimethylbenzene    | 0.000  | 15.114 | 0.000  |      | 0        | N.D. |       |
| 67) 2-Chlorotoluene           | 0.000  | 15.117 | 0.000  |      | 0        | N.D. |       |
| 68) 4-Chlorotoluene           | 15.213 | 15.216 | 0.953  | 91   | 138      | N.D. |       |
| 69) tert-Butylbenzene         | 0.000  | 15.489 | 0.000  |      | 0        | N.D. |       |
| 70) 1,2,4-Trimethylbenzene    | 15.581 | 15.527 | 0.976  | 105  | 381      | N.D. |       |
| 71) sec-Butylbenzene          | 15.581 | 15.711 | 0.976  | 105  | 381      | N.D. |       |
| 72) 4-Isopropyltoluene        | 15.839 | 15.832 | 0.992  | 119  | 745      | N.D. |       |
| 73) 1,3-Dichlorobenzene       | 0.000  | 15.902 | 0.000  |      | 0        | N.D. |       |
| 74) 1,4-Dichlorobenzene       | 15.980 | 15.991 | 1.001  | 146  | 147      | N.D. |       |
| 75) n-Butylbenzene            | 0.000  | 16.277 | 0.000  |      | 0        | N.D. |       |
| 76) 1,2-Dichlorobenzene       | 0.000  | 16.422 | 0.000  |      | 0        | N.D. |       |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D. |       |
| 78) 1,2,4-Trichlorobenzene    | 18.385 | 18.371 | 1.152  | 180  | 128      | N.D. |       |
| 79) Hexachlorobutadiene       | 0.000  | 18.548 | 0.000  |      | 0        | N.D. |       |
| 80) Naphthalene               | 18.777 | 18.762 | 1.176  | 128  | 773      | N.D. |       |
| 81) 1,2,3-Trichlorobenzene    | 0.000  | 19.116 | 0.000  |      | 0        | N.D. |       |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D. |       |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D. |       |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D. |       |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D. |       |
| 87) Isopropyl Alcohol         | 0.000  | 7.175  | 0.000  |      | 0        | N.D. |       |
| 88) Allyl chloride            | 7.673  | 7.546  | 0.740  | 41   | 107      | N.D. |       |
| 89) tert-Butyl Alcohol        | 0.000  | 7.673  | 0.000  |      | 0        | N.D. |       |
| 90) Acrylonitrile             | 0.000  | 7.928  | 0.000  |      | 0        | N.D. |       |
| 91) Isopropyl ether           | 0.000  | 8.483  | 0.000  |      | 0        | N.D. |       |
| 92) 2-Chloro-1,3-butadiene    | 0.000  | 8.617  | 0.000  |      | 0        | N.D. |       |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D. |       |
| 94) Ethyl acetate             | 0.000  | 9.088  | 0.000  |      | 0        | N.D. |       |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V412.D  
Acq On : 28 Jan 2010 2:14 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114007|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 29 09:19:36 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|--------|--------|--------|------|----------|------|-------|
| 95) Propionitrile              | 0.000  | 9.148  | 0.000  |      | 0        | N.D. |       |
| 96) Methacrylonitrile          | 0.000  | 9.332  | 0.000  |      | 0        | N.D. |       |
| 97) Tetrahydrofuran            | 0.000  | 9.466  | 0.000  |      | 0        | N.D. |       |
| 98) Isobutyl alcohol           | 0.000  | 9.770  | 0.000  |      | 0        | N.D. |       |
| 99) Methyl tert-amyl ether     | 0.000  | 10.138 | 0.000  |      | 0        | N.D. |       |
| 100) Methyl methacrylate       | 0.000  | 10.969 | 0.000  |      | 0        | N.D. |       |
| 101) 1,4-Dioxane               | 0.000  | 11.089 | 0.000  |      | 0        | N.D. |       |
| 102) 2-Nitropropane            | 0.000  | 11.443 | 0.000  |      | 0        | N.D. |       |
| 104) Ethyl methacrylate        | 0.000  | 12.235 | 0.000  |      | 0        | N.D. |       |
| 106) 1-Chlorohexane            | 13.346 | 13.438 | 0.836  | 55   | 111      | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 14.573 | 14.573 | 0.913  | 53   | 112      | N.D. |       |
| 108) Cyclohexanone             | 0.000  | 14.693 | 0.000  |      | 0m       | N.D. | d     |
| 109) trans-1,4-Dichloro-2-b... | 0.000  | 14.856 | 0.000  |      | 0m       | N.D. | d     |
| 110) Pentachloroethane         | 0.000  | 15.559 | 0.000  |      | 0        | N.D. |       |
| 111) Benzyl chloride           | 0.000  | 16.100 | 0.000  |      | 0        | N.D. |       |
| 112) bis(2-Chloroisopropyl)... | 16.532 | 16.497 | 1.036  | 45   | 2556     | N.D. |       |

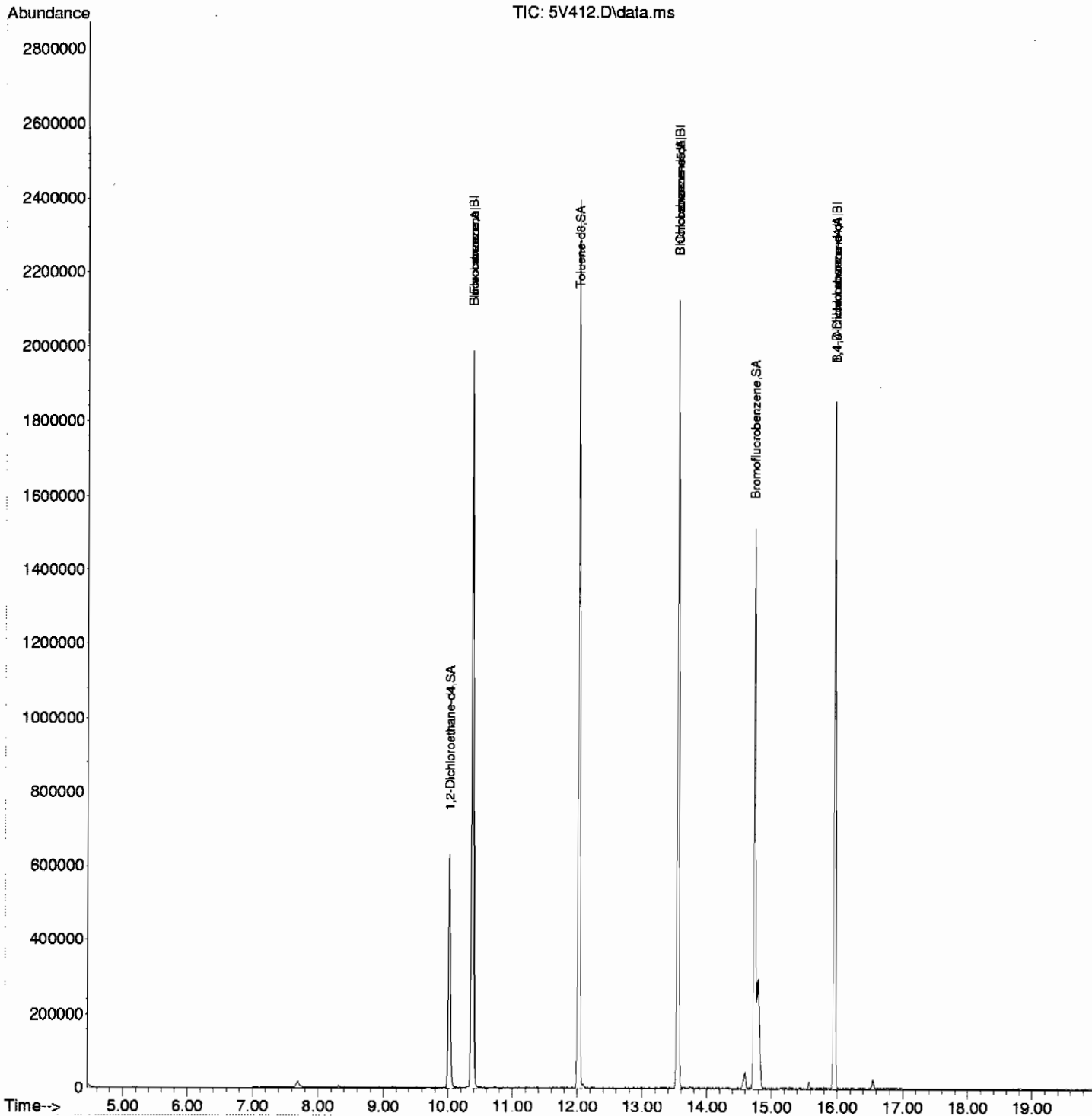
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

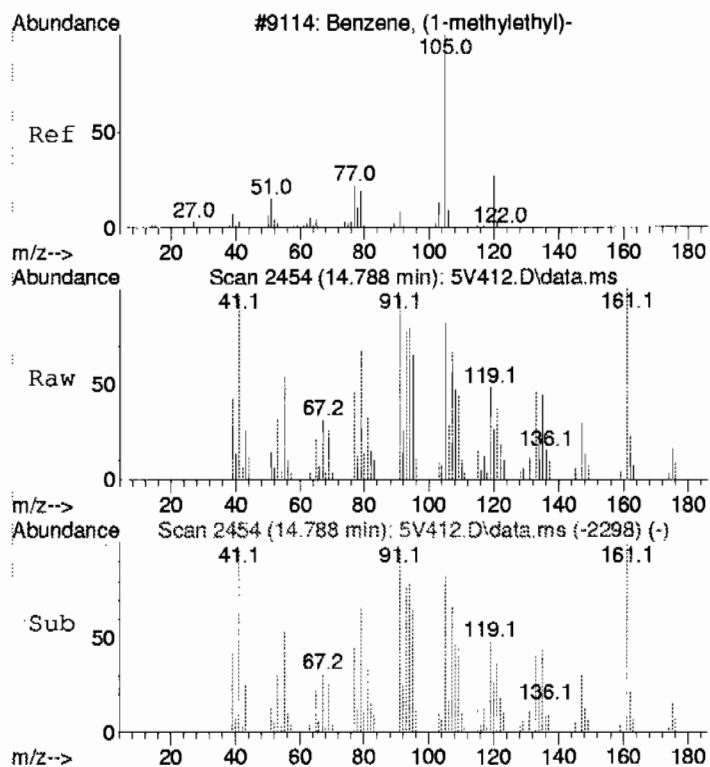
Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V412.D  
Acq On : 28 Jan 2010 2:14 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114007|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 29 09:19:36 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

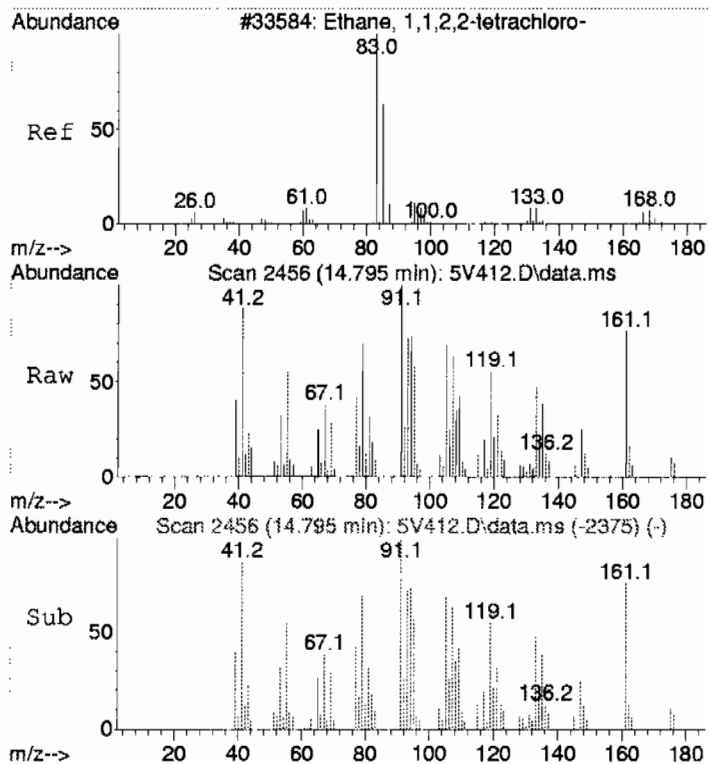
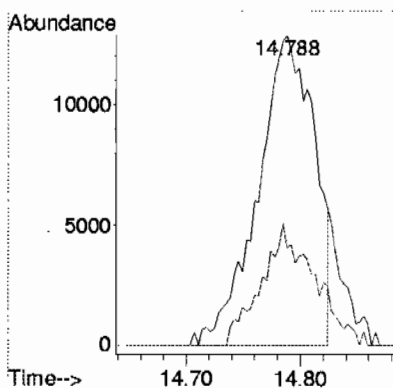






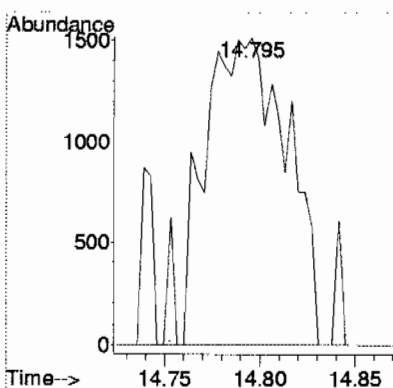
#60 BEFORE analyst DELETION  
Isopropylbenzene  
Concen: 1.92 ug/L  
RT: 14.788 min Scan# 2454  
Delta R.T. 0.251 min  
Lab File: 5V412.D  
Acq: 28 Jan 2010 2:14 pm

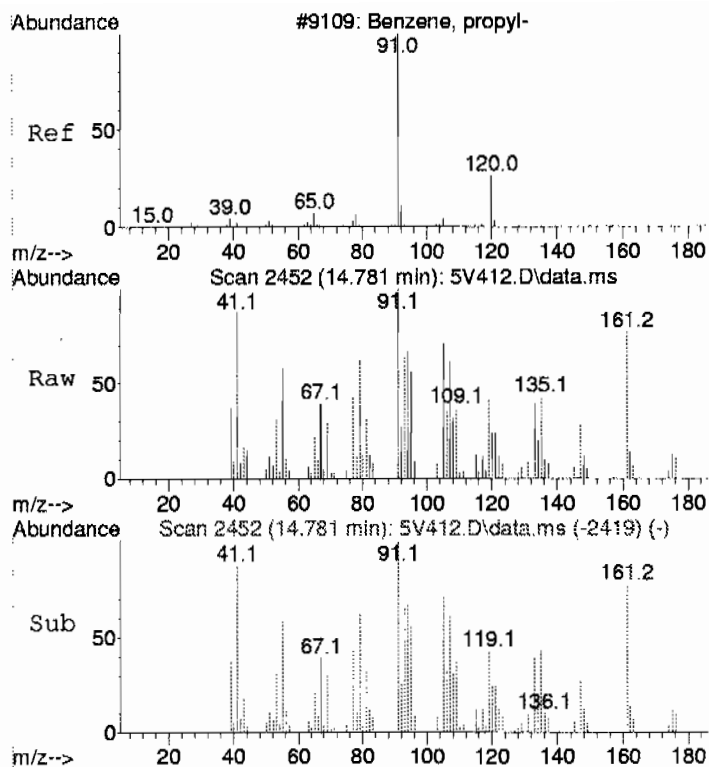
Tgt Ion: 105 Resp: 44181  
Ion Ratio Lower Upper  
105 100  
120 33.5 0.0 57.9



#62 BEFORE analyst DELETION  
1,1,2,2-Tetrachloroethane  
Concen: 0.78 ug/L  
RT: 14.795 min Scan# 2456  
Delta R.T. -0.015 min  
Lab File: 5V412.D  
Acq: 28 Jan 2010 2:14 pm

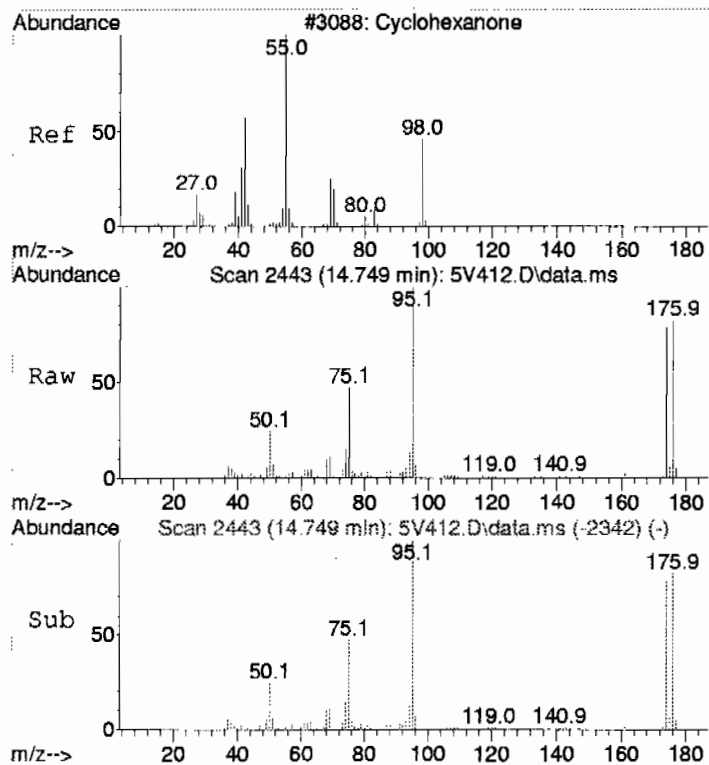
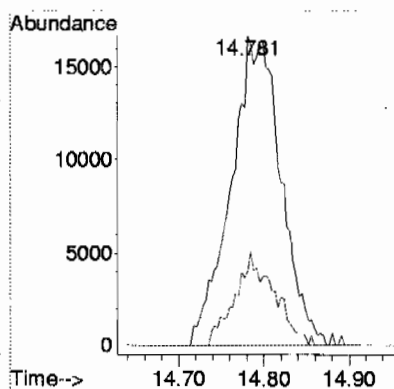
Tgt Ion: 83 Resp: 4555  
Ion Ratio Lower Upper  
83 100  
85 0.0 33.6 93.6#





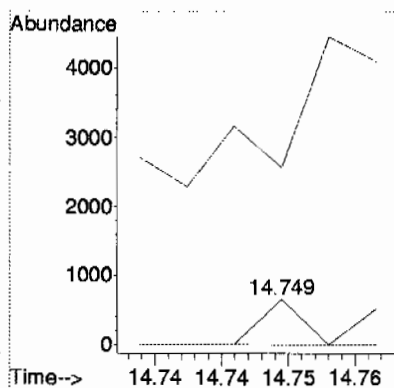
#65 BEFORE analyst DELETION  
n-Propylbenzene  
Concen: 2.47 ug/L  
RT: 14.781 min Scan# 2452  
Delta R.T. -0.184 min  
Lab File: 5V412.D  
Acq: 28 Jan 2010 2:14 pm

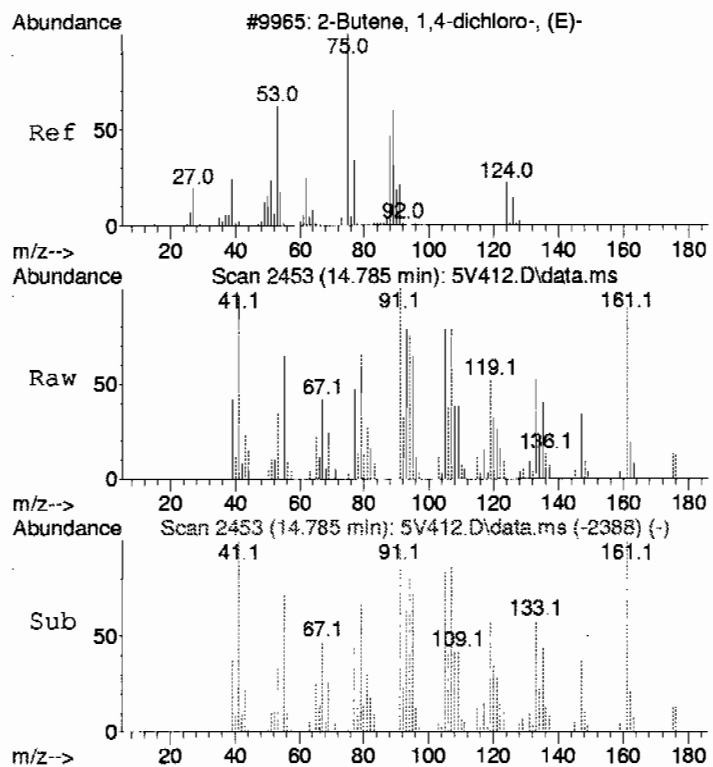
Tgt Ion: 91 Resp: 67996  
Ion Ratio Lower Upper  
91 100  
120 23.9 0.0 53.6



#108 BEFORE analyst DELETION  
Cyclohexanone  
Concen: 28.33 ug/L  
RT: 14.749 min Scan# 2443  
Delta R.T. 0.056 min  
Lab File: 5V412.D  
Acq: 28 Jan 2010 2:14 pm

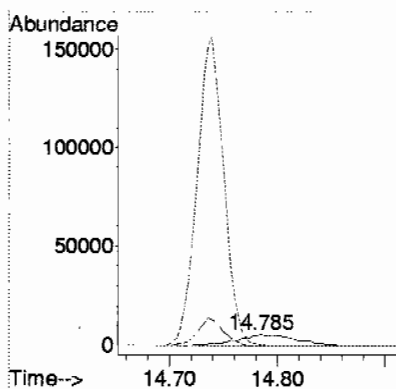
Tgt Ion: 42 Resp: 138  
Ion Ratio Lower Upper  
42 100  
55 85.5 104.7 164.7#  
98 0.0 21.5 81.5#





#109 BEFORE analyst DELETION  
trans-1,4-Dichloro-2-butene  
Concen: 11.10 ug/L  
RT: 14.785 min Scan# 2453  
Delta R.T. -0.071 min  
Lab File: 5V412.D  
Acq: 28 Jan 2010 2:14 pm

Tgt Ion: 53 Resp: 20429  
Ion Ratio Lower Upper  
53 100  
88 109.6 7.6 67.6#  
75 1323.7 86.0 146.0#



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V412.D  
Acq On : 28 Jan 2010 2:14 pm  
Operator : DXK1  
Sample : |245114007|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V412.D  
Acq On : 28 Jan 2010 2:14 pm  
Operator : DXK1  
Sample : |245114007|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard-- |    |           |
|------------------|----|---------|-------|----------|-----------------------|----|-----------|
|                  |    |         |       |          | #                     | RT | Resp Conc |

**Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 2

SDG Number: 10-1324  
Lab Sample ID: 245114008  
  
Client ID: RE15-10-8422  
Batch ID: 946008  
Run Date: 01/28/2010 14:40  
Prep Date: 01/28/2009 11:10  
Data File: 012810V55V413.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/23/2010 09:20  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 10.9  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.12   | ug/kg | 0.382   | 1.12    |
| 74-87-3    | Chloromethane               | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 75-01-4    | Vinyl chloride              | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 74-83-9    | Bromomethane                | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 75-00-3    | Chloroethane                | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 67-64-1    | Acetone                     | J         | 4.11   | ug/kg | 1.86    | 5.61    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 74-88-4    | Iodomethane                 | U         | 5.61   | ug/kg | 1.80    | 5.61    |
| 75-09-2    | Methylene chloride          | J         | 3.71   | ug/kg | 2.25    | 5.61    |
| 75-15-0    | Carbon disulfide            | U         | 5.61   | ug/kg | 1.40    | 5.61    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 78-93-3    | 2-Butanone                  | U         | 5.61   | ug/kg | 1.68    | 5.61    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 67-66-3    | Chloroform                  | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 74-97-5    | Bromochloromethane          | U         | 1.12   | ug/kg | 0.371   | 1.12    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 71-43-2    | Benzene                     | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 79-01-6    | Trichloroethylene           | U         | 1.12   | ug/kg | 0.371   | 1.12    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 75-27-4    | Bromodichloromethane        | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 74-95-3    | Dibromomethane              | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.61   | ug/kg | 1.40    | 5.61    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 108-88-3   | Toluene                     | J         | 0.618  | ug/kg | 0.337   | 1.12    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 591-78-6   | 2-Hexanone                  | U         | 5.61   | ug/kg | 1.68    | 5.61    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 124-48-1   | Dibromochloromethane        | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 108-90-7   | Chlorobenzene               | U         | 1.12   | ug/kg | 0.337   | 1.12    |

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114008  
  
Client ID: RE15-10-8422  
Batch ID: 946008  
Run Date: 01/28/2010 14:40  
Prep Date: 01/28/2009 11:10  
Data File: 012810V5SV413.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/23/2010 09:20  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
% Moisture: 10.9  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.25   | ug/kg | 0.337   | 2.25    |
| 95-47-6     | o-Xylene                              | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 100-42-5    | Styrene                               | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 75-25-2     | Bromoform                             | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 108-86-1    | Bromobenzene                          | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.61   | ug/kg | 1.80    | 5.61    |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.12   | ug/kg | 0.337   | 1.12    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.12   | ug/kg | 0.337   | 1.12    |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|-------|-----------|-------|-----|------|
|         | unknown siloxane                      | 16.55 | 8.84      | ug/kg | 0   | J    |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V413.D  
Acq On : 28 Jan 2010 2:40 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114008|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 29 09:20:01 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT         | Rel RT   | QIon | Response | Conc  | Units | Dev (Min) |
|-------------------------------|--------|----------------|----------|------|----------|-------|-------|-----------|
| Internal Standards            |        |                |          |      |          |       |       |           |
| 1) Fluorobenzene              | 10.375 | 10.375         | 1.000    | 96   | 1761372  | 50.00 | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547 | 13.547         | 1.000    | 117  | 1105391  | 50.00 | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.962 | 15.962         | 1.000    | 152  | 457668   | 50.00 | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.375 | 10.375         | 1.000    | 96   | 1761372  | 50.00 | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547 | 13.547         | 1.000    | 117  | 1105391  | 50.00 | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.962 | 15.962         | 1.000    | 152  | 457668   | 50.00 | ug/L  | 0.00      |
| System Monitoring Compounds   |        |                |          |      |          |       |       |           |
| 29) 1,2-Dichloroethane-d4     | 10.021 | 10.021         | 0.966    | 65   | 469621   | 57.37 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 131 | Recovery | =    | 114.74%  |       |       |           |
| 43) Toluene-d8                | 12.016 | 12.016         | 0.887    | 98   | 1553740  | 51.54 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 75 - 129 | Recovery | =    | 103.08%  |       |       |           |
| 61) Bromofluorobenzene        | 14.739 | 14.739         | 0.923    | 95   | 534559   | 61.21 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 133 | Recovery | =    | 122.42%  |       |       |           |
| Target Compounds              |        |                |          |      |          |       |       |           |
| Compound                      | R.T.   | Exp RT         | Rel RT   | QIon | Response | Conc  | Units | QValue    |
| 2) Dichlorodifluoromethane    | 0.000  | 4.689          | 0.000    |      | 0        | N.D.  |       |           |
| 3) Chloromethane              | 5.041  | 5.051          | 0.486    | 50   | 173      | N.D.  |       |           |
| 4) Vinyl chloride             | 0.000  | 5.283          | 0.000    |      | 0        | N.D.  |       |           |
| 5) Bromomethane               | 0.000  | 5.877          | 0.000    |      | 0        | N.D.  |       |           |
| 6) Chloroethane               | 0.000  | 6.018          | 0.000    |      | 0        | N.D.  |       |           |
| 7) Trichlorofluoromethane     | 0.000  | 6.391          | 0.000    |      | 0        | N.D.  |       |           |
| 8) Ethyl ether                | 0.000  | 6.733          | 0.000    |      | 0        | N.D.  |       |           |
| 9) Acetone                    | 7.107  | 7.100          | 0.685    | 43   | 24153    | 3.66  | ug/L  | 69        |
| 10) 1,1-Dichloroethylene      | 0.000  | 7.125          | 0.000    |      | 0        | N.D.  |       |           |
| 11) Iodomethane               | 0.000  | 7.373          | 0.000    |      | 0        | N.D.  |       |           |
| 12) Acetonitrile              | 7.680  | 7.450          | 0.740    | 41   | 266      | N.D.  |       |           |
| 13) Methyl acetate            | 7.496  | 7.493          | 0.723    | 43   | 1357     | N.D.  |       |           |
| 14) Carbon disulfide          | 7.511  | 7.511          | 0.724    | 76   | 396      | N.D.  |       |           |
| 15) Methylene chloride        | 7.694  | 7.691          | 0.742    | 84   | 24755    | 3.30  | ug/L  | 93        |
| 16) tert-Butyl methyl ether   | 0.000  | 7.984          | 0.000    |      | 0        | N.D.  |       |           |
| 17) trans-1,2-Dichloroethy... | 0.000  | 8.030          | 0.000    |      | 0        | N.D.  |       |           |
| 18) Vinyl acetate             | 8.320  | 8.458          | 0.802    | 43   | 436      | N.D.  |       |           |
| 19) 1,1-Dichloroethane        | 0.000  | 8.511          | 0.000    |      | 0        | N.D.  |       |           |
| 20) 2-Butanone                | 9.084  | 9.077          | 0.876    | 43   | 1523     | N.D.  |       |           |
| 21) cis-1,2-Dichloroethylene  | 0.000  | 9.144          | 0.000    |      | 0        | N.D.  |       |           |
| 22) 2,2-Dichloropropane       | 0.000  | 9.173          | 0.000    |      | 0        | N.D.  |       |           |
| 23) Bromochloromethane        | 0.000  | 9.417          | 0.000    |      | 0        | N.D.  |       |           |
| 24) Chloroform                | 0.000  | 9.452          | 0.000    |      | 0        | N.D.  |       |           |
| 25) 1,1,1-Trichloroethane     | 0.000  | 9.735          | 0.000    |      | 0        | N.D.  |       |           |
| 26) Cyclohexane               | 0.000  | 9.830          | 0.000    |      | 0        | N.D.  |       |           |
| 27) 1,1-Dichloropropene       | 0.000  | 9.887          | 0.000    |      | 0        | N.D.  |       |           |
| 28) Carbon tetrachloride      | 0.000  | 9.929          | 0.000    |      | 0        | N.D.  |       |           |
| 30) 1,2-Dichloroethane        | 0.000  | 10.103         | 0.000    |      | 0        | N.D.  |       |           |
| 31) Benzene                   | 10.120 | 10.127         | 0.975    | 78   | 110      | N.D.  |       |           |
| 32) Cyclohexene               | 0.000  | 10.248         | 0.000    |      | 0        | N.D.  |       |           |
| 33) n-Butyl alcohol           | 0.000  | 10.460         | 0.000    |      | 0        | N.D.  |       |           |
| 34) Trichloroethylene         | 0.000  | 10.768         | 0.000    |      | 0        | N.D.  |       |           |
| 35) 1,2-Dichloropropane       | 0.000  | 11.004         | 0.000    |      | 0        | N.D.  |       |           |
| 36) Methylcyclohexane         | 0.000  | 11.019         | 0.000    |      | 0        | N.D.  |       |           |
| 37) Dibromomethane            | 0.000  | 11.146         | 0.000    |      | 0        | N.D.  |       |           |



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V413.D  
Acq On : 28 Jan 2010 2:40 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114008|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 29 09:20:01 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc      | Units |
|-------------------------------|--------|--------|--------|------|----------|-----------|-------|
| 38) Bromodichloromethane      | 0.000  | 11.256 | 0.000  |      | 0        | N.D.      |       |
| 39) 2-Chloroethylvinyl ether  | 0.000  | 11.468 | 0.000  |      | 0        | N.D.      |       |
| 40) cis-1,3-Dichloropropylene | 0.000  | 11.705 | 0.000  |      | 0        | N.D.      |       |
| 42) 4-Methyl-2-pentanone      | 0.000  | 11.786 | 0.000  |      | 0        | N.D.      |       |
| 44) Toluene                   | 12.087 | 12.090 | 0.892  | 91   | 14530    | 0.55 ug/L | 95    |
| 45) trans-1,3-Dichloroprop... | 0.000  | 12.239 | 0.000  |      | 0        | N.D.      |       |
| 46) 1,1,2-Trichloroethane     | 0.000  | 12.465 | 0.000  |      | 0        | N.D.      |       |
| 47) 2-Hexanone                | 0.000  | 12.631 | 0.000  |      | 0        | N.D.      |       |
| 48) 1,3-Dichloropropane       | 0.000  | 12.656 | 0.000  |      | 0        | N.D.      |       |
| 49) Tetrachloroethylene       | 0.000  | 12.691 | 0.000  |      | 0        | N.D.      |       |
| 50) Dibromochloromethane      | 0.000  | 12.928 | 0.000  |      | 0        | N.D.      |       |
| 51) 1,2-Dibromoethane         | 0.000  | 13.094 | 0.000  |      | 0        | N.D.      |       |
| 52) Chlorobenzene             | 0.000  | 13.579 | 0.000  |      | 0        | N.D.      |       |
| 53) 1,1,1,2-Tetrachloroethane | 0.000  | 13.636 | 0.000  |      | 0        | N.D.      |       |
| 54) Ethylbenzene              | 13.636 | 13.639 | 1.007  | 91   | 564      | N.D.      |       |
| 55) m,p-Xylenes               | 13.735 | 13.749 | 1.014  | 106  | 1132     | N.D.      |       |
| 56) o-Xylene                  | 14.180 | 14.184 | 1.047  | 106  | 106      | N.D.      |       |
| 57) Styrene                   | 0.000  | 14.184 | 0.000  |      | 0        | N.D.      |       |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D.      |       |
| 60) Isopropylbenzene          | 14.590 | 14.537 | 0.914  | 105  | 3217     | N.D.      |       |
| 62) 1,1,2,2-Tetrachloroethane | 14.813 | 14.810 | 0.928  | 83   | 106      | N.D.      |       |
| 63) 1,2,3-Trichloropropane    | 14.803 | 14.898 | 0.927  | 110  | 128      | N.D.      |       |
| 64) Bromobenzene              | 0.000  | 14.951 | 0.000  |      | 0        | N.D.      |       |
| 65) n-Propylbenzene           | 0.000  | 14.965 | 0.000  |      | 0m       | N.D.      | d     |
| 66) 1,3,5-Trimethylbenzene    | 0.000  | 15.114 | 0.000  |      | 0        | N.D.      |       |
| 67) 2-Chlorotoluene           | 0.000  | 15.117 | 0.000  |      | 0        | N.D.      |       |
| 68) 4-Chlorotoluene           | 0.000  | 15.216 | 0.000  |      | 0        | N.D.      |       |
| 69) tert-Butylbenzene         | 0.000  | 15.489 | 0.000  |      | 0        | N.D.      |       |
| 70) 1,2,4-Trimethylbenzene    | 15.542 | 15.527 | 0.974  | 105  | 107      | N.D.      |       |
| 71) sec-Butylbenzene          | 0.000  | 15.711 | 0.000  |      | 0        | N.D.      |       |
| 72) 4-Isopropyltoluene        | 15.828 | 15.832 | 0.992  | 119  | 280      | N.D.      |       |
| 73) 1,3-Dichlorobenzene       | 0.000  | 15.902 | 0.000  |      | 0        | N.D.      |       |
| 74) 1,4-Dichlorobenzene       | 15.991 | 15.991 | 1.002  | 146  | 127      | N.D.      |       |
| 75) n-Butylbenzene            | 16.182 | 16.277 | 1.014  | 91   | 112      | N.D.      |       |
| 76) 1,2-Dichlorobenzene       | 0.000  | 16.422 | 0.000  |      | 0        | N.D.      |       |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D.      |       |
| 78) 1,2,4-Trichlorobenzene    | 0.000  | 18.371 | 0.000  |      | 0        | N.D.      |       |
| 79) Hexachlorobutadiene       | 0.000  | 18.548 | 0.000  |      | 0        | N.D.      |       |
| 80) Naphthalene               | 18.769 | 18.762 | 1.176  | 128  | 583      | N.D.      |       |
| 81) 1,2,3-Trichlorobenzene    | 0.000  | 19.116 | 0.000  |      | 0        | N.D.      |       |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D.      |       |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D.      |       |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D.      |       |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D.      |       |
| 87) Isopropyl Alcohol         | 7.182  | 7.175  | 0.692  | 45   | 1767     | N.D.      |       |
| 88) Allyl chloride            | 7.680  | 7.546  | 0.740  | 41   | 266      | N.D.      |       |
| 89) tert-Butyl Alcohol        | 7.670  | 7.673  | 0.739  | 59   | 113      | N.D.      |       |
| 90) Acrylonitrile             | 0.000  | 7.928  | 0.000  |      | 0        | N.D.      |       |
| 91) Isopropyl ether           | 0.000  | 8.483  | 0.000  |      | 0        | N.D.      |       |
| 92) 2-Chloro-1,3-butadiene    | 0.000  | 8.617  | 0.000  |      | 0        | N.D.      |       |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D.      |       |
| 94) Ethyl acetate             | 9.084  | 9.088  | 0.876  | 43   | 1523     | N.D.      |       |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V413.D  
Acq On : 28 Jan 2010 2:40 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114008|946008|1|VOA|1|VOA8260BS|  
Misc : LANTL 5.0g N/A SOIL  
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 29 09:20:01 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.  | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|-------|--------|--------|------|----------|------|-------|
| 95) Propionitrile              | 0.000 | 9.148  | 0.000  |      | 0        | N.D. |       |
| 96) Methacrylonitrile          | 0.000 | 9.332  | 0.000  |      | 0        | N.D. |       |
| 97) Tetrahydrofuran            | 9.477 | 9.466  | 0.913  | 42   | 111      | N.D. |       |
| 98) Isobutyl alcohol           | 0.000 | 9.770  | 0.000  |      | 0        | N.D. |       |
| 99) Methyl tert-amyl ether     | 0.000 | 10.138 | 0.000  |      | 0        | N.D. |       |
| 100) Methyl methacrylate       | 0.000 | 10.969 | 0.000  |      | 0        | N.D. |       |
| 101) 1,4-Dioxane               | 0.000 | 11.089 | 0.000  |      | 0        | N.D. |       |
| 102) 2-Nitropropane            | 0.000 | 11.443 | 0.000  |      | 0        | N.D. |       |
| 104) Ethyl methacrylate        | 0.000 | 12.235 | 0.000  |      | 0        | N.D. |       |
| 106) 1-Chlorohexane            | 0.000 | 13.438 | 0.000  |      | 0        | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 0.000 | 14.573 | 0.000  |      | 0m       | N.D. | d     |
| 108) Cyclohexanone             | 0.000 | 14.693 | 0.000  |      | 0m       | N.D. | d     |
| 109) trans-1,4-Dichloro-2-b... | 0.000 | 14.856 | 0.000  |      | 0m       | N.D. | d     |
| 110) Pentachloroethane         | 0.000 | 15.559 | 0.000  |      | 0        | N.D. |       |
| 111) Benzyl chloride           | 0.000 | 16.100 | 0.000  |      | 0m       | N.D. | d     |
| 112) bis(2-Chloroisopropyl)... | 0.000 | 16.497 | 0.000  |      | 0m       | N.D. | d     |

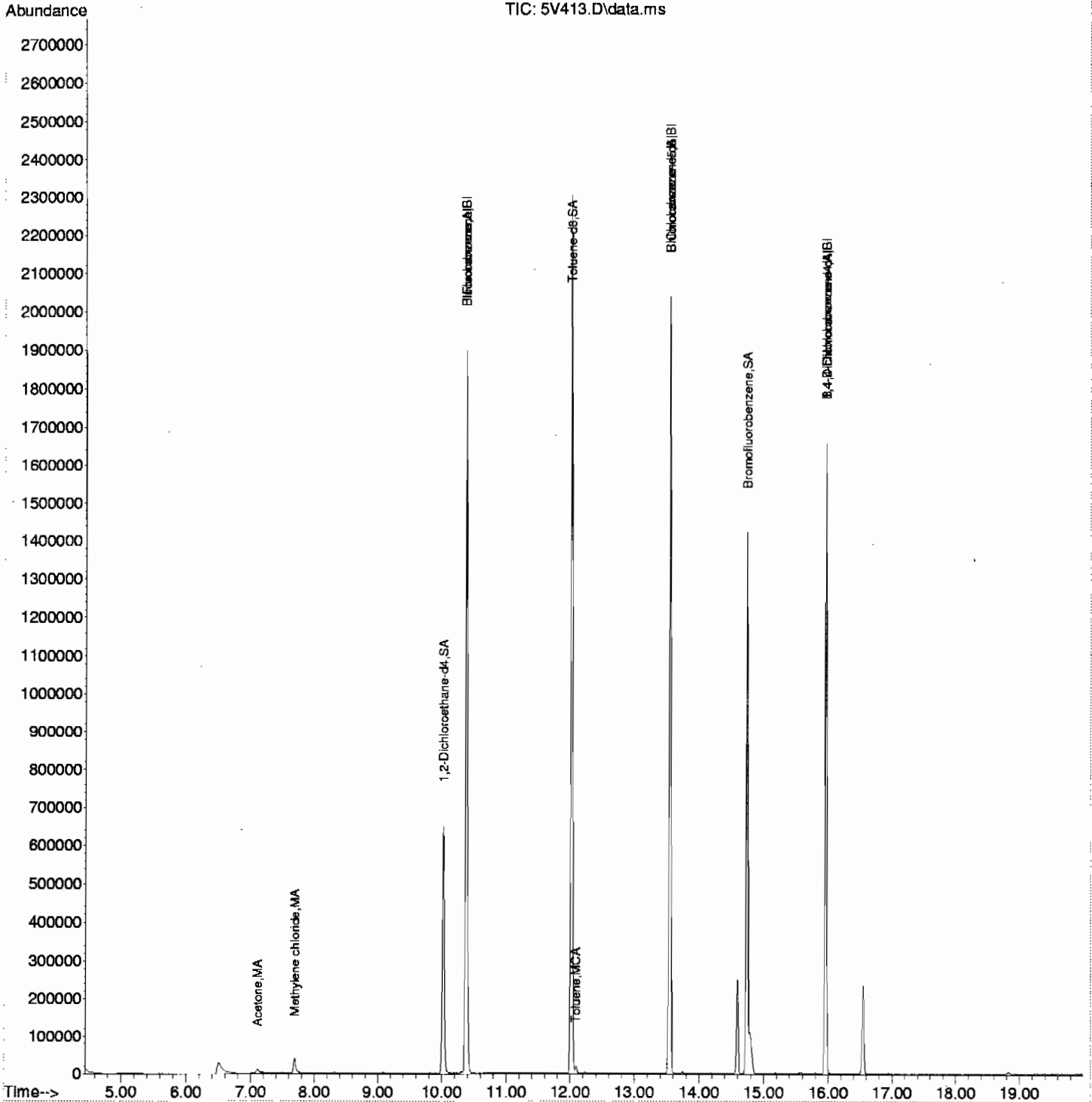
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

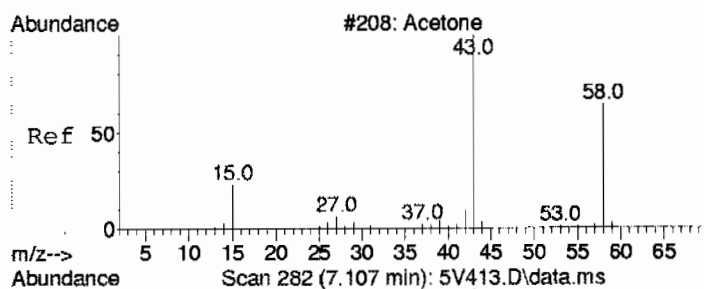
Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V413.D  
Acq On : 28 Jan 2010 2:40 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114008|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 29 09:20:01 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

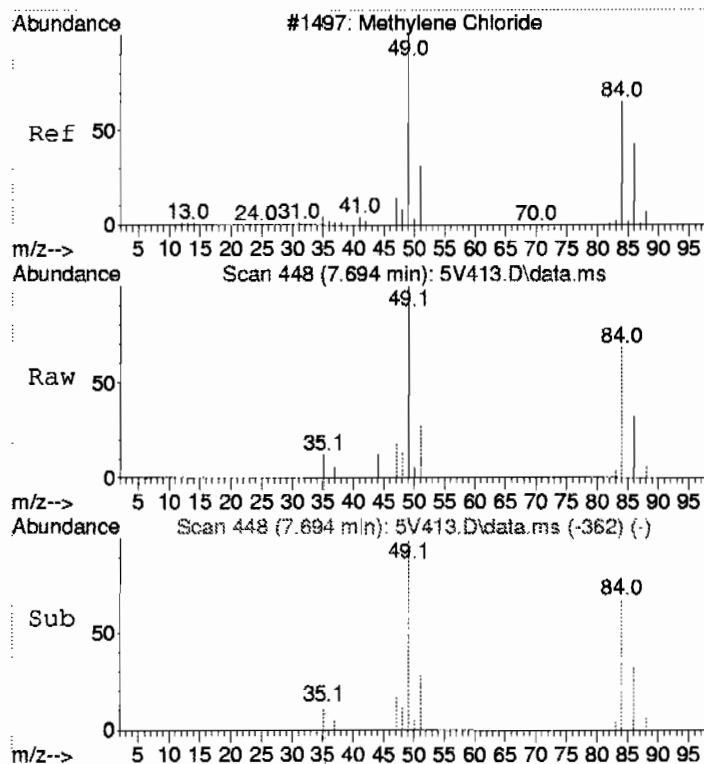
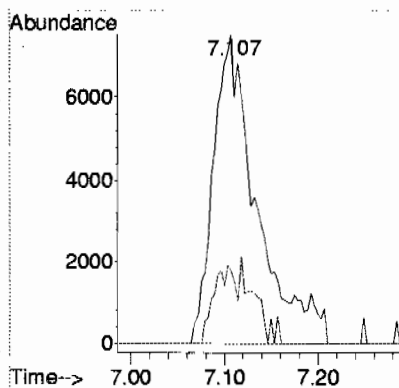
SubList :





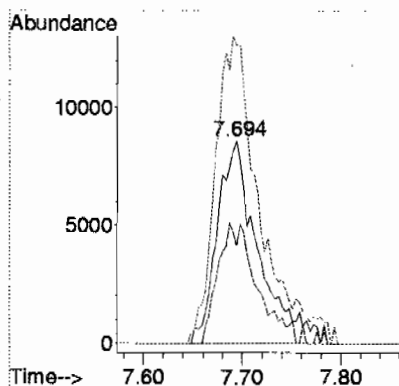
#9  
Acetone  
Concen: 3.66 ug/L  
RT: 7.107 min Scan# 282  
Delta R.T. 0.007 min  
Lab File: 5V413.D  
Acq: 28 Jan 2010 2:40 pm

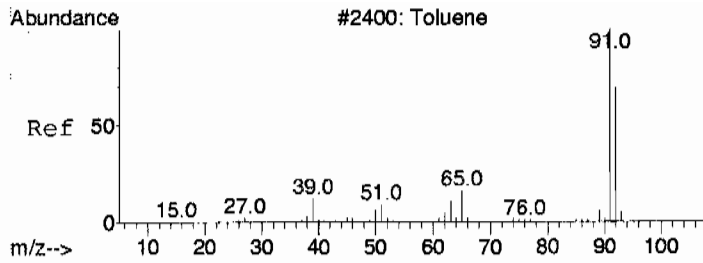
Tgt Ion: 43 Resp: 24153  
Ion Ratio Lower Upper  
43 100  
58 12.8 0.0 59.5



#15  
Methylene chloride  
Concen: 3.30 ug/L  
RT: 7.694 min Scan# 448  
Delta R.T. 0.003 min  
Lab File: 5V413.D  
Acq: 28 Jan 2010 2:40 pm

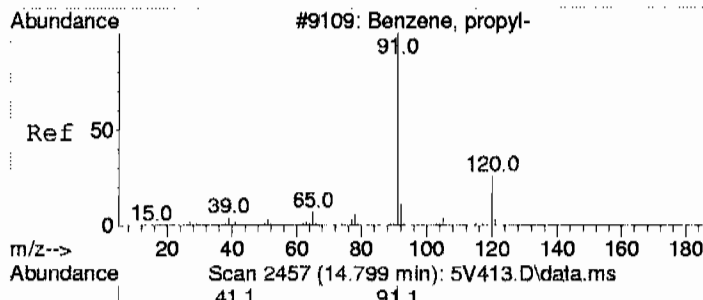
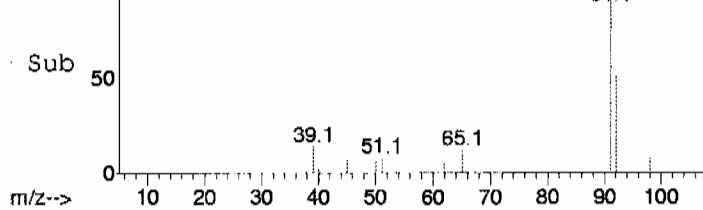
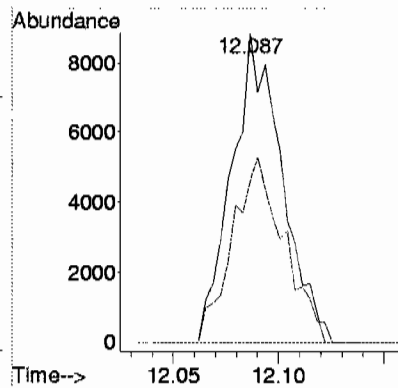
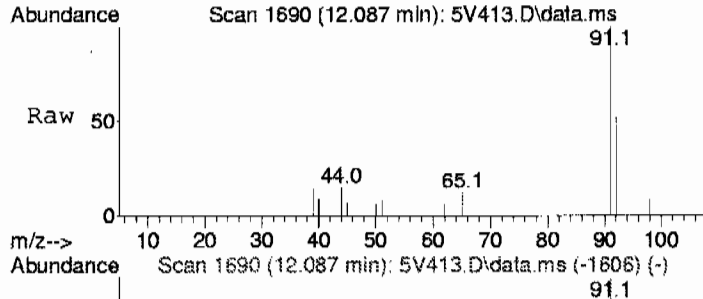
Tgt Ion: 84 Resp: 24755  
Ion Ratio Lower Upper  
84 100  
86 55.9 33.2 93.2  
49 163.7 125.4 185.4





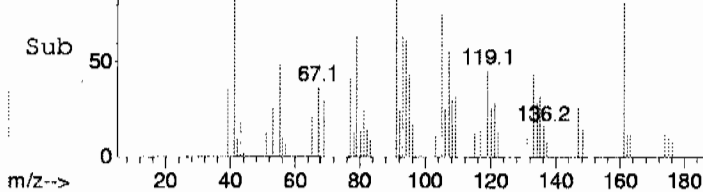
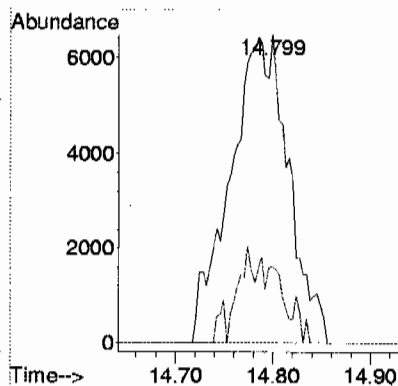
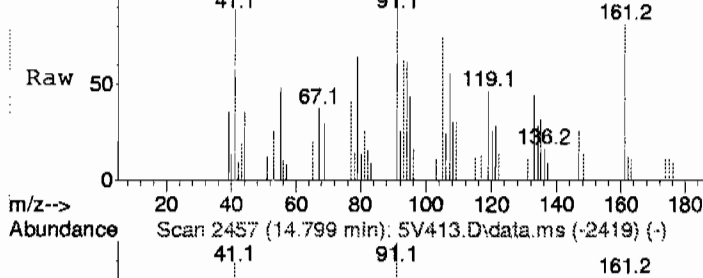
#44  
Toluene  
Concen: 0.55 ug/L  
RT: 12.087 min Scan# 1690  
Delta R.T. -0.003 min  
Lab File: 5V413.D  
Acq: 28 Jan 2010 2:40 pm

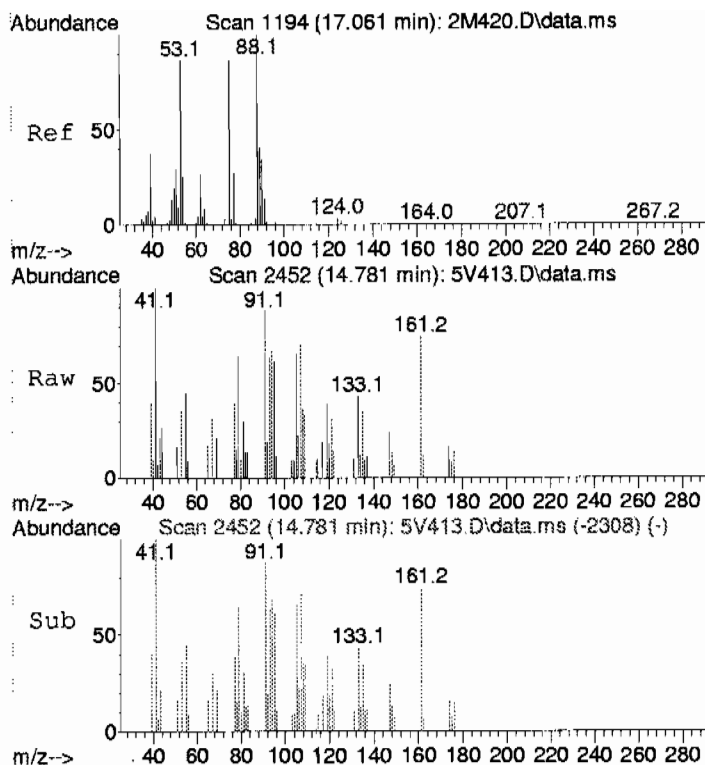
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 62.8  | 28.7  | 88.7  |



#65 BEFORE analyst DELETION  
n-Propylbenzene  
Concen: 1.07 ug/L  
RT: 14.799 min Scan# 2457  
Delta R.T. -0.166 min  
Lab File: 5V413.D  
Acq: 28 Jan 2010 2:40 pm

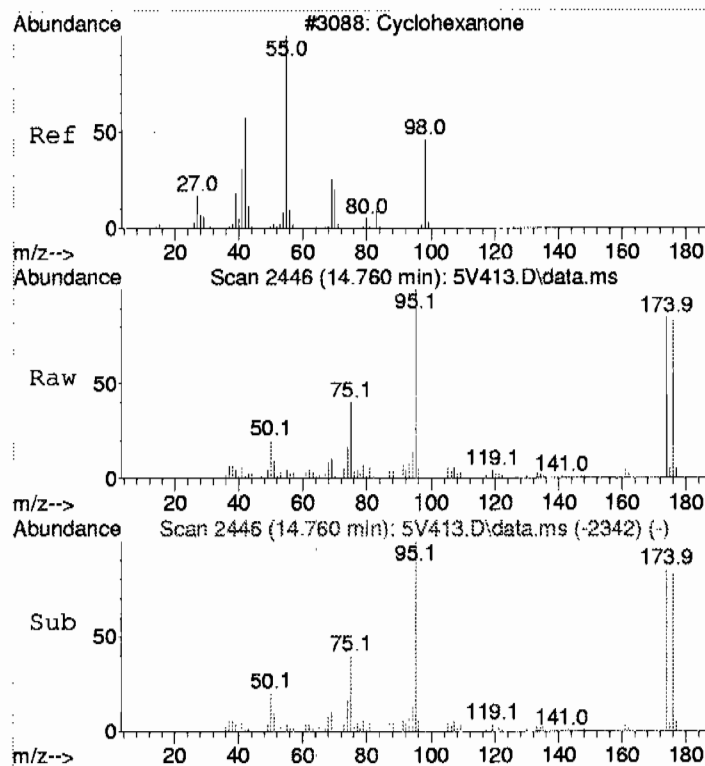
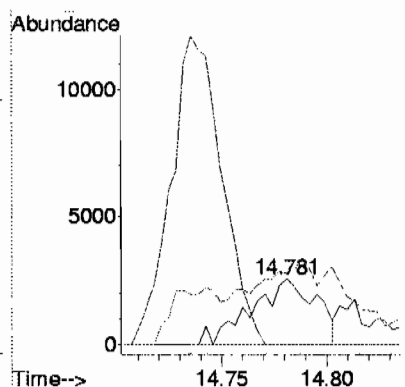
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 120     | 20.6  | 0.0   | 53.6  |





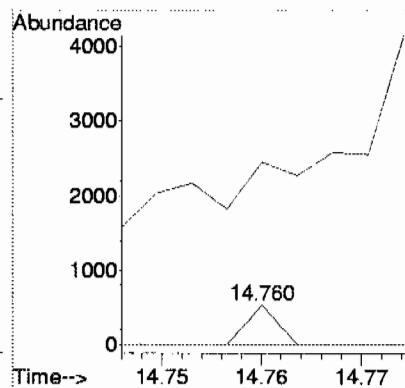
#107 BEFORE analyst DELETION  
 cis-1,4-Dichloro-2-butene  
 Concen: 3.13 ug/L  
 RT: 14.781 min Scan# 2452  
 Delta R.T. 0.208 min  
 Lab File: 5V413.D  
 Acq: 28 Jan 2010 2:40 pm

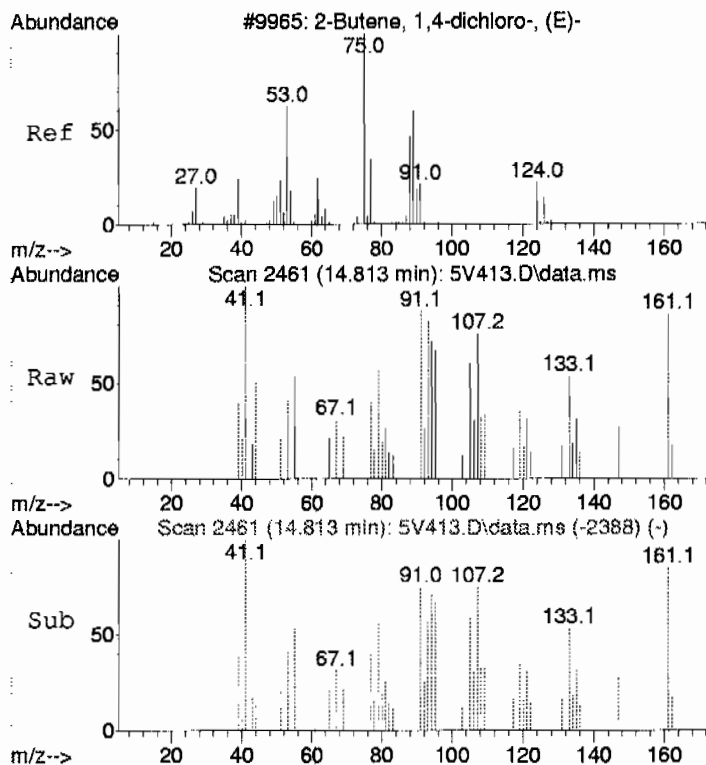
| Tgt Ion | Resp  | Lower | Upper  |
|---------|-------|-------|--------|
| 53      | 100   |       |        |
| 88      | 0.0   | 50.2  | 110.2# |
| 77      | 259.7 | 0.0   | 59.6#  |



#108 BEFORE analyst DELETION  
 Cyclohexanone  
 Concen: 28.30 ug/L  
 RT: 14.760 min Scan# 2446  
 Delta R.T. 0.067 min  
 Lab File: 5V413.D  
 Acq: 28 Jan 2010 2:40 pm

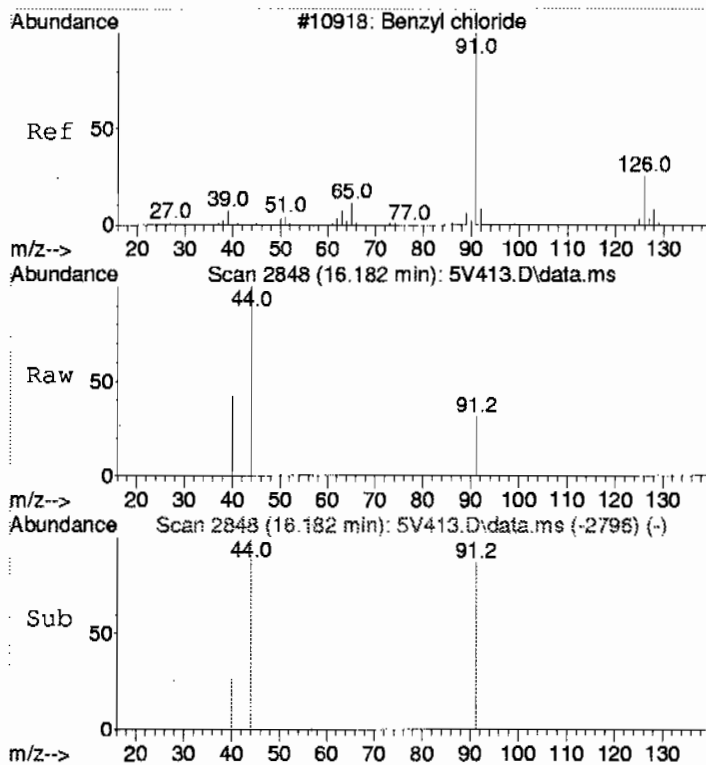
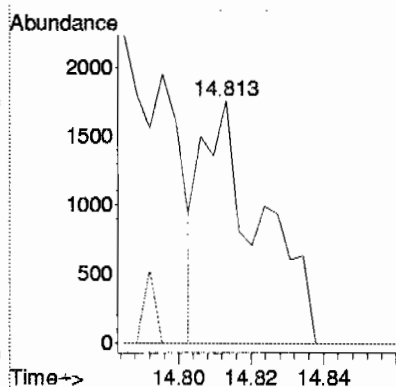
| Tgt Ion | Resp   | Lower | Upper  |
|---------|--------|-------|--------|
| 42      | 100    |       |        |
| 55      | 4393.7 | 104.7 | 164.7# |
| 98      | 0.0    | 21.5  | 81.5#  |





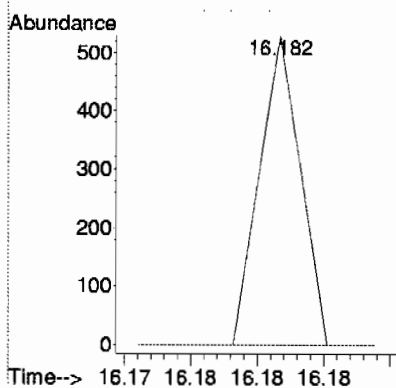
#109 BEFORE analyst DELETION  
trans-1,4-Dichloro-2-butene  
Concen: 1.18 ug/L  
RT: 14.813 min Scan# 2461  
Delta R.T. -0.043 min  
Lab File: 5V413.D  
Acq: 28 Jan 2010 2:40 pm

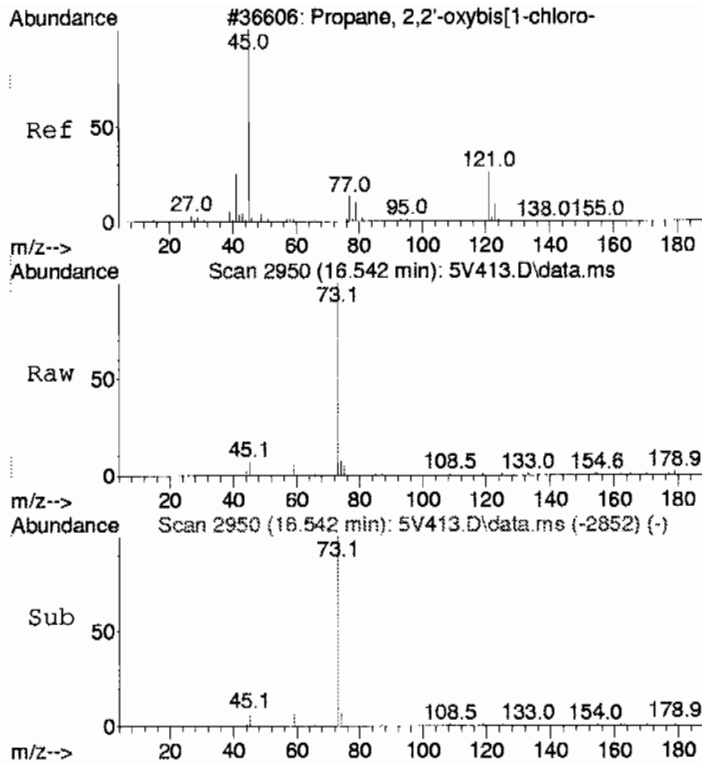
Tgt Ion: 53 Resp: 1969  
Ion Ratio Lower Upper  
53 100  
88 0.0 7.6 67.6#  
75 0.0 86.0 146.0#



#111 BEFORE analyst DELETION  
Benzyl chloride  
Concen: 4.48 ug/L  
RT: 16.182 min Scan# 2848  
Delta R.T. 0.082 min  
Lab File: 5V413.D  
Acq: 28 Jan 2010 2:40 pm

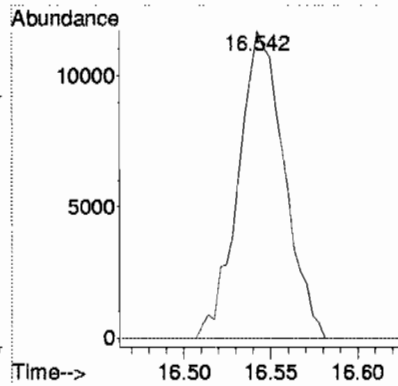
Tgt Ion: 91 Resp: 112  
Ion Ratio Lower Upper  
91 100  
126 0.0 0.0 51.6  
65 0.0 0.0 41.9





#112 BEFORE analyst DELETION  
 bis(2-Chloroisopropyl) ether  
 Concen: 7.01 ug/L  
 RT: 16.542 min Scan# 2950  
 Delta R.T. 0.045 min  
 Lab File: 5V413.D  
 Acq: 28 Jan 2010 2:40 pm

Tgt Ion: 45 Resp: 21377  
 Ion Ratio Lower Upper  
 45 100  
 121 0.0 0.0 49.2





Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V413.D  
Acq On : 28 Jan 2010 2:40 pm  
Operator : DXK1  
Sample : |245114008|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 13 Sample Multiplier: 1

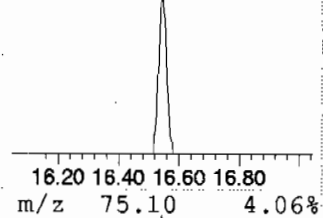
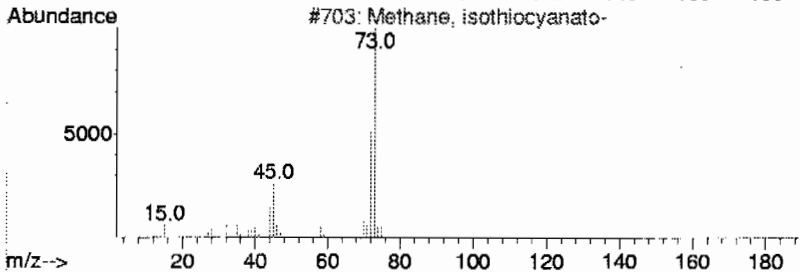
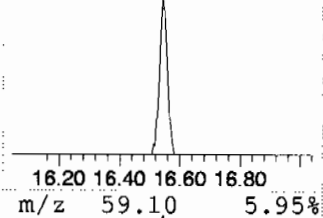
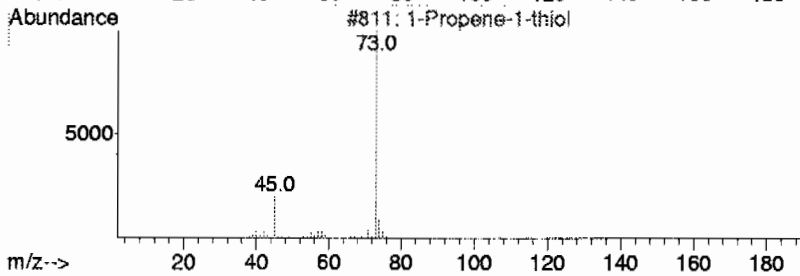
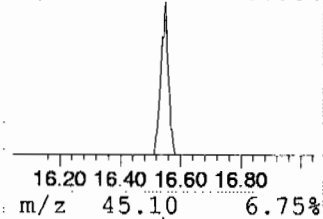
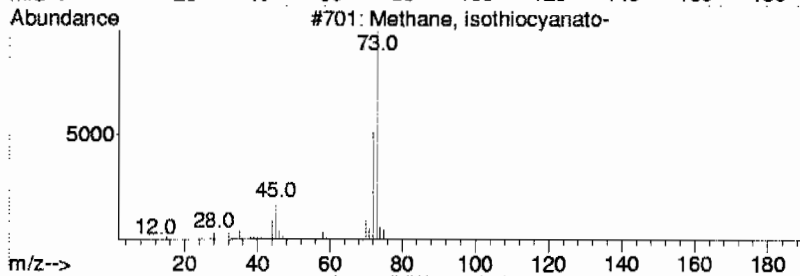
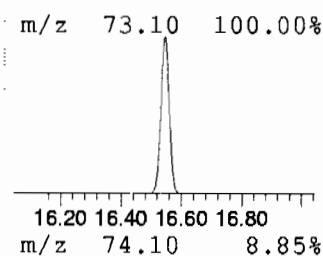
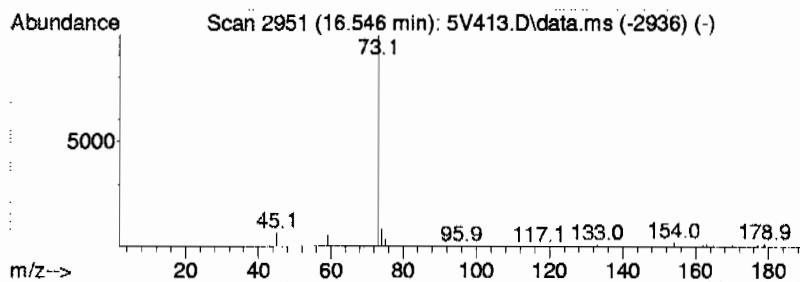
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

\*\*\*\*\*  
Peak Number 1 unknown siloxane Concentration Rank 1

| R.T.      | EstConc                       | Area   | Relative to ISTD         | R.T.        |      |
|-----------|-------------------------------|--------|--------------------------|-------------|------|
| 16.546    | 7.87 ug/L                     | 461272 | B 1,4-Dichlorobenzene-d4 | 15.963      |      |
| Hit# of 5 | Tentative ID                  | MW     | MolForm                  | CAS#        | Qual |
| 1         | Methane, isothiocyanato-      | 73     | C2H3NS                   | 000556-61-6 | 4    |
| 2         | 1-Propene-1-thiol             | 74     | C3H6S                    | 000925-89-3 | 4    |
| 3         | Methane, isothiocyanato-      | 73     | C2H3NS                   | 000556-61-6 | 4    |
| 4         | Methane, isothiocyanato-      | 73     | C2H3NS                   | 000556-61-6 | 4    |
| 5         | Thiocyanic acid, methyl ester | 73     | C2H3NS                   | 000556-64-9 | 4    |



Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V413.D  
Acq On : 28 Jan 2010 2:40 pm  
Operator : DXK1  
Sample : |245114008|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

| TIC Top Hit name | RT     | EstConc | Units | Response | # | RT     | Resp    | Conc |
|------------------|--------|---------|-------|----------|---|--------|---------|------|
| unknown siloxane | 16.546 | 7.9     | ug/L  | 461272   | 6 | 15.963 | 2929620 | 50.0 |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 2

SDG Number: 10-1324  
 Lab Sample ID: 245114009  
 Client ID: RE15-10-8417  
 Batch ID: 946008  
 Run Date: 01/28/2010 15:06  
 Prep Date: 01/28/2009 11:11  
 Data File: 012810V55V414.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 % Moisture: 5.3  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.06   | ug/kg | 0.359   | 1.06    |
| 74-87-3    | Chloromethane               | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 75-01-4    | Vinyl chloride              | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 74-83-9    | Bromomethane                | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 75-00-3    | Chloroethane                | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 67-64-1    | Acetone                     | U         | 5.28   | ug/kg | 1.75    | 5.28    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 74-88-4    | Iodomethane                 | U         | 5.28   | ug/kg | 1.69    | 5.28    |
| 75-09-2    | Methylene chloride          | U         | 5.28   | ug/kg | 2.11    | 5.28    |
| 75-15-0    | Carbon disulfide            | U         | 5.28   | ug/kg | 1.32    | 5.28    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 78-93-3    | 2-Butanone                  | U         | 5.28   | ug/kg | 1.58    | 5.28    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 67-66-3    | Chloroform                  | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 74-97-5    | Bromochloromethane          | U         | 1.06   | ug/kg | 0.349   | 1.06    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 71-43-2    | Benzene                     | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 79-01-6    | Trichloroethylene           | U         | 1.06   | ug/kg | 0.349   | 1.06    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 75-27-4    | Bromodichloromethane        | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 74-95-3    | Dibromomethane              | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.28   | ug/kg | 1.32    | 5.28    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 108-88-3   | Toluene                     | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 591-78-6   | 2-Hexanone                  | U         | 5.28   | ug/kg | 1.58    | 5.28    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 124-48-1   | Dibromochloromethane        | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 108-90-7   | Chlorobenzene               | U         | 1.06   | ug/kg | 0.317   | 1.06    |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114009  
 Client ID: RE15-10-8417  
 Batch ID: 946008  
 Run Date: 01/28/2010 15:06  
 Prep Date: 01/28/2009 11:11  
 Data File: 012810V5SV414.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.1  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 5.3  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.     | Parname                               | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.11   | ug/kg | 0.317   | 2.11    |
| 95-47-6     | o-Xylene                              | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 100-42-5    | Styrene                               | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 75-25-2     | Bromoform                             | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 108-86-1    | Bromobenzene                          | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.28   | ug/kg | 1.69    | 5.28    |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.06   | ug/kg | 0.317   | 1.06    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.06   | ug/kg | 0.317   | 1.06    |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V414.D  
Acq On : 28 Jan 2010 3:06 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114009|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 29 09:20:12 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT         | Rel RT   | QIon | Response | Conc  | Units |           |
|-------------------------------|--------|----------------|----------|------|----------|-------|-------|-----------|
| Internal Standards            |        |                |          |      |          |       |       | Dev (Min) |
| 1) Fluorobenzene              | 10.375 | 10.375         | 1.000    | 96   | 1837252  | 50.00 | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547 | 13.547         | 1.000    | 117  | 1153625  | 50.00 | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.959 | 15.962         | 1.000    | 152  | 457982   | 50.00 | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.375 | 10.375         | 1.000    | 96   | 1837252  | 50.00 | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547 | 13.547         | 1.000    | 117  | 1153625  | 50.00 | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.959 | 15.962         | 1.000    | 152  | 457982   | 50.00 | ug/L  | 0.00      |
| System Monitoring Compounds   |        |                |          |      |          |       |       | Dev (Min) |
| 29) 1,2-Dichloroethane-d4     | 10.021 | 10.021         | 0.966    | 65   | 456187   | 53.42 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 131 | Recovery | =    | 106.84%  |       |       |           |
| 43) Toluene-d8                | 12.016 | 12.016         | 0.887    | 98   | 1620836  | 51.52 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 75 - 129 | Recovery | =    | 103.04%  |       |       |           |
| 61) Bromofluorobenzene        | 14.739 | 14.739         | 0.924    | 95   | 528718   | 60.50 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 133 | Recovery | =    | 121.00%  |       |       |           |
| Target Compounds              |        |                |          |      |          |       |       | QValue    |
| 2) Dichlorodifluoromethane    | 0.000  | 4.689          | 0.000    |      | 0        | N.D.  |       |           |
| 3) Chloromethane              | 5.182  | 5.051          | 0.499    | 50   | 165      | N.D.  |       |           |
| 4) Vinyl chloride             | 0.000  | 5.283          | 0.000    |      | 0        | N.D.  |       |           |
| 5) Bromomethane               | 0.000  | 5.877          | 0.000    |      | 0        | N.D.  |       |           |
| 6) Chloroethane               | 0.000  | 6.018          | 0.000    |      | 0        | N.D.  |       |           |
| 7) Trichlorofluoromethane     | 0.000  | 6.391          | 0.000    |      | 0        | N.D.  |       |           |
| 8) Ethyl ether                | 0.000  | 6.733          | 0.000    |      | 0        | N.D.  |       |           |
| 9) Acetone                    | 7.118  | 7.100          | 0.686    | 43   | 2951     | N.D.  |       |           |
| 10) 1,1-Dichloroethylene      | 0.000  | 7.125          | 0.000    |      | 0        | N.D.  |       |           |
| 11) Iodomethane               | 0.000  | 7.373          | 0.000    |      | 0        | N.D.  |       |           |
| 12) Acetonitrile              | 7.687  | 7.450          | 0.741    | 41   | 107      | N.D.  |       |           |
| 13) Methyl acetate            | 7.486  | 7.493          | 0.722    | 43   | 130      | N.D.  |       |           |
| 14) Carbon disulfide          | 7.507  | 7.511          | 0.724    | 76   | 255      | N.D.  |       |           |
| 15) Methylene chloride        | 7.691  | 7.691          | 0.741    | 84   | 9646     | N.D.  |       |           |
| 16) tert-Butyl methyl ether   | 0.000  | 7.984          | 0.000    |      | 0        | N.D.  |       |           |
| 17) trans-1,2-Dichloroethy... | 0.000  | 8.030          | 0.000    |      | 0        | N.D.  |       |           |
| 18) Vinyl acetate             | 8.320  | 8.458          | 0.802    | 43   | 1438     | N.D.  |       |           |
| 19) 1,1-Dichloroethane        | 0.000  | 8.511          | 0.000    |      | 0        | N.D.  |       |           |
| 20) 2-Butanone                | 9.095  | 9.077          | 0.877    | 43   | 108      | N.D.  |       |           |
| 21) cis-1,2-Dichloroethylene  | 0.000  | 9.144          | 0.000    |      | 0        | N.D.  |       |           |
| 22) 2,2-Dichloropropane       | 0.000  | 9.173          | 0.000    |      | 0        | N.D.  |       |           |
| 23) Bromochloromethane        | 0.000  | 9.417          | 0.000    |      | 0        | N.D.  |       |           |
| 24) Chloroform                | 0.000  | 9.452          | 0.000    |      | 0        | N.D.  |       |           |
| 25) 1,1,1-Trichloroethane     | 0.000  | 9.735          | 0.000    |      | 0        | N.D.  |       |           |
| 26) Cyclohexane               | 0.000  | 9.830          | 0.000    |      | 0        | N.D.  |       |           |
| 27) 1,1-Dichloropropene       | 0.000  | 9.887          | 0.000    |      | 0        | N.D.  |       |           |
| 28) Carbon tetrachloride      | 0.000  | 9.929          | 0.000    |      | 0        | N.D.  |       |           |
| 30) 1,2-Dichloroethane        | 0.000  | 10.103         | 0.000    |      | 0        | N.D.  |       |           |
| 31) Benzene                   | 10.135 | 10.127         | 0.977    | 78   | 111      | N.D.  |       |           |
| 32) Cyclohexene               | 0.000  | 10.248         | 0.000    |      | 0        | N.D.  |       |           |
| 33) n-Butyl alcohol           | 0.000  | 10.460         | 0.000    |      | 0        | N.D.  |       |           |
| 34) Trichloroethylene         | 0.000  | 10.768         | 0.000    |      | 0        | N.D.  |       |           |
| 35) 1,2-Dichloropropane       | 0.000  | 11.004         | 0.000    |      | 0        | N.D.  |       |           |
| 36) Methylcyclohexane         | 0.000  | 11.019         | 0.000    |      | 0        | N.D.  |       |           |
| 37) Dibromomethane            | 0.000  | 11.146         | 0.000    |      | 0        | N.D.  |       |           |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V414.D  
Acq On : 28 Jan 2010 3:06 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114009|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 29 09:20:12 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|-------------------------------|--------|--------|--------|------|----------|------|-------|
| 38) Bromodichloromethane      | 0.000  | 11.256 | 0.000  |      | 0        | N.D. |       |
| 39) 2-Chloroethylvinyl ether  | 0.000  | 11.468 | 0.000  |      | 0        | N.D. |       |
| 40) cis-1,3-Dichloropropylene | 0.000  | 11.705 | 0.000  |      | 0        | N.D. |       |
| 42) 4-Methyl-2-pentanone      | 0.000  | 11.786 | 0.000  |      | 0        | N.D. |       |
| 44) Toluene                   | 12.090 | 12.090 | 0.892  | 91   | 3577     | N.D. |       |
| 45) trans-1,3-Dichloroprop... | 0.000  | 12.239 | 0.000  |      | 0        | N.D. |       |
| 46) 1,1,2-Trichloroethane     | 0.000  | 12.465 | 0.000  |      | 0        | N.D. |       |
| 47) 2-Hexanone                | 0.000  | 12.631 | 0.000  |      | 0        | N.D. |       |
| 48) 1,3-Dichloropropane       | 0.000  | 12.656 | 0.000  |      | 0        | N.D. |       |
| 49) Tetrachloroethylene       | 12.691 | 12.691 | 0.937  | 164  | 1414     | N.D. |       |
| 50) Dibromochloromethane      | 12.681 | 12.928 | 0.936  | 129  | 997      | N.D. |       |
| 51) 1,2-Dibromoethane         | 0.000  | 13.094 | 0.000  |      | 0        | N.D. |       |
| 52) Chlorobenzene             | 0.000  | 13.579 | 0.000  |      | 0        | N.D. |       |
| 53) 1,1,1,2-Tetrachloroethane | 0.000  | 13.636 | 0.000  |      | 0        | N.D. |       |
| 54) Ethylbenzene              | 13.636 | 13.639 | 1.007  | 91   | 1186     | N.D. |       |
| 55) m,p-Xylenes               | 13.745 | 13.749 | 1.015  | 106  | 1858     | N.D. |       |
| 56) o-Xylene                  | 14.177 | 14.184 | 1.046  | 106  | 397      | N.D. |       |
| 57) Styrene                   | 0.000  | 14.184 | 0.000  |      | 0        | N.D. |       |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D. |       |
| 60) Isopropylbenzene          | 14.601 | 14.537 | 0.915  | 105  | 2321     | N.D. |       |
| 62) 1,1,2,2-Tetrachloroethane | 0.000  | 14.810 | 0.000  |      | 0        | N.D. |       |
| 63) 1,2,3-Trichloropropane    | 0.000  | 14.898 | 0.000  |      | 0        | N.D. |       |
| 64) Bromobenzene              | 0.000  | 14.951 | 0.000  |      | 0        | N.D. |       |
| 65) n-Propylbenzene           | 14.951 | 14.965 | 0.937  | 91   | 114      | N.D. |       |
| 66) 1,3,5-Trimethylbenzene    | 0.000  | 15.114 | 0.000  |      | 0        | N.D. |       |
| 67) 2-Chlorotoluene           | 0.000  | 15.117 | 0.000  |      | 0        | N.D. |       |
| 68) 4-Chlorotoluene           | 0.000  | 15.216 | 0.000  |      | 0        | N.D. |       |
| 69) tert-Butylbenzene         | 0.000  | 15.489 | 0.000  |      | 0        | N.D. |       |
| 70) 1,2,4-Trimethylbenzene    | 15.584 | 15.527 | 0.977  | 105  | 331      | N.D. |       |
| 71) sec-Butylbenzene          | 15.584 | 15.711 | 0.977  | 105  | 331      | N.D. |       |
| 72) 4-Isopropyltoluene        | 15.835 | 15.832 | 0.992  | 119  | 963      | N.D. |       |
| 73) 1,3-Dichlorobenzene       | 0.000  | 15.902 | 0.000  |      | 0        | N.D. |       |
| 74) 1,4-Dichlorobenzene       | 15.987 | 15.991 | 1.002  | 146  | 106      | N.D. |       |
| 75) n-Butylbenzene            | 0.000  | 16.277 | 0.000  |      | 0        | N.D. |       |
| 76) 1,2-Dichlorobenzene       | 0.000  | 16.422 | 0.000  |      | 0        | N.D. |       |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D. |       |
| 78) 1,2,4-Trichlorobenzene    | 0.000  | 18.371 | 0.000  |      | 0        | N.D. |       |
| 79) Hexachlorobutadiene       | 0.000  | 18.548 | 0.000  |      | 0        | N.D. |       |
| 80) Naphthalene               | 18.762 | 18.762 | 1.176  | 128  | 427      | N.D. |       |
| 81) 1,2,3-Trichlorobenzene    | 0.000  | 19.116 | 0.000  |      | 0        | N.D. |       |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D. |       |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D. |       |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D. |       |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D. |       |
| 87) Isopropyl Alcohol         | 0.000  | 7.175  | 0.000  |      | 0        | N.D. |       |
| 88) Allyl chloride            | 7.687  | 7.546  | 0.741  | 41   | 107      | N.D. |       |
| 89) tert-Butyl Alcohol        | 0.000  | 7.673  | 0.000  |      | 0        | N.D. |       |
| 90) Acrylonitrile             | 0.000  | 7.928  | 0.000  |      | 0        | N.D. |       |
| 91) Isopropyl ether           | 0.000  | 8.483  | 0.000  |      | 0        | N.D. |       |
| 92) 2-Chloro-1,3-butadiene    | 0.000  | 8.617  | 0.000  |      | 0        | N.D. |       |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D. |       |
| 94) Ethyl acetate             | 9.095  | 9.088  | 0.877  | 43   | 108      | N.D. |       |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V414.D  
Acq On : 28 Jan 2010 3:06 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114009|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 29 09:20:12 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|--------|--------|--------|------|----------|------|-------|
| 95) Propionitrile              | 0.000  | 9.148  | 0.000  |      | 0        | N.D. |       |
| 96) Methacrylonitrile          | 0.000  | 9.332  | 0.000  |      | 0        | N.D. |       |
| 97) Tetrahydrofuran            | 0.000  | 9.466  | 0.000  |      | 0        | N.D. |       |
| 98) Isobutyl alcohol           | 0.000  | 9.770  | 0.000  |      | 0        | N.D. |       |
| 99) Methyl tert-amyl ether     | 0.000  | 10.138 | 0.000  |      | 0        | N.D. |       |
| 100) Methyl methacrylate       | 0.000  | 10.969 | 0.000  |      | 0        | N.D. |       |
| 101) 1,4-Dioxane               | 0.000  | 11.089 | 0.000  |      | 0        | N.D. |       |
| 102) 2-Nitropropane            | 0.000  | 11.443 | 0.000  |      | 0        | N.D. |       |
| 104) Ethyl methacrylate        | 0.000  | 12.235 | 0.000  |      | 0        | N.D. |       |
| 106) 1-Chlorohexane            | 0.000  | 13.438 | 0.000  |      | 0        | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 14.757 | 14.573 | 0.925  | 53   | 141      | N.D. |       |
| 108) Cyclohexanone             | 0.000  | 14.693 | 0.000  |      | 0        | N.D. |       |
| 109) trans-1,4-Dichloro-2-b... | 14.767 | 14.856 | 0.925  | 53   | 124      | N.D. |       |
| 110) Pentachloroethane         | 0.000  | 15.559 | 0.000  |      | 0        | N.D. |       |
| 111) Benzyl chloride           | 0.000  | 16.100 | 0.000  |      | 0        | N.D. |       |
| 112) bis(2-Chloroisopropyl)... | 0.000  | 16.497 | 0.000  |      | 0m       | N.D. | d     |

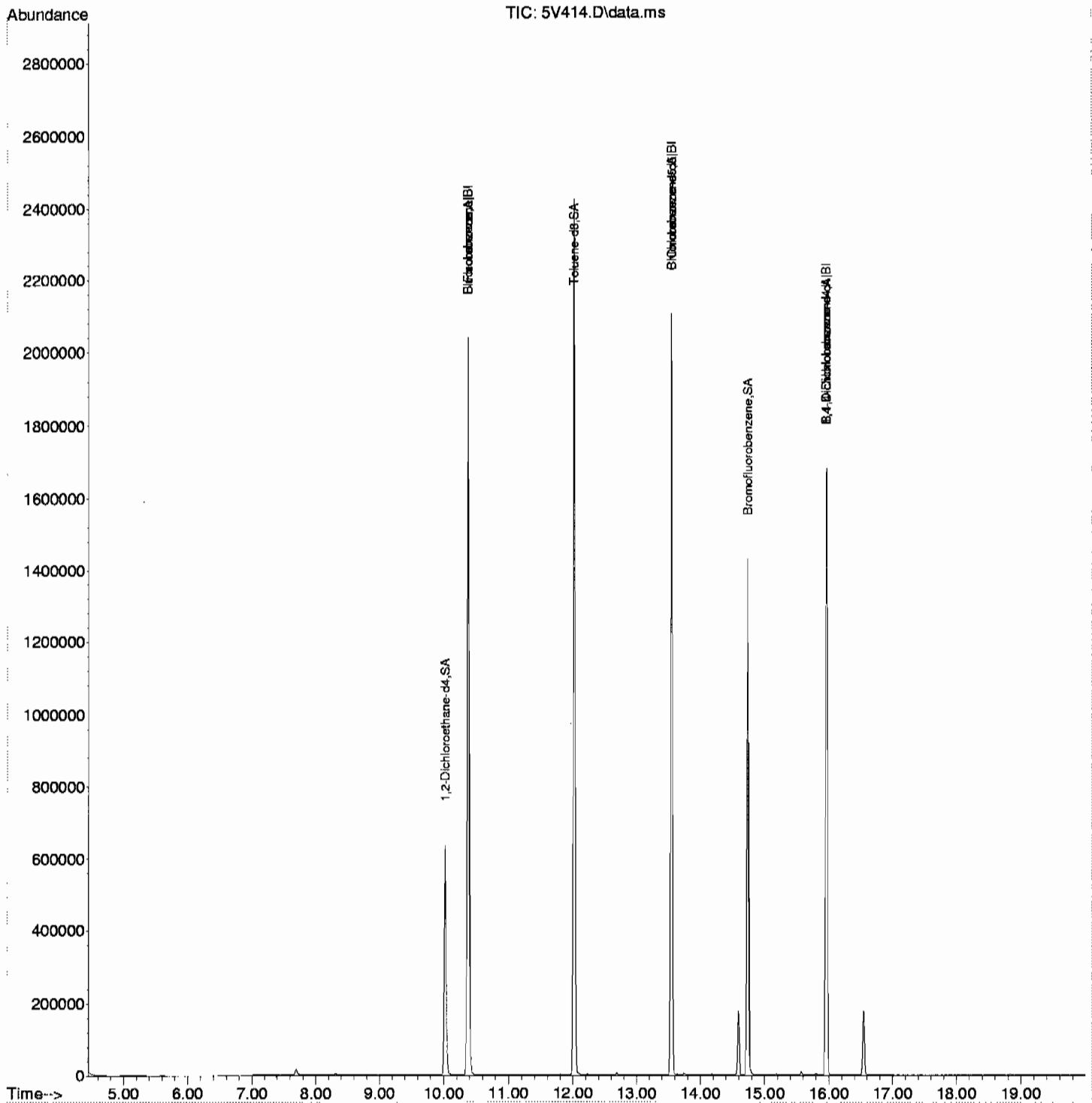
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

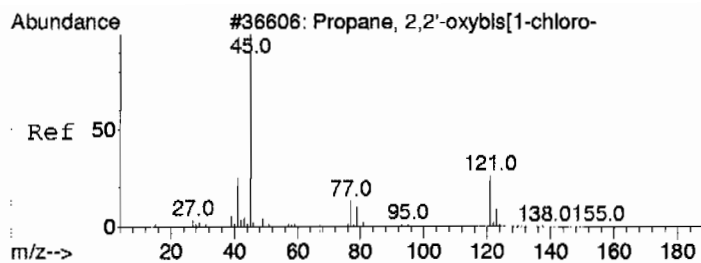
Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V414.D  
Acq On : 28 Jan 2010 3:06 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114009|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 29 09:20:12 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

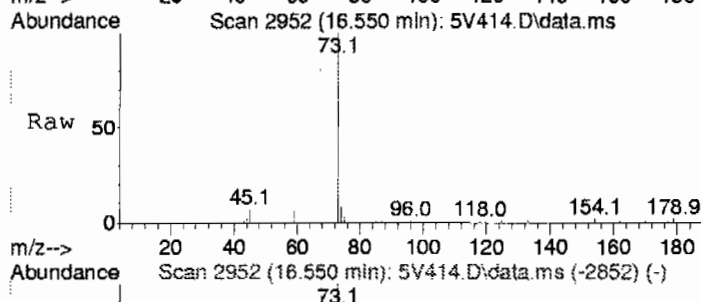
SubList :



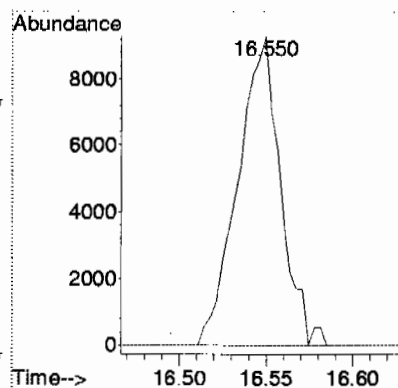
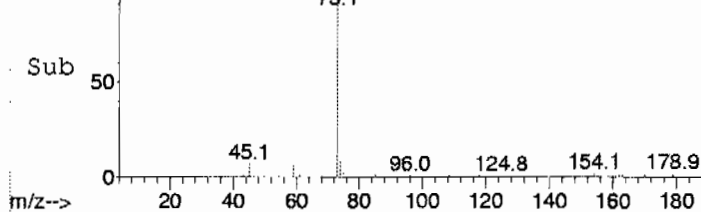




#112 BEFORE analyst DELETION  
 bis(2-Chloroisopropyl)ether  
 Concen: 5.21 ug/L  
 RT: 16.550 min Scan# 2952  
 Delta R.T. 0.053 min  
 Lab File: 5V414.D  
 Acq: 28 Jan 2010 3:06 pm



Tgt Ion: 45 Resp: 15886  
 Ion Ratio Lower Upper  
 45 100  
 121 0.0 0.0 49.2



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V414.D  
Acq On : 28 Jan 2010 3:06 pm  
Operator : DXK1  
Sample : |245114009|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V414.D  
Acq On : 28 Jan 2010 3:06 pm  
Operator : DXK1  
Sample : |245114009|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

| TIC Top Hit name | RT | EstConc | Units | Response | ---Internal Standard--- |    |           |
|------------------|----|---------|-------|----------|-------------------------|----|-----------|
|                  |    |         |       |          | #                       | RT | Resp Conc |

---

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 2

SDG Number: 10-1324  
 Lab Sample ID: 245114010

Client ID: RE15-10-8423  
 Batch ID: 946008  
 Run Date: 01/28/2010 15:32  
 Prep Date: 01/28/2009 11:12  
 Data File: 012810V55V415.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 9.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.10   | ug/kg | 0.375   | 1.10    |
| 74-87-3    | Chloromethane               | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 75-01-4    | Vinyl chloride              | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 74-83-9    | Bromomethane                | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 75-00-3    | Chloroethane                | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 67-64-1    | Acetone                     | U         | 5.52   | ug/kg | 1.83    | 5.52    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 74-88-4    | Iodomethane                 | U         | 5.52   | ug/kg | 1.77    | 5.52    |
| 75-09-2    | Methylene chloride          | U         | 5.52   | ug/kg | 2.21    | 5.52    |
| 75-15-0    | Carbon disulfide            | U         | 5.52   | ug/kg | 1.38    | 5.52    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 78-93-3    | 2-Butanone                  | U         | 5.52   | ug/kg | 1.65    | 5.52    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 67-66-3    | Chloroform                  | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 74-97-5    | Bromochloromethane          | U         | 1.10   | ug/kg | 0.364   | 1.10    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 71-43-2    | Benzene                     | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 79-01-6    | Trichloroethylene           | U         | 1.10   | ug/kg | 0.364   | 1.10    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 75-27-4    | Bromodichloromethane        | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 74-95-3    | Dibromomethane              | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.52   | ug/kg | 1.38    | 5.52    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 108-88-3   | Toluene                     | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 591-78-6   | 2-Hexanone                  | U         | 5.52   | ug/kg | 1.65    | 5.52    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 124-48-1   | Dibromochloromethane        | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 108-90-7   | Chlorobenzene               | U         | 1.10   | ug/kg | 0.331   | 1.10    |

**Volatile  
Certificate of Analysis  
Sample Summary**

Page 2 of 2

SDG Number: 10-1324  
Lab Sample ID: 245114010  
  
Client ID: RE15-10-8423  
Batch ID: 946008  
Run Date: 01/28/2010 15:32  
Prep Date: 01/28/2009 11:12  
Data File: 012810V55V415.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
% Moisture: 9.4  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.21   | ug/kg | 0.331   | 2.21    |
| 95-47-6     | o-Xylene                              | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 100-42-5    | Styrene                               | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 75-25-2     | Bromoform                             | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 108-86-1    | Bromobenzene                          | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.52   | ug/kg | 1.77    | 5.52    |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.10   | ug/kg | 0.331   | 1.10    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.10   | ug/kg | 0.331   | 1.10    |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V415.D  
Acq On : 28 Jan 2010 3:32 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114010|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 29 09:20:20 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT         | Rel RT   | QIon | Response | Conc  | Units |           |
|-------------------------------|--------|----------------|----------|------|----------|-------|-------|-----------|
| Internal Standards            |        |                |          |      |          |       |       | Dev (Min) |
| 1) Fluorobenzene              | 10.375 | 10.375         | 1.000    | 96   | 1036864  | 50.00 | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547 | 13.547         | 1.000    | 117  | 612351   | 50.00 | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.963 | 15.962         | 1.000    | 152  | 226364   | 50.00 | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.375 | 10.375         | 1.000    | 96   | 1036864  | 50.00 | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547 | 13.547         | 1.000    | 117  | 612351   | 50.00 | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.963 | 15.962         | 1.000    | 152  | 226364   | 50.00 | ug/L  | 0.00      |
| System Monitoring Compounds   |        |                |          |      |          |       |       | Dev (Min) |
| 29) 1,2-Dichloroethane-d4     | 10.022 | 10.021         | 0.966    | 65   | 280163   | 58.14 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 131 | Recovery | =    | 116.28%  |       |       |           |
| 43) Toluene-d8                | 12.020 | 12.016         | 0.887    | 98   | 884364   | 52.95 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 75 - 129 | Recovery | =    | 105.90%  |       |       |           |
| 61) Bromofluorobenzene        | 14.739 | 14.739         | 0.923    | 95   | 276289   | 63.96 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 133 | Recovery | =    | 127.92%  |       |       |           |
| Target Compounds              |        |                |          |      |          |       |       | QValue    |
| 2) Dichlorodifluoromethane    | 0.000  | 4.689          | 0.000    |      | 0        | N.D.  |       |           |
| 3) Chloromethane              | 0.000  | 5.051          | 0.000    |      | 0        | N.D.  |       |           |
| 4) Vinyl chloride             | 0.000  | 5.283          | 0.000    |      | 0        | N.D.  |       |           |
| 5) Bromomethane               | 0.000  | 5.877          | 0.000    |      | 0        | N.D.  |       |           |
| 6) Chloroethane               | 0.000  | 6.018          | 0.000    |      | 0        | N.D.  |       |           |
| 7) Trichlorofluoromethane     | 0.000  | 6.391          | 0.000    |      | 0        | N.D.  |       |           |
| 8) Ethyl ether                | 0.000  | 6.733          | 0.000    |      | 0        | N.D.  |       |           |
| 9) Acetone                    | 7.100  | 7.100          | 0.684    | 43   | 5327     | N.D.  |       |           |
| 10) 1,1-Dichloroethylene      | 0.000  | 7.125          | 0.000    |      | 0        | N.D.  |       |           |
| 11) Iodomethane               | 0.000  | 7.373          | 0.000    |      | 0        | N.D.  |       |           |
| 12) Acetonitrile              | 0.000  | 7.450          | 0.000    |      | 0        | N.D.  |       |           |
| 13) Methyl acetate            | 7.497  | 7.493          | 0.723    | 43   | 116      | N.D.  |       |           |
| 14) Carbon disulfide          | 7.514  | 7.511          | 0.724    | 76   | 367      | N.D.  |       |           |
| 15) Methylene chloride        | 7.691  | 7.691          | 0.741    | 84   | 906      | N.D.  |       |           |
| 16) tert-Butyl methyl ether   | 0.000  | 7.984          | 0.000    |      | 0        | N.D.  |       |           |
| 17) trans-1,2-Dichloroethy... | 0.000  | 8.030          | 0.000    |      | 0        | N.D.  |       |           |
| 18) Vinyl acetate             | 8.310  | 8.458          | 0.801    | 43   | 110      | N.D.  |       |           |
| 19) 1,1-Dichloroethane        | 0.000  | 8.511          | 0.000    |      | 0        | N.D.  |       |           |
| 20) 2-Butanone                | 0.000  | 9.077          | 0.000    |      | 0        | N.D.  |       |           |
| 21) cis-1,2-Dichloroethylene  | 0.000  | 9.144          | 0.000    |      | 0        | N.D.  |       |           |
| 22) 2,2-Dichloropropane       | 0.000  | 9.173          | 0.000    |      | 0        | N.D.  |       |           |
| 23) Bromochloromethane        | 0.000  | 9.417          | 0.000    |      | 0        | N.D.  |       |           |
| 24) Chloroform                | 0.000  | 9.452          | 0.000    |      | 0        | N.D.  |       |           |
| 25) 1,1,1-Trichloroethane     | 0.000  | 9.735          | 0.000    |      | 0        | N.D.  |       |           |
| 26) Cyclohexane               | 0.000  | 9.830          | 0.000    |      | 0        | N.D.  |       |           |
| 27) 1,1-Dichloropropene       | 0.000  | 9.887          | 0.000    |      | 0        | N.D.  |       |           |
| 28) Carbon tetrachloride      | 0.000  | 9.929          | 0.000    |      | 0        | N.D.  |       |           |
| 30) 1,2-Dichloroethane        | 0.000  | 10.103         | 0.000    |      | 0        | N.D.  |       |           |
| 31) Benzene                   | 10.365 | 10.127         | 0.999    | 78   | 373      | N.D.  |       |           |
| 32) Cyclohexene               | 0.000  | 10.248         | 0.000    |      | 0        | N.D.  |       |           |
| 33) n-Butyl alcohol           | 0.000  | 10.460         | 0.000    |      | 0        | N.D.  |       |           |
| 34) Trichloroethylene         | 0.000  | 10.768         | 0.000    |      | 0        | N.D.  |       |           |
| 35) 1,2-Dichloropropane       | 0.000  | 11.004         | 0.000    |      | 0        | N.D.  |       |           |
| 36) Methylcyclohexane         | 0.000  | 11.019         | 0.000    |      | 0        | N.D.  |       |           |
| 37) Dibromomethane            | 0.000  | 11.146         | 0.000    |      | 0        | N.D.  |       |           |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V415.D  
Acq On : 28 Jan 2010 3:32 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114010|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 29 09:20:20 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|-------------------------------|--------|--------|--------|------|----------|------|-------|
| 38) Bromodichloromethane      | 0.000  | 11.256 | 0.000  |      | 0        | N.D. |       |
| 39) 2-Chloroethylvinyl ether  | 0.000  | 11.468 | 0.000  |      | 0        | N.D. |       |
| 40) cis-1,3-Dichloropropylene | 0.000  | 11.705 | 0.000  |      | 0        | N.D. |       |
| 42) 4-Methyl-2-pentanone      | 0.000  | 11.786 | 0.000  |      | 0        | N.D. |       |
| 44) Toluene                   | 12.087 | 12.090 | 0.892  | 91   | 2666     | N.D. |       |
| 45) trans-1,3-Dichloroprop... | 0.000  | 12.239 | 0.000  |      | 0        | N.D. |       |
| 46) 1,1,2-Trichloroethane     | 0.000  | 12.465 | 0.000  |      | 0        | N.D. |       |
| 47) 2-Hexanone                | 0.000  | 12.631 | 0.000  |      | 0        | N.D. |       |
| 48) 1,3-Dichloropropane       | 0.000  | 12.656 | 0.000  |      | 0        | N.D. |       |
| 49) Tetrachloroethylene       | 12.691 | 12.691 | 0.937  | 164  | 157      | N.D. |       |
| 50) Dibromochloromethane      | 12.684 | 12.928 | 0.936  | 129  | 405      | N.D. |       |
| 51) 1,2-Dibromoethane         | 0.000  | 13.094 | 0.000  |      | 0        | N.D. |       |
| 52) Chlorobenzene             | 0.000  | 13.579 | 0.000  |      | 0        | N.D. |       |
| 53) 1,1,1,2-Tetrachloroethane | 0.000  | 13.636 | 0.000  |      | 0        | N.D. |       |
| 54) Ethylbenzene              | 13.639 | 13.639 | 1.007  | 91   | 107      | N.D. |       |
| 55) m,p-Xylenes               | 13.752 | 13.749 | 1.015  | 106  | 239      | N.D. |       |
| 56) o-Xylene                  | 0.000  | 14.184 | 0.000  |      | 0        | N.D. |       |
| 57) Styrene                   | 0.000  | 14.184 | 0.000  |      | 0        | N.D. |       |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D. |       |
| 60) Isopropylbenzene          | 14.594 | 14.537 | 0.914  | 105  | 664      | N.D. |       |
| 62) 1,1,2,2-Tetrachloroethane | 0.000  | 14.810 | 0.000  |      | 0        | N.D. |       |
| 63) 1,2,3-Trichloropropane    | 0.000  | 14.898 | 0.000  |      | 0        | N.D. |       |
| 64) Bromobenzene              | 0.000  | 14.951 | 0.000  |      | 0        | N.D. |       |
| 65) n-Propylbenzene           | 14.813 | 14.965 | 0.928  | 91   | 136      | N.D. |       |
| 66) 1,3,5-Trimethylbenzene    | 0.000  | 15.114 | 0.000  |      | 0        | N.D. |       |
| 67) 2-Chlorotoluene           | 0.000  | 15.117 | 0.000  |      | 0        | N.D. |       |
| 68) 4-Chlorotoluene           | 15.224 | 15.216 | 0.954  | 91   | 112      | N.D. |       |
| 69) tert-Butylbenzene         | 0.000  | 15.489 | 0.000  |      | 0        | N.D. |       |
| 70) 1,2,4-Trimethylbenzene    | 0.000  | 15.527 | 0.000  |      | 0        | N.D. |       |
| 71) sec-Butylbenzene          | 0.000  | 15.711 | 0.000  |      | 0        | N.D. |       |
| 72) 4-Isopropyltoluene        | 0.000  | 15.832 | 0.000  |      | 0        | N.D. |       |
| 73) 1,3-Dichlorobenzene       | 0.000  | 15.902 | 0.000  |      | 0        | N.D. |       |
| 74) 1,4-Dichlorobenzene       | 0.000  | 15.991 | 0.000  |      | 0        | N.D. |       |
| 75) n-Butylbenzene            | 0.000  | 16.277 | 0.000  |      | 0        | N.D. |       |
| 76) 1,2-Dichlorobenzene       | 0.000  | 16.422 | 0.000  |      | 0        | N.D. |       |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D. |       |
| 78) 1,2,4-Trichlorobenzene    | 0.000  | 18.371 | 0.000  |      | 0        | N.D. |       |
| 79) Hexachlorobutadiene       | 0.000  | 18.548 | 0.000  |      | 0        | N.D. |       |
| 80) Naphthalene               | 0.000  | 18.762 | 0.000  |      | 0        | N.D. |       |
| 81) 1,2,3-Trichlorobenzene    | 0.000  | 19.116 | 0.000  |      | 0        | N.D. |       |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D. |       |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D. |       |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D. |       |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D. |       |
| 87) Isopropyl Alcohol         | 0.000  | 7.175  | 0.000  |      | 0        | N.D. |       |
| 88) Allyl chloride            | 0.000  | 7.546  | 0.000  |      | 0        | N.D. |       |
| 89) tert-Butyl Alcohol        | 0.000  | 7.673  | 0.000  |      | 0        | N.D. |       |
| 90) Acrylonitrile             | 0.000  | 7.928  | 0.000  |      | 0        | N.D. |       |
| 91) Isopropyl ether           | 0.000  | 8.483  | 0.000  |      | 0        | N.D. |       |
| 92) 2-Chloro-1,3-butadiene    | 0.000  | 8.617  | 0.000  |      | 0        | N.D. |       |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D. |       |
| 94) Ethyl acetate             | 0.000  | 9.088  | 0.000  |      | 0        | N.D. |       |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V415.D  
Acq On : 28 Jan 2010 3:32 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114010|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 29 09:20:20 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

| Compound                       | R.T.  | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|-------|--------|--------|------|----------|------|-------|
| 95) Propionitrile              | 0.000 | 9.148  | 0.000  |      | 0        | N.D. |       |
| 96) Methacrylonitrile          | 0.000 | 9.332  | 0.000  |      | 0        | N.D. |       |
| 97) Tetrahydrofuran            | 0.000 | 9.466  | 0.000  |      | 0        | N.D. |       |
| 98) Isobutyl alcohol           | 0.000 | 9.770  | 0.000  |      | 0        | N.D. |       |
| 99) Methyl tert-amyl ether     | 0.000 | 10.138 | 0.000  |      | 0        | N.D. |       |
| 100) Methyl methacrylate       | 0.000 | 10.969 | 0.000  |      | 0        | N.D. |       |
| 101) 1,4-Dioxane               | 0.000 | 11.089 | 0.000  |      | 0        | N.D. |       |
| 102) 2-Nitropropane            | 0.000 | 11.443 | 0.000  |      | 0        | N.D. |       |
| 104) Ethyl methacrylate        | 0.000 | 12.235 | 0.000  |      | 0        | N.D. |       |
| 106) 1-Chlorohexane            | 0.000 | 13.438 | 0.000  |      | 0        | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 0.000 | 14.573 | 0.000  |      | 0        | N.D. |       |
| 108) Cyclohexanone             | 0.000 | 14.693 | 0.000  |      | 0        | N.D. |       |
| 109) trans-1,4-Dichloro-2-b... | 0.000 | 14.856 | 0.000  |      | 0        | N.D. |       |
| 110) Pentachloroethane         | 0.000 | 15.559 | 0.000  |      | 0        | N.D. |       |
| 111) Benzyl chloride           | 0.000 | 16.100 | 0.000  |      | 0        | N.D. |       |
| 112) bis(2-Chloroisopropyl)... | 0.000 | 16.497 | 0.000  |      | 0m       | N.D. | d     |

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

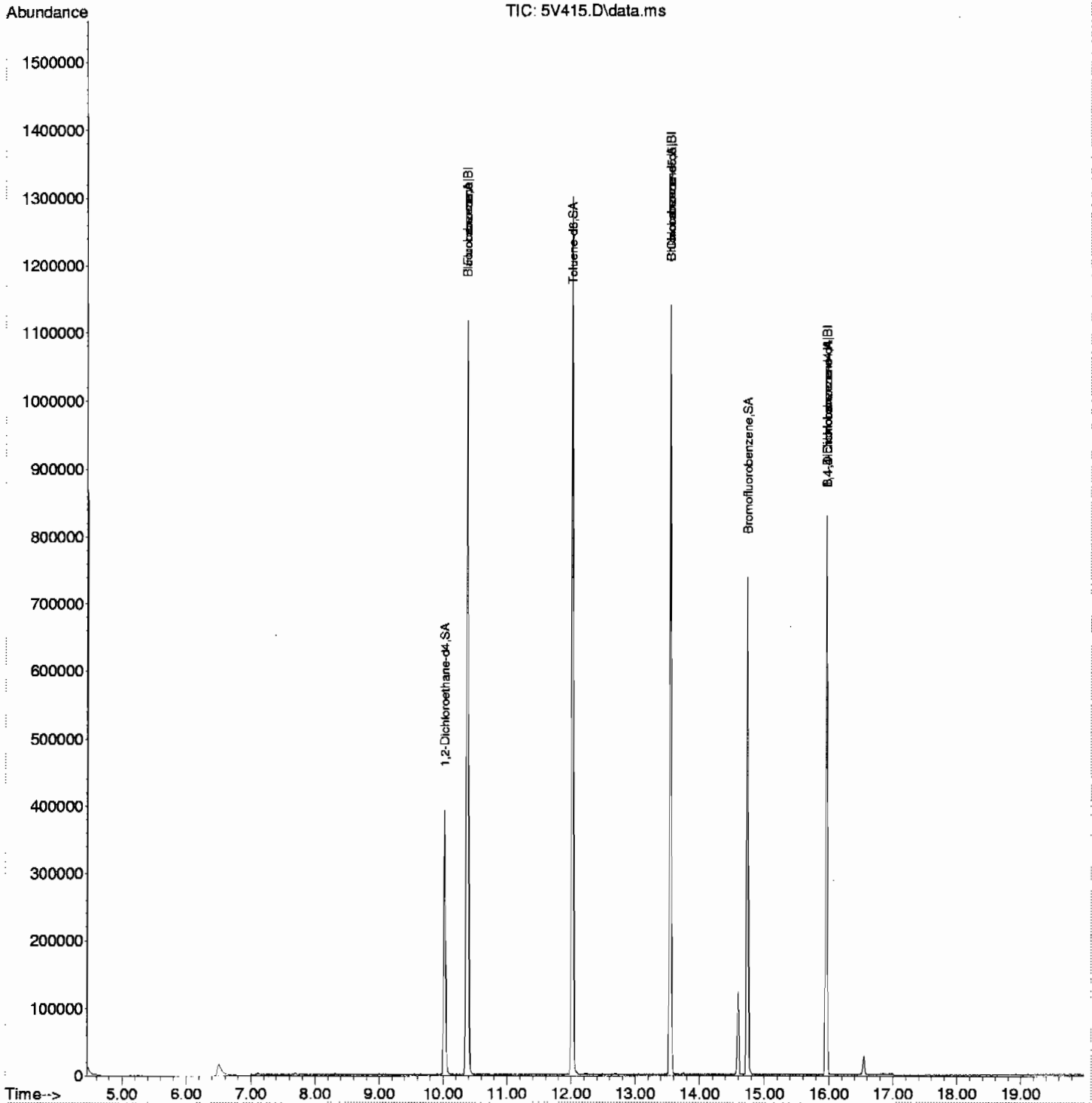


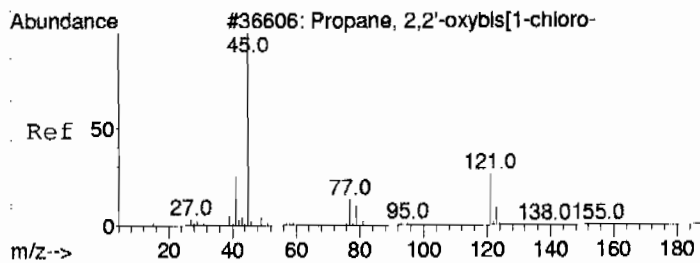
Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V415.D  
Acq On : 28 Jan 2010 3:32 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114010|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 15 Sample Multiplier: 1

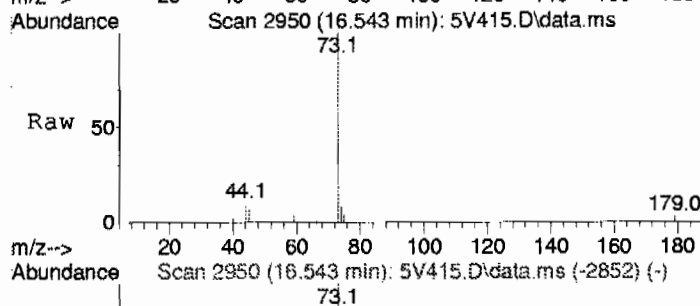
Quant Time: Jan 29 09:20:20 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

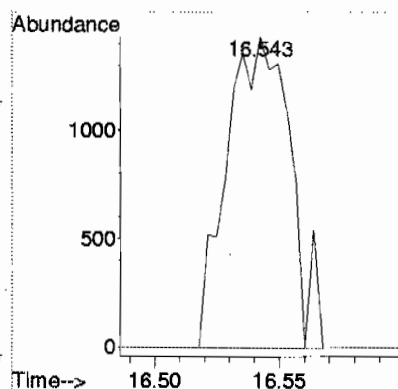
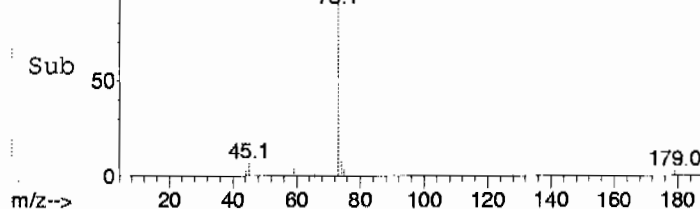




#112 BEFORE analyst DELETION  
 bis(2-Chloroisopropyl) ether  
 Concen: 1.68 ug/L  
 RT: 16.543 min Scan# 2950  
 Delta R.T. 0.046 min  
 Lab File: 5V415.D  
 Acq: 28 Jan 2010 3:32 pm



Tgt Ion: 45 Resp: 2532  
 Ion Ratio Lower Upper  
 45 100  
 121 0.0 0.0 49.2



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V415.D  
Acq On : 28 Jan 2010 3:32 pm  
Operator : DXK1  
Sample : |245114010|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V415.D  
Acq On : 28 Jan 2010 3:32 pm  
Operator : DXK1  
Sample : |245114010|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
|------------------|----|---------|-------|----------|---|----|------|------|
|------------------|----|---------|-------|----------|---|----|------|------|

---Internal Standard---

**Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 2

SDG Number: 10-1324  
Lab Sample ID: 245114011

Client ID: RE15-10-8416  
Batch ID: 946008  
Run Date: 01/28/2010 15:58  
Prep Date: 01/28/2009 11:13  
Data File: 012810V55V416.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXX1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 9.6  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.11   | ug/kg | 0.376   | 1.11    |
| 74-87-3    | Chloromethane               | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-01-4    | Vinyl chloride              | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 74-83-9    | Bromomethane                | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-00-3    | Chloroethane                | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 67-64-1    | Acetone                     | U         | 5.53   | ug/kg | 1.84    | 5.53    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 74-88-4    | Iodomethane                 | U         | 5.53   | ug/kg | 1.77    | 5.53    |
| 75-09-2    | Methylene chloride          | U         | 5.53   | ug/kg | 2.21    | 5.53    |
| 75-15-0    | Carbon disulfide            | U         | 5.53   | ug/kg | 1.38    | 5.53    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 78-93-3    | 2-Butanone                  | U         | 5.53   | ug/kg | 1.66    | 5.53    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 67-66-3    | Chloroform                  | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 74-97-5    | Bromochloromethane          | U         | 1.11   | ug/kg | 0.365   | 1.11    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 71-43-2    | Benzene                     | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 79-01-6    | Trichloroethylene           | U         | 1.11   | ug/kg | 0.365   | 1.11    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-27-4    | Bromodichloromethane        | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 74-95-3    | Dibromomethane              | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.53   | ug/kg | 1.38    | 5.53    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 108-88-3   | Toluene                     | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 591-78-6   | 2-Hexanone                  | U         | 5.53   | ug/kg | 1.66    | 5.53    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 124-48-1   | Dibromochloromethane        | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 108-90-7   | Chlorobenzene               | U         | 1.11   | ug/kg | 0.332   | 1.11    |

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114011  
  
Client ID: RE15-10-8416  
Batch ID: 946008  
Run Date: 01/28/2010 15:58  
Prep Date: 01/28/2009 11:13  
Data File: 012810V55V416.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
% Moisture: 9.6  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.21   | ug/kg | 0.332   | 2.21    |
| 95-47-6     | o-Xylene                              | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 100-42-5    | Styrene                               | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 75-25-2     | Bromoform                             | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 108-86-1    | Bromobenzene                          | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.53   | ug/kg | 1.77    | 5.53    |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.11   | ug/kg | 0.332   | 1.11    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.332   | 1.11    |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V416.D  
Acq On : 28 Jan 2010 3:58 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114011|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 29 09:21:49 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                           | R.T.     | Exp RT | Rel RT   | QIon | Response | Conc  | Units | Dev (Min) |
|------------------------------------|----------|--------|----------|------|----------|-------|-------|-----------|
| <b>Internal Standards</b>          |          |        |          |      |          |       |       |           |
| 1) Fluorobenzene                   | 10.375   | 10.375 | 1.000    | 96   | 1753275  | 50.00 | ug/L  | 0.00      |
| 41) Chlorobenzene-d5               | 13.547   | 13.547 | 1.000    | 117  | 1031545  | 50.00 | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4         | 15.962   | 15.962 | 1.000    | 152  | 368763   | 50.00 | ug/L  | 0.00      |
| 82) B Fluorobenzene                | 10.375   | 10.375 | 1.000    | 96   | 1753275  | 50.00 | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5            | 13.547   | 13.547 | 1.000    | 117  | 1031545  | 50.00 | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4      | 15.962   | 15.962 | 1.000    | 152  | 368763   | 50.00 | ug/L  | 0.00      |
| <b>System Monitoring Compounds</b> |          |        |          |      |          |       |       |           |
| 29) 1,2-Dichloroethane-d4          | 10.021   | 10.021 | 0.966    | 65   | 437630   | 53.71 | ug/L  | 0.00      |
| Spiked Amount 50.000               | Range 68 | - 131  | Recovery | =    | 107.42%  |       |       |           |
| 43) Toluene-d8                     | 12.016   | 12.016 | 0.887    | 98   | 1501685  | 53.38 | ug/L  | 0.00      |
| Spiked Amount 50.000               | Range 75 | - 129  | Recovery | =    | 106.76%  |       |       |           |
| 61) Bromofluorobenzene             | 14.739   | 14.739 | 0.923    | 95   | 439130   | 62.40 | ug/L  | 0.00      |
| Spiked Amount 50.000               | Range 68 | - 133  | Recovery | =    | 124.80%  |       |       |           |
| <b>Target Compounds</b>            |          |        |          |      |          |       |       |           |
| Compound                           | R.T.     | Exp RT | Rel RT   | QIon | Response | Conc  | Units | QValue    |
| 2) Dichlorodifluoromethane         | 0.000    | 4.689  | 0.000    |      | 0        | N.D.  |       |           |
| 3) Chloromethane                   | 5.071    | 5.051  | 0.489    | 50   | 226      | N.D.  |       |           |
| 4) Vinyl chloride                  | 0.000    | 5.283  | 0.000    |      | 0        | N.D.  |       |           |
| 5) Bromomethane                    | 0.000    | 5.877  | 0.000    |      | 0        | N.D.  |       |           |
| 6) Chloroethane                    | 0.000    | 6.018  | 0.000    |      | 0        | N.D.  |       |           |
| 7) Trichlorofluoromethane          | 0.000    | 6.391  | 0.000    |      | 0        | N.D.  |       |           |
| 8) Ethyl ether                     | 0.000    | 6.733  | 0.000    |      | 0        | N.D.  |       |           |
| 9) Acetone                         | 7.104    | 7.100  | 0.685    | 43   | 1111     | N.D.  |       |           |
| 10) 1,1-Dichloroethylene           | 0.000    | 7.125  | 0.000    |      | 0        | N.D.  |       |           |
| 11) Iodomethane                    | 0.000    | 7.373  | 0.000    |      | 0        | N.D.  |       |           |
| 12) Acetonitrile                   | 7.670    | 7.450  | 0.739    | 41   | 125      | N.D.  |       |           |
| 13) Methyl acetate                 | 0.000    | 7.493  | 0.000    |      | 0        | N.D.  |       |           |
| 14) Carbon disulfide               | 0.000    | 7.511  | 0.000    |      | 0        | N.D.  |       |           |
| 15) Methylene chloride             | 7.691    | 7.691  | 0.741    | 84   | 1279     | N.D.  |       |           |
| 16) tert-Butyl methyl ether        | 0.000    | 7.984  | 0.000    |      | 0        | N.D.  |       |           |
| 17) trans-1,2-Dichloroethy...      | 0.000    | 8.030  | 0.000    |      | 0        | N.D.  |       |           |
| 18) Vinyl acetate                  | 8.317    | 8.458  | 0.802    | 43   | 1027     | N.D.  |       |           |
| 19) 1,1-Dichloroethane             | 0.000    | 8.511  | 0.000    |      | 0        | N.D.  |       |           |
| 20) 2-Butanone                     | 0.000    | 9.077  | 0.000    |      | 0        | N.D.  |       |           |
| 21) cis-1,2-Dichloroethylene       | 0.000    | 9.144  | 0.000    |      | 0        | N.D.  |       |           |
| 22) 2,2-Dichloropropane            | 0.000    | 9.173  | 0.000    |      | 0        | N.D.  |       |           |
| 23) Bromochloromethane             | 0.000    | 9.417  | 0.000    |      | 0        | N.D.  |       |           |
| 24) Chloroform                     | 0.000    | 9.452  | 0.000    |      | 0        | N.D.  |       |           |
| 25) 1,1,1-Trichloroethane          | 0.000    | 9.735  | 0.000    |      | 0        | N.D.  |       |           |
| 26) Cyclohexane                    | 0.000    | 9.830  | 0.000    |      | 0        | N.D.  |       |           |
| 27) 1,1-Dichloropropene            | 0.000    | 9.887  | 0.000    |      | 0        | N.D.  |       |           |
| 28) Carbon tetrachloride           | 0.000    | 9.929  | 0.000    |      | 0        | N.D.  |       |           |
| 30) 1,2-Dichloroethane             | 0.000    | 10.103 | 0.000    |      | 0        | N.D.  |       |           |
| 31) Benzene                        | 10.120   | 10.127 | 0.975    | 78   | 108      | N.D.  |       |           |
| 32) Cyclohexene                    | 0.000    | 10.248 | 0.000    |      | 0        | N.D.  |       |           |
| 33) n-Butyl alcohol                | 0.000    | 10.460 | 0.000    |      | 0        | N.D.  |       |           |
| 34) Trichloroethylene              | 0.000    | 10.768 | 0.000    |      | 0        | N.D.  |       |           |
| 35) 1,2-Dichloropropane            | 0.000    | 11.004 | 0.000    |      | 0        | N.D.  |       |           |
| 36) Methylcyclohexane              | 0.000    | 11.019 | 0.000    |      | 0        | N.D.  |       |           |
| 37) Dibromomethane                 | 0.000    | 11.146 | 0.000    |      | 0        | N.D.  |       |           |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V416.D  
Acq On : 28 Jan 2010 3:58 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114011|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 29 09:21:49 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|-------------------------------|--------|--------|--------|------|----------|------|-------|
| 38) Bromodichloromethane      | 0.000  | 11.256 | 0.000  |      | 0        | N.D. |       |
| 39) 2-Chloroethylvinyl ether  | 0.000  | 11.468 | 0.000  |      | 0        | N.D. |       |
| 40) cis-1,3-Dichloropropylene | 0.000  | 11.705 | 0.000  |      | 0        | N.D. |       |
| 42) 4-Methyl-2-pentanone      | 0.000  | 11.786 | 0.000  |      | 0        | N.D. |       |
| 44) Toluene                   | 12.083 | 12.090 | 0.892  | 91   | 564      | N.D. |       |
| 45) trans-1,3-Dichloroprop... | 12.019 | 12.239 | 0.887  | 75   | 160      | N.D. |       |
| 46) 1,1,2-Trichloroethane     | 0.000  | 12.465 | 0.000  |      | 0        | N.D. |       |
| 47) 2-Hexanone                | 0.000  | 12.631 | 0.000  |      | 0        | N.D. |       |
| 48) 1,3-Dichloropropane       | 0.000  | 12.656 | 0.000  |      | 0        | N.D. |       |
| 49) Tetrachloroethylene       | 12.684 | 12.691 | 0.936  | 164  | 652      | N.D. |       |
| 50) Dibromochloromethane      | 12.684 | 12.928 | 0.936  | 129  | 1157     | N.D. |       |
| 51) 1,2-Dibromoethane         | 0.000  | 13.094 | 0.000  |      | 0        | N.D. |       |
| 52) Chlorobenzene             | 0.000  | 13.579 | 0.000  |      | 0        | N.D. |       |
| 53) 1,1,1,2-Tetrachloroethane | 0.000  | 13.636 | 0.000  |      | 0        | N.D. |       |
| 54) Ethylbenzene              | 13.643 | 13.639 | 1.007  | 91   | 110      | N.D. |       |
| 55) m,p-Xylenes               | 13.738 | 13.749 | 1.014  | 106  | 119      | N.D. |       |
| 56) o-Xylene                  | 0.000  | 14.184 | 0.000  |      | 0        | N.D. |       |
| 57) Styrene                   | 0.000  | 14.184 | 0.000  |      | 0        | N.D. |       |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D. |       |
| 60) Isopropylbenzene          | 14.573 | 14.537 | 0.913  | 105  | 576      | N.D. |       |
| 62) 1,1,2,2-Tetrachloroethane | 14.580 | 14.810 | 0.913  | 83   | 240      | N.D. |       |
| 63) 1,2,3-Trichloropropane    | 0.000  | 14.898 | 0.000  |      | 0        | N.D. |       |
| 64) Bromobenzene              | 0.000  | 14.951 | 0.000  |      | 0        | N.D. |       |
| 65) n-Propylbenzene           | 14.739 | 14.965 | 0.923  | 91   | 880      | N.D. |       |
| 66) 1,3,5-Trimethylbenzene    | 0.000  | 15.114 | 0.000  |      | 0        | N.D. |       |
| 67) 2-Chlorotoluene           | 0.000  | 15.117 | 0.000  |      | 0        | N.D. |       |
| 68) 4-Chlorotoluene           | 0.000  | 15.216 | 0.000  |      | 0        | N.D. |       |
| 69) tert-Butylbenzene         | 0.000  | 15.489 | 0.000  |      | 0        | N.D. |       |
| 70) 1,2,4-Trimethylbenzene    | 15.573 | 15.527 | 0.976  | 105  | 1176     | N.D. |       |
| 71) sec-Butylbenzene          | 15.573 | 15.711 | 0.976  | 105  | 1176     | N.D. |       |
| 72) 4-Isopropyltoluene        | 15.835 | 15.832 | 0.992  | 119  | 337      | N.D. |       |
| 73) 1,3-Dichlorobenzene       | 0.000  | 15.902 | 0.000  |      | 0        | N.D. |       |
| 74) 1,4-Dichlorobenzene       | 0.000  | 15.991 | 0.000  |      | 0        | N.D. |       |
| 75) n-Butylbenzene            | 0.000  | 16.277 | 0.000  |      | 0        | N.D. |       |
| 76) 1,2-Dichlorobenzene       | 0.000  | 16.422 | 0.000  |      | 0        | N.D. |       |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D. |       |
| 78) 1,2,4-Trichlorobenzene    | 0.000  | 18.371 | 0.000  |      | 0        | N.D. |       |
| 79) Hexachlorobutadiene       | 0.000  | 18.548 | 0.000  |      | 0        | N.D. |       |
| 80) Naphthalene               | 18.762 | 18.762 | 1.175  | 128  | 306      | N.D. |       |
| 81) 1,2,3-Trichlorobenzene    | 0.000  | 19.116 | 0.000  |      | 0        | N.D. |       |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D. |       |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D. |       |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D. |       |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D. |       |
| 87) Isopropyl Alcohol         | 0.000  | 7.175  | 0.000  |      | 0        | N.D. |       |
| 88) Allyl chloride            | 7.670  | 7.546  | 0.739  | 41   | 125      | N.D. |       |
| 89) tert-Butyl Alcohol        | 0.000  | 7.673  | 0.000  |      | 0        | N.D. |       |
| 90) Acrylonitrile             | 0.000  | 7.928  | 0.000  |      | 0        | N.D. |       |
| 91) Isopropyl ether           | 0.000  | 8.483  | 0.000  |      | 0        | N.D. |       |
| 92) 2-Chloro-1,3-butadiene    | 0.000  | 8.617  | 0.000  |      | 0        | N.D. |       |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D. |       |
| 94) Ethyl acetate             | 0.000  | 9.088  | 0.000  |      | 0        | N.D. |       |



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V416.D  
Acq On : 28 Jan 2010 3:58 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114011|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 29 09:21:49 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|--------|--------|--------|------|----------|------|-------|
| 95) Propionitrile              | 0.000  | 9.148  | 0.000  |      | 0        | N.D. |       |
| 96) Methacrylonitrile          | 0.000  | 9.332  | 0.000  |      | 0        | N.D. |       |
| 97) Tetrahydrofuran            | 0.000  | 9.466  | 0.000  |      | 0        | N.D. |       |
| 98) Isobutyl alcohol           | 0.000  | 9.770  | 0.000  |      | 0        | N.D. |       |
| 99) Methyl tert-amyl ether     | 0.000  | 10.138 | 0.000  |      | 0        | N.D. |       |
| 100) Methyl methacrylate       | 0.000  | 10.969 | 0.000  |      | 0        | N.D. |       |
| 101) 1,4-Dioxane               | 0.000  | 11.089 | 0.000  |      | 0        | N.D. |       |
| 102) 2-Nitropropane            | 0.000  | 11.443 | 0.000  |      | 0        | N.D. |       |
| 104) Ethyl methacrylate        | 0.000  | 12.235 | 0.000  |      | 0        | N.D. |       |
| 106) 1-Chlorohexane            | 0.000  | 13.438 | 0.000  |      | 0        | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 14.562 | 14.573 | 0.912  | 53   | 959      | N.D. |       |
| 108) Cyclohexanone             | 0.000  | 14.693 | 0.000  |      | 0        | N.D. |       |
| 109) trans-1,4-Dichloro-2-b... | 0.000  | 14.856 | 0.000  |      | 0        | N.D. |       |
| 110) Pentachloroethane         | 0.000  | 15.559 | 0.000  |      | 0        | N.D. |       |
| 111) Benzyl chloride           | 0.000  | 16.100 | 0.000  |      | 0        | N.D. |       |
| 112) bis(2-Chloroisopropyl)... | 0.000  | 16.497 | 0.000  |      | 0m       | N.D. | d     |

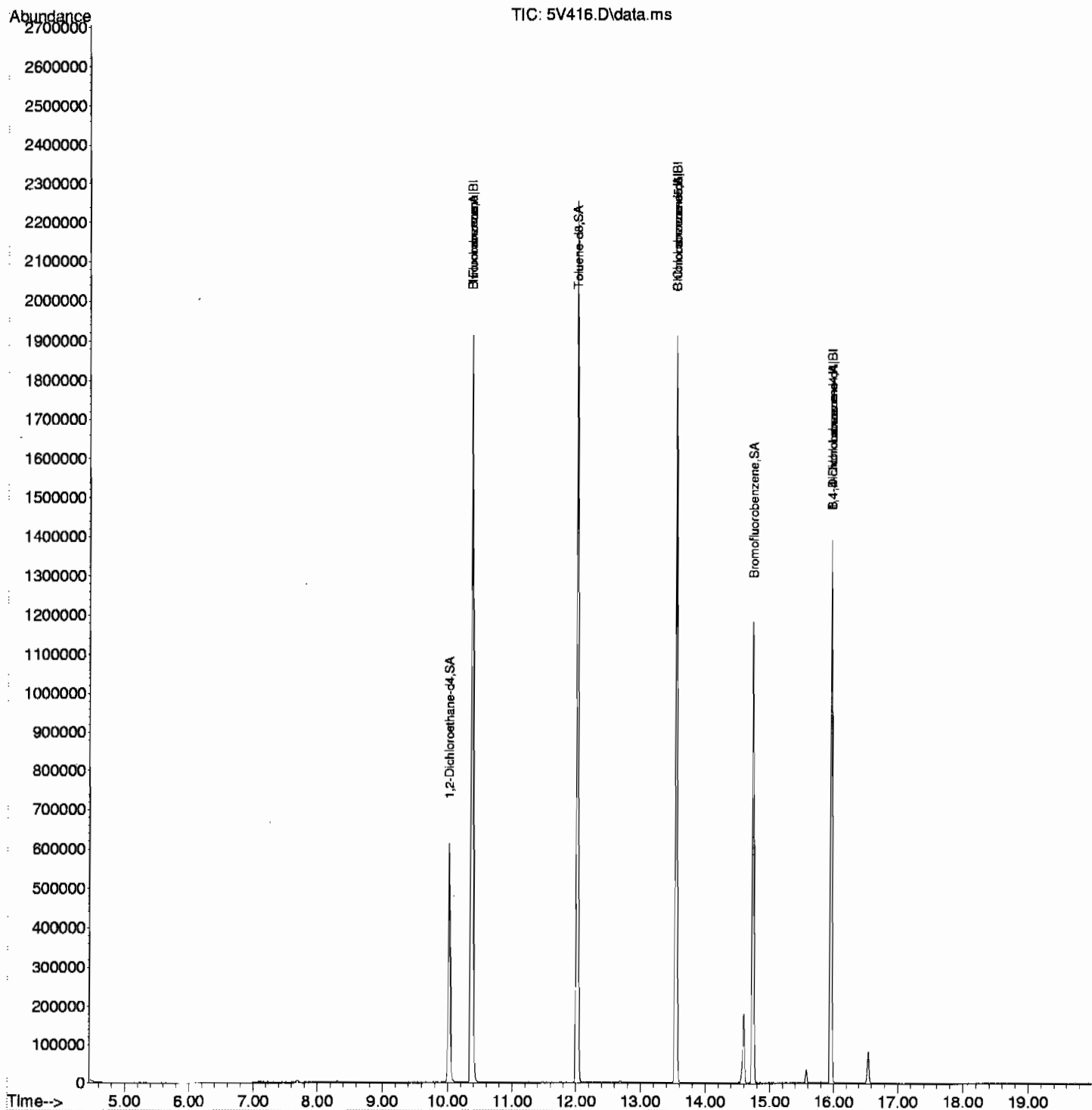
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

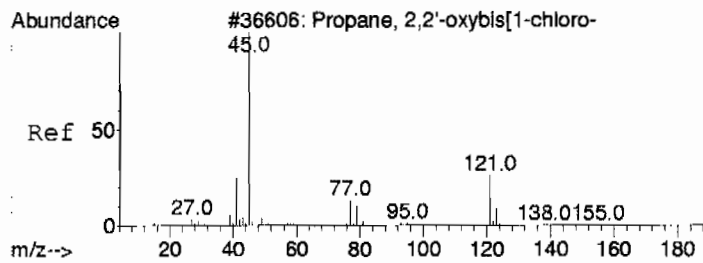
Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V416.D  
Acq On : 28 Jan 2010 3:58 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114011|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 16 Sample Multiplier: 1

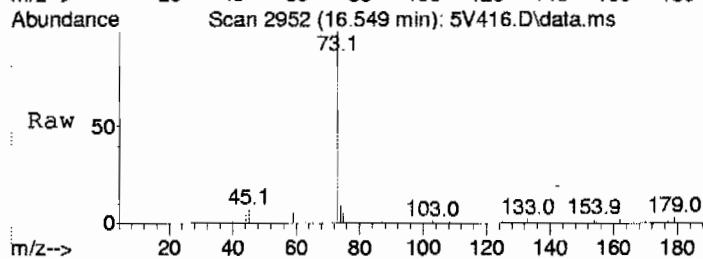
Quant Time: Jan 29 09:21:49 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

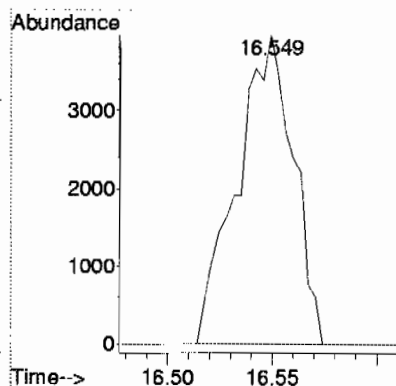
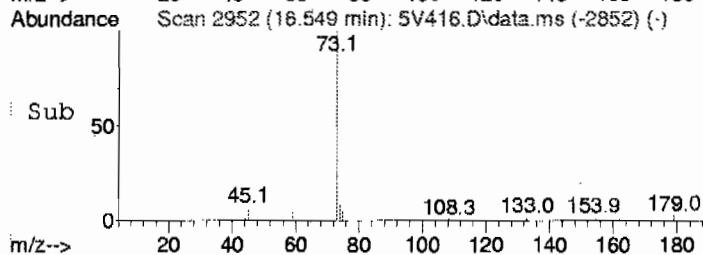




#112 BEFORE analyst DELETION  
 bis(2-Chloroisopropyl)ether  
 Concen: 3.01 ug/L  
 RT: 16.549 min Scan# 2952  
 Delta R.T. 0.052 min  
 Lab File: 5V416.D  
 Acq: 28 Jan 2010 3:58 pm



Tgt Ion: 45 Resp: 7393  
 Ion Ratio Lower Upper  
 45 100  
 121 0.0 0.0 49.2



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V416.D  
Acq On : 28 Jan 2010 3:58 pm  
Operator : DXK1  
Sample : |245114011|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V416.D  
Acq On : 28 Jan 2010 3:58 pm  
Operator : DXK1  
Sample : |245114011|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
|------------------|----|---------|-------|----------|---|----|------|------|
|------------------|----|---------|-------|----------|---|----|------|------|

---Internal Standard---

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114012

Client ID: RE15-10-8418  
 Batch ID: 946008  
 Run Date: 01/28/2010 16:23  
 Prep Date: 01/28/2009 11:14  
 Data File: 012810V5SV417.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 11.3  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.13   | ug/kg | 0.383   | 1.13    |
| 74-87-3    | Chloromethane               | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 75-01-4    | Vinyl chloride              | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 74-83-9    | Bromomethane                | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 75-00-3    | Chloroethane                | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 67-64-1    | Acetone                     | U         | 5.64   | ug/kg | 1.87    | 5.64    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 74-88-4    | Iodomethane                 | U         | 5.64   | ug/kg | 1.80    | 5.64    |
| 75-09-2    | Methylene chloride          | U         | 5.64   | ug/kg | 2.25    | 5.64    |
| 75-15-0    | Carbon disulfide            | U         | 5.64   | ug/kg | 1.41    | 5.64    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 78-93-3    | 2-Butanone                  | U         | 5.64   | ug/kg | 1.69    | 5.64    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 67-66-3    | Chloroform                  | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 74-97-5    | Bromochloromethane          | U         | 1.13   | ug/kg | 0.372   | 1.13    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 71-43-2    | Benzene                     | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 79-01-6    | Trichloroethylene           | U         | 1.13   | ug/kg | 0.372   | 1.13    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 75-27-4    | Bromodichloromethane        | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 74-95-3    | Dibromomethane              | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.64   | ug/kg | 1.41    | 5.64    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 108-88-3   | Toluene                     | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 591-78-6   | 2-Hexanone                  | U         | 5.64   | ug/kg | 1.69    | 5.64    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 124-48-1   | Dibromochloromethane        | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 108-90-7   | Chlorobenzene               | U         | 1.13   | ug/kg | 0.338   | 1.13    |

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114012

Client ID: RE15-10-8418  
Batch ID: 946008  
Run Date: 01/28/2010 16:23  
Prep Date: 01/28/2009 11:14  
Data File: 012810V55V417.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
% Moisture: 11.3  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.25   | ug/kg | 0.338   | 2.25    |
| 95-47-6     | o-Xylene                              | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 100-42-5    | Styrene                               | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 75-25-2     | Bromoform                             | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 108-86-1    | Bromobenzene                          | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.64   | ug/kg | 1.80    | 5.64    |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.13   | ug/kg | 0.338   | 1.13    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.13   | ug/kg | 0.338   | 1.13    |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|-------|-----------|-------|-----|------|
|         | unknown siloxane                      | 16.55 | 8.04      | ug/kg | 0   | J    |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V417.D  
Acq On : 28 Jan 2010 4:23 pm  
Operator : DXK1  
InstName : VOA5  
Sample : 1245114012|946008|1|VOA|1|VOA8260BS|  
Misc : LNL 5.0g N/A SOIL  
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 29 09:22:07 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.     | Exp RT | Rel RT   | QIon | Response | Conc  | Units | Dev (Min) |
|-------------------------------|----------|--------|----------|------|----------|-------|-------|-----------|
| Internal Standards            |          |        |          |      |          |       |       |           |
| 1) Fluorobenzene              | 10.375   | 10.375 | 1.000    | 96   | 1745716  | 50.00 | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547   | 13.547 | 1.000    | 117  | 1081472  | 50.00 | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.962   | 15.962 | 1.000    | 152  | 398239   | 50.00 | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.375   | 10.375 | 1.000    | 96   | 1745716  | 50.00 | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547   | 13.547 | 1.000    | 117  | 1081472  | 50.00 | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.962   | 15.962 | 1.000    | 152  | 398239   | 50.00 | ug/L  | 0.00      |
| System Monitoring Compounds   |          |        |          |      |          |       |       |           |
| 29) 1,2-Dichloroethane-d4     | 10.021   | 10.021 | 0.966    | 65   | 431205   | 53.15 | ug/L  | 0.00      |
| Spiked Amount 50.000          | Range 68 | - 131  | Recovery | =    | 106.30%  |       |       |           |
| 43) Toluene-d8                | 12.016   | 12.016 | 0.887    | 98   | 1519213  | 51.51 | ug/L  | 0.00      |
| Spiked Amount 50.000          | Range 75 | - 129  | Recovery | =    | 103.02%  |       |       |           |
| 61) Bromofluorobenzene        | 14.739   | 14.739 | 0.923    | 95   | 486944   | 64.08 | ug/L  | 0.00      |
| Spiked Amount 50.000          | Range 68 | - 133  | Recovery | =    | 128.16%  |       |       |           |
| Target Compounds              |          |        |          |      |          |       |       |           |
| Compound                      | R.T.     | Exp RT | Rel RT   | QIon | Response | Conc  | Units | QValue    |
| 2) Dichlorodifluoromethane    | 0.000    | 4.689  | 0.000    |      | 0        | N.D.  |       |           |
| 3) Chloromethane              | 5.061    | 5.051  | 0.488    | 50   | 165      | N.D.  |       |           |
| 4) Vinyl chloride             | 0.000    | 5.283  | 0.000    |      | 0        | N.D.  |       |           |
| 5) Bromomethane               | 0.000    | 5.877  | 0.000    |      | 0        | N.D.  |       |           |
| 6) Chloroethane               | 0.000    | 6.018  | 0.000    |      | 0        | N.D.  |       |           |
| 7) Trichlorofluoromethane     | 0.000    | 6.391  | 0.000    |      | 0        | N.D.  |       |           |
| 8) Ethyl ether                | 0.000    | 6.733  | 0.000    |      | 0        | N.D.  |       |           |
| 9) Acetone                    | 7.107    | 7.100  | 0.685    | 43   | 2891     | N.D.  |       |           |
| 10) 1,1-Dichloroethylene      | 0.000    | 7.125  | 0.000    |      | 0        | N.D.  |       |           |
| 11) Iodomethane               | 0.000    | 7.373  | 0.000    |      | 0        | N.D.  |       |           |
| 12) Acetonitrile              | 0.000    | 7.450  | 0.000    |      | 0        | N.D.  |       |           |
| 13) Methyl acetate            | 0.000    | 7.493  | 0.000    |      | 0        | N.D.  |       |           |
| 14) Carbon disulfide          | 7.507    | 7.511  | 0.724    | 76   | 123      | N.D.  |       |           |
| 15) Methylene chloride        | 7.694    | 7.691  | 0.742    | 84   | 4086     | N.D.  |       |           |
| 16) tert-Butyl methyl ether   | 0.000    | 7.984  | 0.000    |      | 0        | N.D.  |       |           |
| 17) trans-1,2-Dichloroethy... | 0.000    | 8.030  | 0.000    |      | 0        | N.D.  |       |           |
| 18) Vinyl acetate             | 0.000    | 8.458  | 0.000    |      | 0        | N.D.  |       |           |
| 19) 1,1-Dichloroethane        | 0.000    | 8.511  | 0.000    |      | 0        | N.D.  |       |           |
| 20) 2-Butanone                | 0.000    | 9.077  | 0.000    |      | 0        | N.D.  |       |           |
| 21) cis-1,2-Dichloroethylene  | 0.000    | 9.144  | 0.000    |      | 0        | N.D.  |       |           |
| 22) 2,2-Dichloropropane       | 0.000    | 9.173  | 0.000    |      | 0        | N.D.  |       |           |
| 23) Bromochloromethane        | 0.000    | 9.417  | 0.000    |      | 0        | N.D.  |       |           |
| 24) Chloroform                | 0.000    | 9.452  | 0.000    |      | 0        | N.D.  |       |           |
| 25) 1,1,1-Trichloroethane     | 0.000    | 9.735  | 0.000    |      | 0        | N.D.  |       |           |
| 26) Cyclohexane               | 0.000    | 9.830  | 0.000    |      | 0        | N.D.  |       |           |
| 27) 1,1-Dichloropropene       | 0.000    | 9.887  | 0.000    |      | 0        | N.D.  |       |           |
| 28) Carbon tetrachloride      | 0.000    | 9.929  | 0.000    |      | 0        | N.D.  |       |           |
| 30) 1,2-Dichloroethane        | 0.000    | 10.103 | 0.000    |      | 0        | N.D.  |       |           |
| 31) Benzene                   | 10.354   | 10.127 | 0.998    | 78   | 243      | N.D.  |       |           |
| 32) Cyclohexene               | 0.000    | 10.248 | 0.000    |      | 0        | N.D.  |       |           |
| 33) n-Butyl alcohol           | 0.000    | 10.460 | 0.000    |      | 0        | N.D.  |       |           |
| 34) Trichloroethylene         | 0.000    | 10.768 | 0.000    |      | 0        | N.D.  |       |           |
| 35) 1,2-Dichloropropane       | 0.000    | 11.004 | 0.000    |      | 0        | N.D.  |       |           |
| 36) Methylcyclohexane         | 0.000    | 11.019 | 0.000    |      | 0        | N.D.  |       |           |
| 37) Dibromomethane            | 0.000    | 11.146 | 0.000    |      | 0        | N.D.  |       |           |



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V417.D  
Acq On : 28 Jan 2010 4:23 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114012|946008|1|VOA|1|VOA8260BS|  
Misc : LANTL 5.0g N/A SOIL  
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 29 09:22:07 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|-------------------------------|--------|--------|--------|------|----------|------|-------|
| 38) Bromodichloromethane      | 0.000  | 11.256 | 0.000  |      | 0        | N.D. |       |
| 39) 2-Chloroethylvinyl ether  | 0.000  | 11.468 | 0.000  |      | 0        | N.D. |       |
| 40) cis-1,3-Dichloropropylene | 0.000  | 11.705 | 0.000  |      | 0        | N.D. |       |
| 42) 4-Methyl-2-pentanone      | 0.000  | 11.786 | 0.000  |      | 0        | N.D. |       |
| 44) Toluene                   | 12.094 | 12.090 | 0.893  | 91   | 1908     | N.D. |       |
| 45) trans-1,3-Dichloroprop... | 0.000  | 12.239 | 0.000  |      | 0        | N.D. |       |
| 46) 1,1,2-Trichloroethane     | 0.000  | 12.465 | 0.000  |      | 0        | N.D. |       |
| 47) 2-Hexanone                | 0.000  | 12.631 | 0.000  |      | 0        | N.D. |       |
| 48) 1,3-Dichloropropane       | 0.000  | 12.656 | 0.000  |      | 0        | N.D. |       |
| 49) Tetrachloroethylene       | 0.000  | 12.691 | 0.000  |      | 0        | N.D. |       |
| 50) Dibromochloromethane      | 0.000  | 12.928 | 0.000  |      | 0        | N.D. |       |
| 51) 1,2-Dibromoethane         | 0.000  | 13.094 | 0.000  |      | 0        | N.D. |       |
| 52) Chlorobenzene             | 0.000  | 13.579 | 0.000  |      | 0        | N.D. |       |
| 53) 1,1,1,2-Tetrachloroethane | 0.000  | 13.636 | 0.000  |      | 0        | N.D. |       |
| 54) Ethylbenzene              | 13.639 | 13.639 | 1.007  | 91   | 270      | N.D. |       |
| 55) m,p-Xylenes               | 13.749 | 13.749 | 1.015  | 106  | 458      | N.D. |       |
| 56) o-Xylene                  | 14.187 | 14.184 | 1.047  | 106  | 162      | N.D. |       |
| 57) Styrene                   | 14.187 | 14.184 | 1.047  | 104  | 109      | N.D. |       |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D. |       |
| 60) Isopropylbenzene          | 14.594 | 14.537 | 0.914  | 105  | 257      | N.D. |       |
| 62) 1,1,2,2-Tetrachloroethane | 0.000  | 14.810 | 0.000  |      | 0m       | N.D. | d     |
| 63) 1,2,3-Trichloropropane    | 0.000  | 14.898 | 0.000  |      | 0m       | N.D. | d     |
| 64) Bromobenzene              | 0.000  | 14.951 | 0.000  |      | 0        | N.D. |       |
| 65) n-Propylbenzene           | 0.000  | 14.965 | 0.000  |      | 0m       | N.D. | d     |
| 66) 1,3,5-Trimethylbenzene    | 0.000  | 15.114 | 0.000  |      | 0        | N.D. |       |
| 67) 2-Chlorotoluene           | 0.000  | 15.117 | 0.000  |      | 0        | N.D. |       |
| 68) 4-Chlorotoluene           | 0.000  | 15.216 | 0.000  |      | 0        | N.D. |       |
| 69) tert-Butylbenzene         | 0.000  | 15.489 | 0.000  |      | 0        | N.D. |       |
| 70) 1,2,4-Trimethylbenzene    | 15.581 | 15.527 | 0.976  | 105  | 120      | N.D. |       |
| 71) sec-Butylbenzene          | 15.581 | 15.711 | 0.976  | 105  | 120      | N.D. |       |
| 72) 4-Isopropyltoluene        | 15.835 | 15.832 | 0.992  | 119  | 404      | N.D. |       |
| 73) 1,3-Dichlorobenzene       | 0.000  | 15.902 | 0.000  |      | 0        | N.D. |       |
| 74) 1,4-Dichlorobenzene       | 0.000  | 15.991 | 0.000  |      | 0        | N.D. |       |
| 75) n-Butylbenzene            | 0.000  | 16.277 | 0.000  |      | 0        | N.D. |       |
| 76) 1,2-Dichlorobenzene       | 0.000  | 16.422 | 0.000  |      | 0        | N.D. |       |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D. |       |
| 78) 1,2,4-Trichlorobenzene    | 0.000  | 18.371 | 0.000  |      | 0        | N.D. |       |
| 79) Hexachlorobutadiene       | 0.000  | 18.548 | 0.000  |      | 0        | N.D. |       |
| 80) Naphthalene               | 18.777 | 18.762 | 1.176  | 128  | 483      | N.D. |       |
| 81) 1,2,3-Trichlorobenzene    | 0.000  | 19.116 | 0.000  |      | 0        | N.D. |       |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D. |       |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D. |       |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D. |       |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D. |       |
| 87) Isopropyl Alcohol         | 0.000  | 7.175  | 0.000  |      | 0        | N.D. |       |
| 88) Allyl chloride            | 0.000  | 7.546  | 0.000  |      | 0        | N.D. |       |
| 89) tert-Butyl Alcohol        | 0.000  | 7.673  | 0.000  |      | 0        | N.D. |       |
| 90) Acrylonitrile             | 0.000  | 7.928  | 0.000  |      | 0        | N.D. |       |
| 91) Isopropyl ether           | 0.000  | 8.483  | 0.000  |      | 0        | N.D. |       |
| 92) 2-Chloro-1,3-butadiene    | 0.000  | 8.617  | 0.000  |      | 0        | N.D. |       |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D. |       |
| 94) Ethyl acetate             | 0.000  | 9.088  | 0.000  |      | 0        | N.D. |       |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V417.D  
Acq On : 28 Jan 2010 4:23 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114012|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 29 09:22:07 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|--------|--------|--------|------|----------|------|-------|
| 95) Propionitrile              | 0.000  | 9.148  | 0.000  |      | 0        | N.D. |       |
| 96) Methacrylonitrile          | 0.000  | 9.332  | 0.000  |      | 0        | N.D. |       |
| 97) Tetrahydrofuran            | 0.000  | 9.466  | 0.000  |      | 0        | N.D. |       |
| 98) Isobutyl alcohol           | 0.000  | 9.770  | 0.000  |      | 0        | N.D. |       |
| 99) Methyl tert-amyl ether     | 0.000  | 10.138 | 0.000  |      | 0        | N.D. |       |
| 100) Methyl methacrylate       | 0.000  | 10.969 | 0.000  |      | 0        | N.D. |       |
| 101) 1,4-Dioxane               | 0.000  | 11.089 | 0.000  |      | 0        | N.D. |       |
| 102) 2-Nitropropane            | 0.000  | 11.443 | 0.000  |      | 0        | N.D. |       |
| 104) Ethyl methacrylate        | 0.000  | 12.235 | 0.000  |      | 0        | N.D. |       |
| 106) 1-Chlorohexane            | 0.000  | 13.438 | 0.000  |      | 0        | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 14.551 | 14.573 | 0.912  | 53   | 108      | N.D. |       |
| 108) Cyclohexanone             | 0.000  | 14.693 | 0.000  |      | 0m       | N.D. | d     |
| 109) trans-1,4-Dichloro-2-b... | 0.000  | 14.856 | 0.000  |      | 0m       | N.D. | d     |
| 110) Pentachloroethane         | 0.000  | 15.559 | 0.000  |      | 0        | N.D. |       |
| 111) Benzyl chloride           | 0.000  | 16.100 | 0.000  |      | 0        | N.D. |       |
| 112) bis(2-Chloroisopropyl)... | 0.000  | 16.497 | 0.000  |      | 0m       | N.D. | d     |

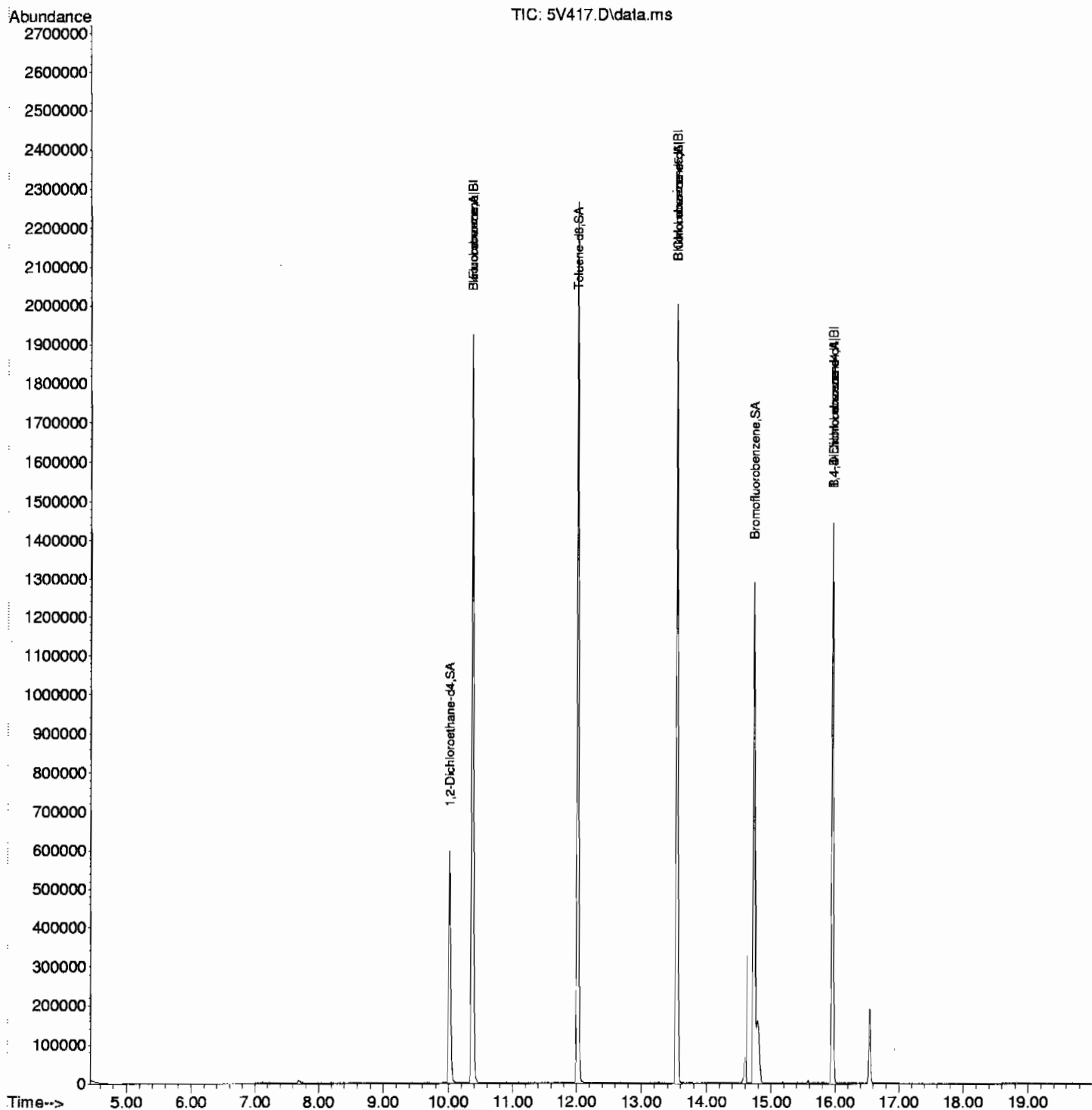
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

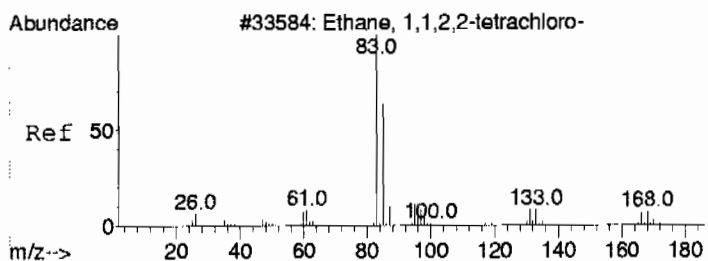
Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V417.D  
Acq On : 28 Jan 2010 4:23 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114012|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 17 Sample Multiplier: 1

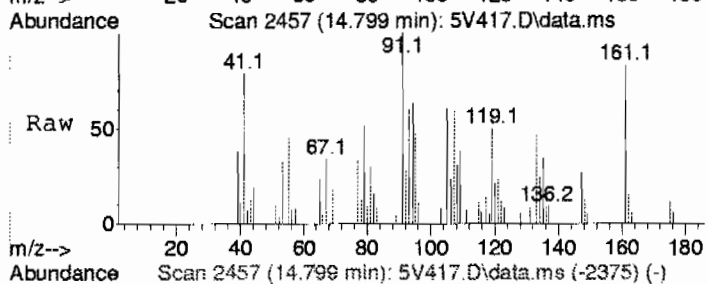
Quant Time: Jan 29 09:22:07 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

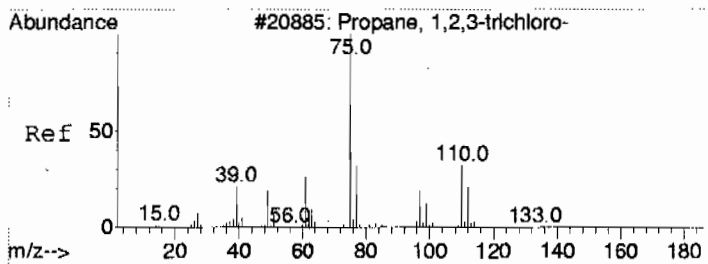
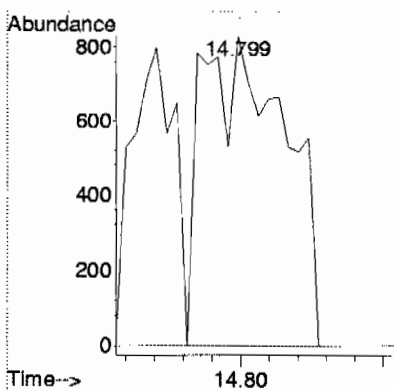
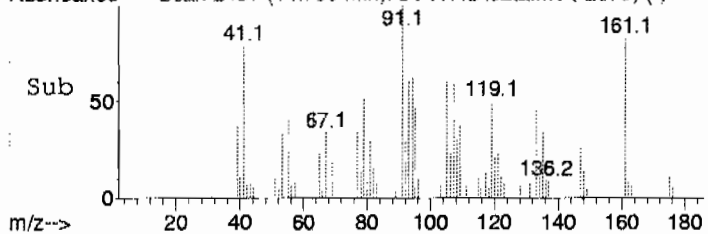




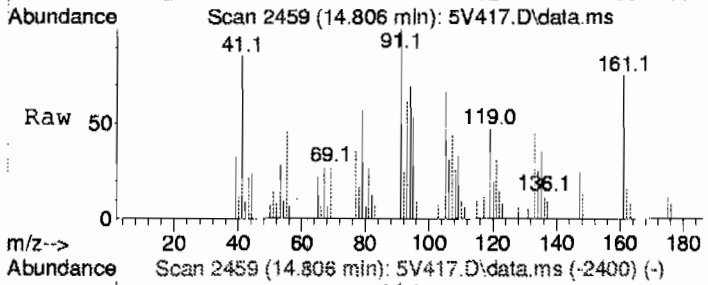
#62 BEFORE analyst DELETION  
1,1,2,2-Tetrachloroethane  
Concen: 0.36 ug/L  
RT: 14.799 min Scan# 2457  
Delta R.T. -0.011 min  
Lab File: 5V417.D  
Acq: 28 Jan 2010 4:23 pm



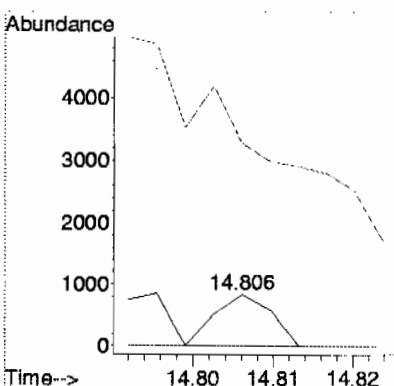
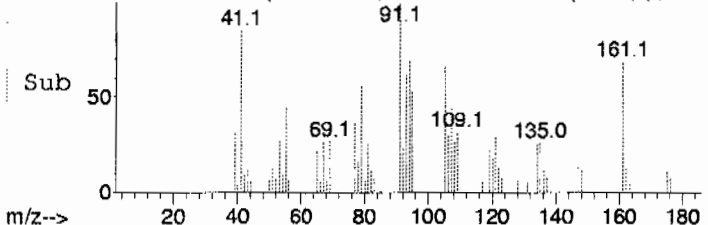
Tgt Ion: 83 Resp: 1677  
Ion Ratio Lower Upper  
83 100  
85 0.0 33.6 93.6#

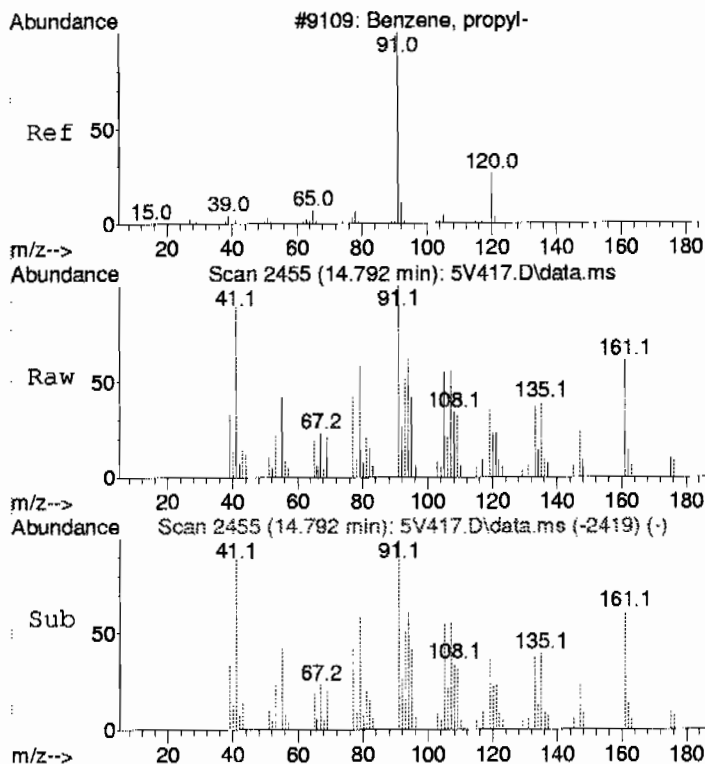


#63 BEFORE analyst DELETION  
1,2,3-Trichloropropane  
Concen: 0.33 ug/L  
RT: 14.806 min Scan# 2459  
Delta R.T. -0.092 min  
Lab File: 5V417.D  
Acq: 28 Jan 2010 4:23 pm



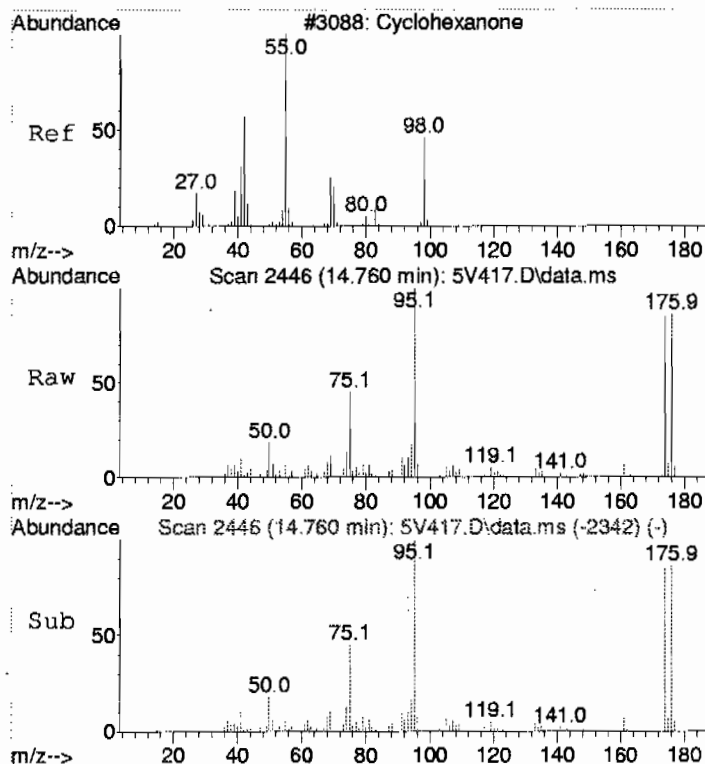
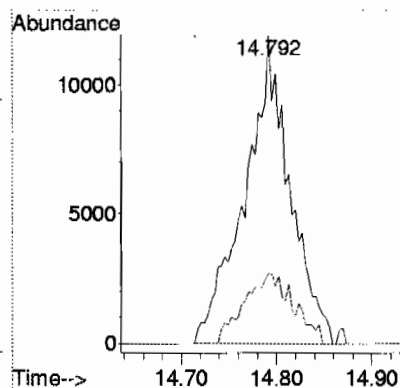
Tgt Ion: 110 Resp: 408  
Ion Ratio Lower Upper  
110 100  
75 0.0 246.3 306.3#  
77 0.0 53.2 113.2#





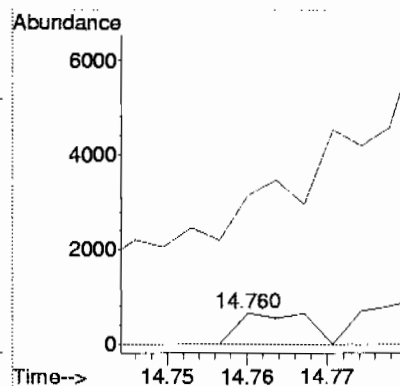
#65 BEFORE analyst DELETION  
n-Propylbenzene  
Concen: 1.80 ug/L  
RT: 14.792 min Scan# 2455  
Delta R.T. -0.173 min  
Lab File: 5V417.D  
Acq: 28 Jan 2010 4:23 pm

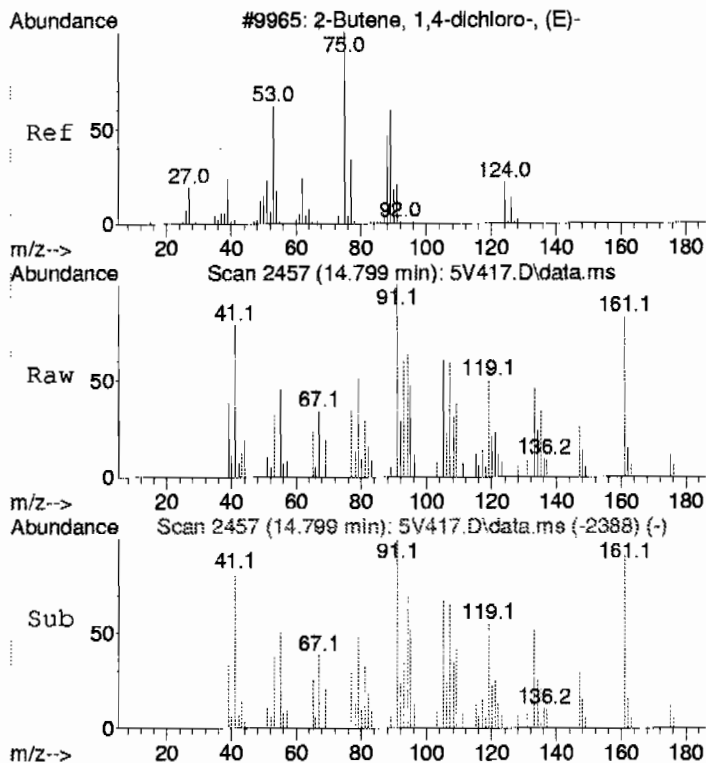
Tgt Ion: 91 Resp: 38946  
Ion Ratio Lower Upper  
91 100  
120 24.5 0.0 53.6



#108 BEFORE analyst DELETION  
Cyclohexanone  
Concen: 28.94 ug/L  
RT: 14.760 min Scan# 2446  
Delta R.T. 0.067 min  
Lab File: 5V417.D  
Acq: 28 Jan 2010 4:23 pm

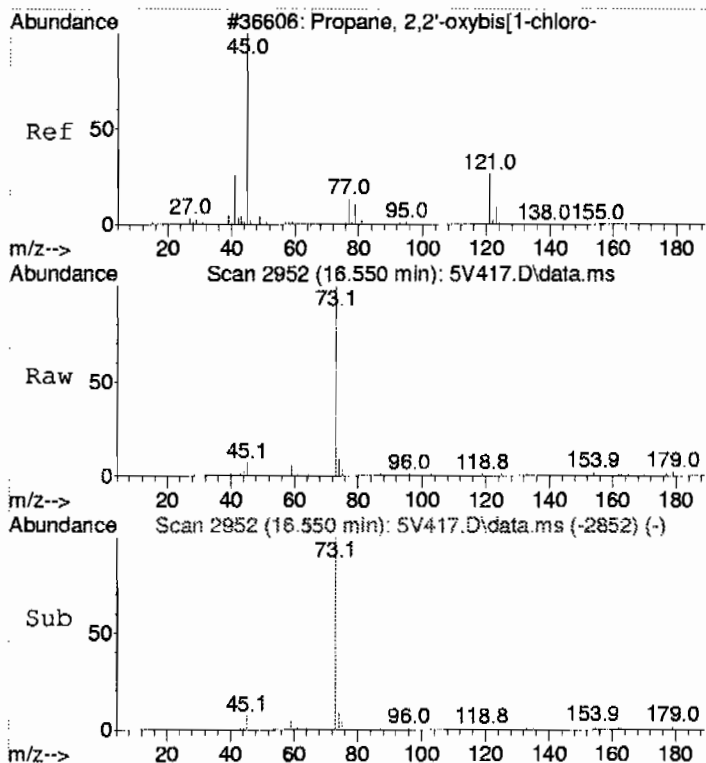
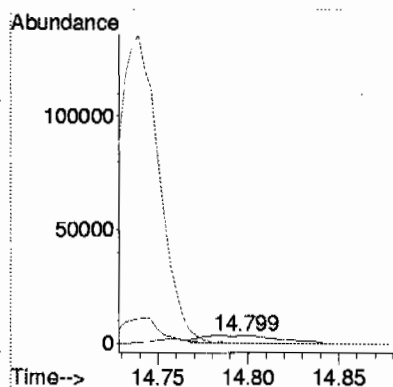
Tgt Ion: 42 Resp: 392  
Ion Ratio Lower Upper  
42 100  
55 0.0 104.7 164.7#  
98 0.0 21.5 81.5#





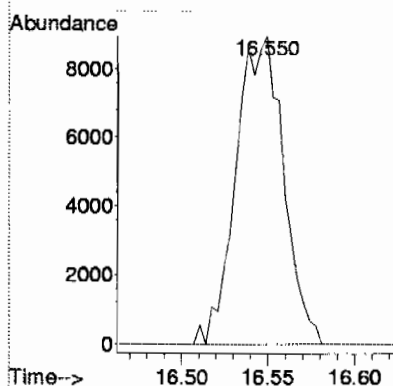
#109 BEFORE analyst DELETION  
trans-1,4-Dichloro-2-butene  
Concen: 6.64 ug/L  
RT: 14.799 min Scan# 2457  
Delta R.T. -0.057 min  
Lab File: 5V417.D  
Acq: 28 Jan 2010 4:23 pm

| Tgt Ion | Ratio | Resp | Lower  | Upper |
|---------|-------|------|--------|-------|
| 53      | 100   | 9594 |        |       |
| 88      | 0.0   | 7.6  | 67.6#  |       |
| 75      | 0.0   | 86.0 | 146.0# |       |



#112 BEFORE analyst DELETION  
bis(2-Chloroisopropyl)ether  
Concen: 6.42 ug/L  
RT: 16.550 min Scan# 2952  
Delta R.T. 0.053 min  
Lab File: 5V417.D  
Acq: 28 Jan 2010 4:23 pm

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 45      | 100   | 17043 |       |       |
| 121     | 0.0   | 0.0   | 49.2  |       |



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V417.D  
Acq On : 28 Jan 2010 4:23 pm  
Operator : DXK1  
Sample : |245114012|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

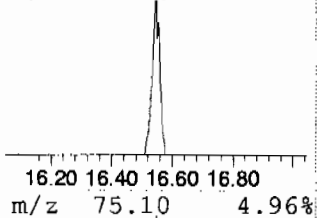
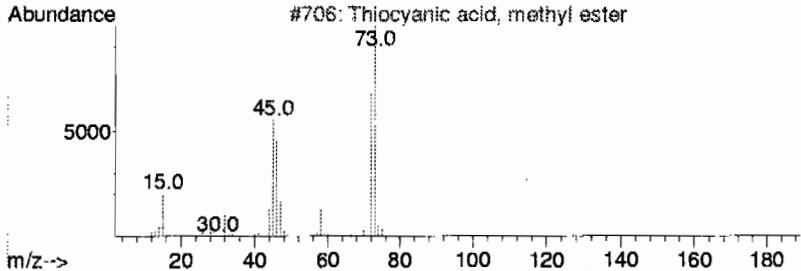
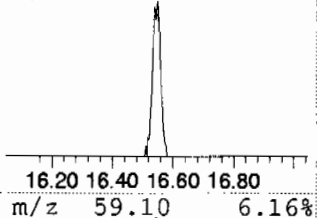
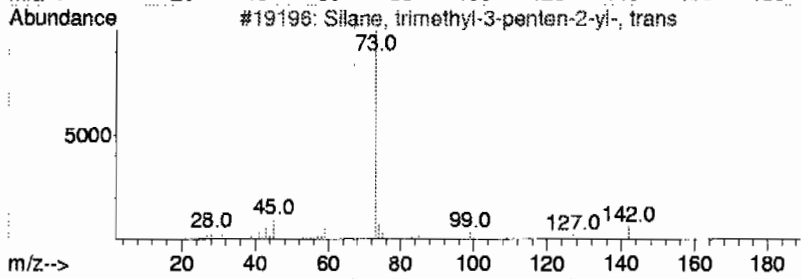
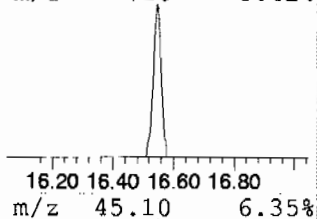
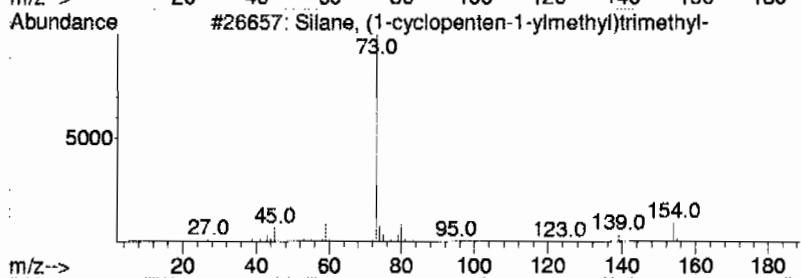
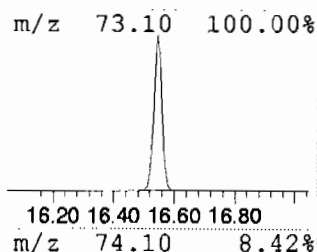
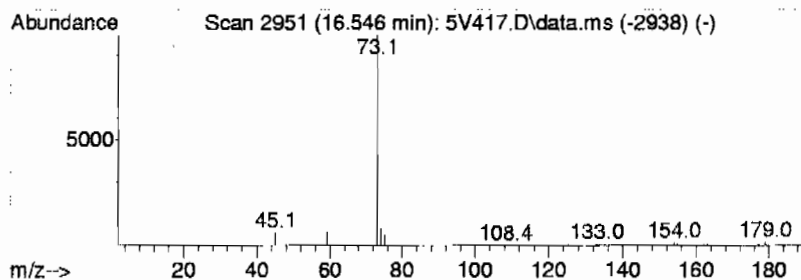
SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

\*\*\*\*\*  
Peak Number 1 unknown siloxane Concentration Rank 1

| R.T.   | EstConc   | Area   | Relative to ISTD         | R.T.   |
|--------|-----------|--------|--------------------------|--------|
| 16.546 | 7.13 ug/L | 364676 | B 1,4-Dichlorobenzene-d4 | 15.963 |

| Hit# | of | Tentative ID                          | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Silane, (1-cyclopenten-1-yl)methyl... | 154 | C9H18Si | 075311-60-3 | 64   |
| 2    |    | Silane, trimethyl-3-penten-2-yl-      | 142 | C8H18Si | 053264-56-5 | 9    |
| 3    |    | Thiocyanic acid, methyl ester         | 73  | C2H3NS  | 000556-64-9 | 4    |
| 4    |    | Ethyl ether                           | 74  | C4H10O  | 000060-29-7 | 4    |
| 5    |    | 1-Propene-1-thiol                     | 74  | C3H6S   | 000925-89-3 | 4    |



Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V417.D  
Acq On : 28 Jan 2010 4:23 pm  
Operator : DXK1  
Sample : |245114012|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

| TIC Top Hit name | RT     | EstConc | Units | Response | ---Internal Standard--- |        |         |      |
|------------------|--------|---------|-------|----------|-------------------------|--------|---------|------|
|                  |        |         |       |          | #                       | RT     | Resp    | Conc |
| unknown siloxane | 16.546 | 7.1     | ug/L  | 364676   | 6                       | 15.963 | 2556400 | 50.0 |



**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114013  
 Client ID: RE15-10-8424  
 Batch ID: 946008  
 Run Date: 01/28/2010 16:49  
 Prep Date: 01/28/2009 11:15  
 Data File: 012810V5SV418.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 10  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.11   | ug/kg | 0.378   | 1.11    |
| 74-87-3    | Chloromethane               | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 75-01-4    | Vinyl chloride              | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 74-83-9    | Bromomethane                | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 75-00-3    | Chloroethane                | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 67-64-1    | Acetone                     | U         | 5.56   | ug/kg | 1.85    | 5.56    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 74-88-4    | Iodomethane                 | U         | 5.56   | ug/kg | 1.78    | 5.56    |
| 75-09-2    | Methylene chloride          | U         | 5.56   | ug/kg | 2.22    | 5.56    |
| 75-15-0    | Carbon disulfide            | U         | 5.56   | ug/kg | 1.39    | 5.56    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 78-93-3    | 2-Butanone                  | U         | 5.56   | ug/kg | 1.67    | 5.56    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 67-66-3    | Chloroform                  | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 74-97-5    | Bromochloromethane          | U         | 1.11   | ug/kg | 0.367   | 1.11    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 71-43-2    | Benzene                     | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 79-01-6    | Trichloroethylene           | U         | 1.11   | ug/kg | 0.367   | 1.11    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 75-27-4    | Bromodichloromethane        | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 74-95-3    | Dibromomethane              | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.56   | ug/kg | 1.39    | 5.56    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 108-88-3   | Toluene                     | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 591-78-6   | 2-Hexanone                  | U         | 5.56   | ug/kg | 1.67    | 5.56    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 124-48-1   | Dibromochloromethane        | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 108-90-7   | Chlorobenzene               | U         | 1.11   | ug/kg | 0.333   | 1.11    |

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114013

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 10  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE15-10-8424  
Batch ID: 946008  
Run Date: 01/28/2010 16:49  
Prep Date: 01/28/2009 11:15  
Data File: 012810V5SV418.D

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.22   | ug/kg | 0.333   | 2.22    |
| 95-47-6     | o-Xylene                              | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 100-42-5    | Styrene                               | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 75-25-2     | Bromoform                             | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 108-86-1    | Bromobenzene                          | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.56   | ug/kg | 1.78    | 5.56    |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.11   | ug/kg | 0.333   | 1.11    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.11   | ug/kg | 0.333   | 1.11    |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|-------|-----------|-------|-----|------|
|         | unknown siloxane                      | 16.55 | 8.53      | ug/kg | 0   | J    |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V418.D  
Acq On : 28 Jan 2010 4:49 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114013|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 29 09:23:01 2010

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Jan 11 08:56:29 2010

Response via : Initial Calibration

Integrator: RTE

| Compound                      | R.T.     | Exp RT | Rel RT   | QIon | Response | Conc  | Units |           |
|-------------------------------|----------|--------|----------|------|----------|-------|-------|-----------|
| Internal Standards            |          |        |          |      |          |       |       | Dev (Min) |
| 1) Fluorobenzene              | 10.375   | 10.375 | 1.000    | 96   | 1746436  | 50.00 | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547   | 13.547 | 1.000    | 117  | 1075548  | 50.00 | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.962   | 15.962 | 1.000    | 152  | 414968   | 50.00 | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.375   | 10.375 | 1.000    | 96   | 1746436  | 50.00 | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547   | 13.547 | 1.000    | 117  | 1075548  | 50.00 | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.962   | 15.962 | 1.000    | 152  | 414968   | 50.00 | ug/L  | 0.00      |
| System Monitoring Compounds   |          |        |          |      |          |       |       | Dev (Min) |
| 29) 1,2-Dichloroethane-d4     | 10.025   | 10.021 | 0.966    | 65   | 416816   | 51.35 | ug/L  | 0.00      |
| Spiked Amount 50.000          | Range 68 | - 131  | Recovery | =    | 102.70%  |       |       |           |
| 43) Toluene-d8                | 12.016   | 12.016 | 0.887    | 98   | 1527366  | 52.07 | ug/L  | 0.00      |
| Spiked Amount 50.000          | Range 75 | - 129  | Recovery | =    | 104.14%  |       |       |           |
| 61) Bromofluorobenzene        | 14.739   | 14.739 | 0.923    | 95   | 473648   | 59.82 | ug/L  | 0.00      |
| Spiked Amount 50.000          | Range 68 | - 133  | Recovery | =    | 119.64%  |       |       |           |
| Target Compounds              |          |        |          |      |          |       |       | QValue    |
| 2) Dichlorodifluoromethane    | 0.000    | 4.689  | 0.000    |      | 0        | N.D.  |       |           |
| 3) Chloromethane              | 5.081    | 5.051  | 0.490    | 50   | 340      | N.D.  |       |           |
| 4) Vinyl chloride             | 0.000    | 5.283  | 0.000    |      | 0        | N.D.  |       |           |
| 5) Bromomethane               | 0.000    | 5.877  | 0.000    |      | 0        | N.D.  |       |           |
| 6) Chloroethane               | 0.000    | 6.018  | 0.000    |      | 0        | N.D.  |       |           |
| 7) Trichlorofluoromethane     | 0.000    | 6.391  | 0.000    |      | 0        | N.D.  |       |           |
| 8) Ethyl ether                | 0.000    | 6.733  | 0.000    |      | 0        | N.D.  |       |           |
| 9) Acetone                    | 7.111    | 7.100  | 0.685    | 43   | 5792     | N.D.  |       |           |
| 10) 1,1-Dichloroethylene      | 0.000    | 7.125  | 0.000    |      | 0        | N.D.  |       |           |
| 11) Iodomethane               | 0.000    | 7.373  | 0.000    |      | 0        | N.D.  |       |           |
| 12) Acetonitrile              | 0.000    | 7.450  | 0.000    |      | 0        | N.D.  |       |           |
| 13) Methyl acetate            | 7.496    | 7.493  | 0.723    | 43   | 219      | N.D.  |       |           |
| 14) Carbon disulfide          | 7.507    | 7.511  | 0.724    | 76   | 236      | N.D.  |       |           |
| 15) Methylene chloride        | 7.694    | 7.691  | 0.742    | 84   | 12802    | N.D.  |       |           |
| 16) tert-Butyl methyl ether   | 0.000    | 7.984  | 0.000    |      | 0        | N.D.  |       |           |
| 17) trans-1,2-Dichloroethy... | 0.000    | 8.030  | 0.000    |      | 0        | N.D.  |       |           |
| 18) Vinyl acetate             | 8.320    | 8.458  | 0.802    | 43   | 382      | N.D.  |       |           |
| 19) 1,1-Dichloroethane        | 0.000    | 8.511  | 0.000    |      | 0        | N.D.  |       |           |
| 20) 2-Butanone                | 9.088    | 9.077  | 0.876    | 43   | 128      | N.D.  |       |           |
| 21) cis-1,2-Dichloroethylene  | 0.000    | 9.144  | 0.000    |      | 0        | N.D.  |       |           |
| 22) 2,2-Dichloropropane       | 0.000    | 9.173  | 0.000    |      | 0        | N.D.  |       |           |
| 23) Bromochloromethane        | 0.000    | 9.417  | 0.000    |      | 0        | N.D.  |       |           |
| 24) Chloroform                | 0.000    | 9.452  | 0.000    |      | 0        | N.D.  |       |           |
| 25) 1,1,1-Trichloroethane     | 0.000    | 9.735  | 0.000    |      | 0        | N.D.  |       |           |
| 26) Cyclohexane               | 9.823    | 9.830  | 0.947    | 56   | 234      | N.D.  |       |           |
| 27) 1,1-Dichloropropene       | 0.000    | 9.887  | 0.000    |      | 0        | N.D.  |       |           |
| 28) Carbon tetrachloride      | 0.000    | 9.929  | 0.000    |      | 0        | N.D.  |       |           |
| 30) 1,2-Dichloroethane        | 0.000    | 10.103 | 0.000    |      | 0        | N.D.  |       |           |
| 31) Benzene                   | 10.124   | 10.127 | 0.976    | 78   | 235      | N.D.  |       |           |
| 32) Cyclohexene               | 0.000    | 10.248 | 0.000    |      | 0        | N.D.  |       |           |
| 33) n-Butyl alcohol           | 0.000    | 10.460 | 0.000    |      | 0        | N.D.  |       |           |
| 34) Trichloroethylene         | 0.000    | 10.768 | 0.000    |      | 0        | N.D.  |       |           |
| 35) 1,2-Dichloropropane       | 0.000    | 11.004 | 0.000    |      | 0        | N.D.  |       |           |
| 36) Methylcyclohexane         | 0.000    | 11.019 | 0.000    |      | 0        | N.D.  |       |           |
| 37) Dibromomethane            | 0.000    | 11.146 | 0.000    |      | 0        | N.D.  |       |           |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V418.D  
Acq On : 28 Jan 2010 4:49 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114013|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 29 09:23:01 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|-------------------------------|--------|--------|--------|------|----------|------|-------|
| 38) Bromodichloromethane      | 0.000  | 11.256 | 0.000  |      | 0        | N.D. |       |
| 39) 2-Chloroethylvinyl ether  | 0.000  | 11.468 | 0.000  |      | 0        | N.D. |       |
| 40) cis-1,3-Dichloropropylene | 0.000  | 11.705 | 0.000  |      | 0        | N.D. |       |
| 42) 4-Methyl-2-pentanone      | 0.000  | 11.786 | 0.000  |      | 0        | N.D. |       |
| 44) Toluene                   | 12.090 | 12.090 | 0.892  | 91   | 6053     | N.D. |       |
| 45) trans-1,3-Dichloroprop... | 0.000  | 12.239 | 0.000  |      | 0        | N.D. |       |
| 46) 1,1,2-Trichloroethane     | 0.000  | 12.465 | 0.000  |      | 0        | N.D. |       |
| 47) 2-Hexanone                | 0.000  | 12.631 | 0.000  |      | 0        | N.D. |       |
| 48) 1,3-Dichloropropane       | 0.000  | 12.656 | 0.000  |      | 0        | N.D. |       |
| 49) Tetrachloroethylene       | 0.000  | 12.691 | 0.000  |      | 0        | N.D. |       |
| 50) Dibromochloromethane      | 0.000  | 12.928 | 0.000  |      | 0        | N.D. |       |
| 51) 1,2-Dibromoethane         | 0.000  | 13.094 | 0.000  |      | 0        | N.D. |       |
| 52) Chlorobenzene             | 13.579 | 13.579 | 1.002  | 112  | 107      | N.D. |       |
| 53) 1,1,1,2-Tetrachloroethane | 0.000  | 13.636 | 0.000  |      | 0        | N.D. |       |
| 54) Ethylbenzene              | 13.642 | 13.639 | 1.007  | 91   | 1530     | N.D. |       |
| 55) m,p-Xylenes               | 13.756 | 13.749 | 1.015  | 106  | 275      | N.D. |       |
| 56) o-Xylene                  | 14.176 | 14.184 | 1.046  | 106  | 1162     | N.D. |       |
| 57) Styrene                   | 0.000  | 14.184 | 0.000  |      | 0        | N.D. |       |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D. |       |
| 60) Isopropylbenzene          | 14.565 | 14.537 | 0.912  | 105  | 4505     | N.D. |       |
| 62) 1,1,2,2-Tetrachloroethane | 0.000  | 14.810 | 0.000  |      | 0        | N.D. |       |
| 63) 1,2,3-Trichloropropane    | 0.000  | 14.898 | 0.000  |      | 0        | N.D. |       |
| 64) Bromobenzene              | 0.000  | 14.951 | 0.000  |      | 0        | N.D. |       |
| 65) n-Propylbenzene           | 14.965 | 14.965 | 0.938  | 91   | 115      | N.D. |       |
| 66) 1,3,5-Trimethylbenzene    | 0.000  | 15.114 | 0.000  |      | 0        | N.D. |       |
| 67) 2-Chlorotoluene           | 0.000  | 15.117 | 0.000  |      | 0        | N.D. |       |
| 68) 4-Chlorotoluene           | 15.188 | 15.216 | 0.951  | 91   | 260      | N.D. |       |
| 69) tert-Butylbenzene         | 0.000  | 15.489 | 0.000  |      | 0m       | N.D. | d     |
| 70) 1,2,4-Trimethylbenzene    | 0.000  | 15.527 | 0.000  |      | 0m       | N.D. | d     |
| 71) sec-Butylbenzene          | 15.807 | 15.711 | 0.990  | 105  | 632      | N.D. |       |
| 72) 4-Isopropyltoluene        | 0.000  | 15.832 | 0.000  |      | 0m       | N.D. | d     |
| 73) 1,3-Dichlorobenzene       | 0.000  | 15.902 | 0.000  |      | 0        | N.D. |       |
| 74) 1,4-Dichlorobenzene       | 0.000  | 15.991 | 0.000  |      | 0        | N.D. |       |
| 75) n-Butylbenzene            | 16.129 | 16.277 | 1.010  | 91   | 147      | N.D. |       |
| 76) 1,2-Dichlorobenzene       | 0.000  | 16.422 | 0.000  |      | 0        | N.D. |       |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D. |       |
| 78) 1,2,4-Trichlorobenzene    | 0.000  | 18.371 | 0.000  |      | 0        | N.D. |       |
| 79) Hexachlorobutadiene       | 0.000  | 18.548 | 0.000  |      | 0        | N.D. |       |
| 80) Naphthalene               | 18.754 | 18.762 | 1.175  | 128  | 125      | N.D. |       |
| 81) 1,2,3-Trichlorobenzene    | 0.000  | 19.116 | 0.000  |      | 0        | N.D. |       |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D. |       |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D. |       |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D. |       |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D. |       |
| 87) Isopropyl Alcohol         | 7.270  | 7.175  | 0.701  | 45   | 581      | N.D. |       |
| 88) Allyl chloride            | 0.000  | 7.546  | 0.000  |      | 0        | N.D. |       |
| 89) tert-Butyl Alcohol        | 0.000  | 7.673  | 0.000  |      | 0        | N.D. |       |
| 90) Acrylonitrile             | 0.000  | 7.928  | 0.000  |      | 0        | N.D. |       |
| 91) Isopropyl ether           | 0.000  | 8.483  | 0.000  |      | 0        | N.D. |       |
| 92) 2-Chloro-1,3-butadiene    | 0.000  | 8.617  | 0.000  |      | 0        | N.D. |       |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D. |       |
| 94) Ethyl acetate             | 9.088  | 9.088  | 0.876  | 43   | 128      | N.D. |       |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V418.D  
Acq On : 28 Jan 2010 4:49 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114013|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 29 09:23:01 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.  | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|-------|--------|--------|------|----------|------|-------|
| 95) Propionitrile              | 0.000 | 9.148  | 0.000  |      | 0        | N.D. |       |
| 96) Methacrylonitrile          | 0.000 | 9.332  | 0.000  |      | 0        | N.D. |       |
| 97) Tetrahydrofuran            | 0.000 | 9.466  | 0.000  |      | 0        | N.D. |       |
| 98) Isobutyl alcohol           | 9.827 | 9.770  | 0.947  | 41   | 244      | N.D. |       |
| 99) Methyl tert-amyl ether     | 0.000 | 10.138 | 0.000  |      | 0        | N.D. |       |
| 100) Methyl methacrylate       | 0.000 | 10.969 | 0.000  |      | 0        | N.D. |       |
| 101) 1,4-Dioxane               | 0.000 | 11.089 | 0.000  |      | 0        | N.D. |       |
| 102) 2-Nitropropane            | 0.000 | 11.443 | 0.000  |      | 0        | N.D. |       |
| 104) Ethyl methacrylate        | 0.000 | 12.235 | 0.000  |      | 0        | N.D. |       |
| 106) 1-Chlorohexane            | 0.000 | 13.438 | 0.000  |      | 0        | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 0.000 | 14.573 | 0.000  |      | 0m       | N.D. | d     |
| 108) Cyclohexanone             | 0.000 | 14.693 | 0.000  |      | 0        | N.D. |       |
| 109) trans-1,4-Dichloro-2-b... | 0.000 | 14.856 | 0.000  |      | 0        | N.D. |       |
| 110) Pentachloroethane         | 0.000 | 15.559 | 0.000  |      | 0        | N.D. |       |
| 111) Benzyl chloride           | 0.000 | 16.100 | 0.000  |      | 0m       | N.D. | d     |
| 112) bis(2-Chloroisopropyl)... | 0.000 | 16.497 | 0.000  |      | 0m       | N.D. | d     |

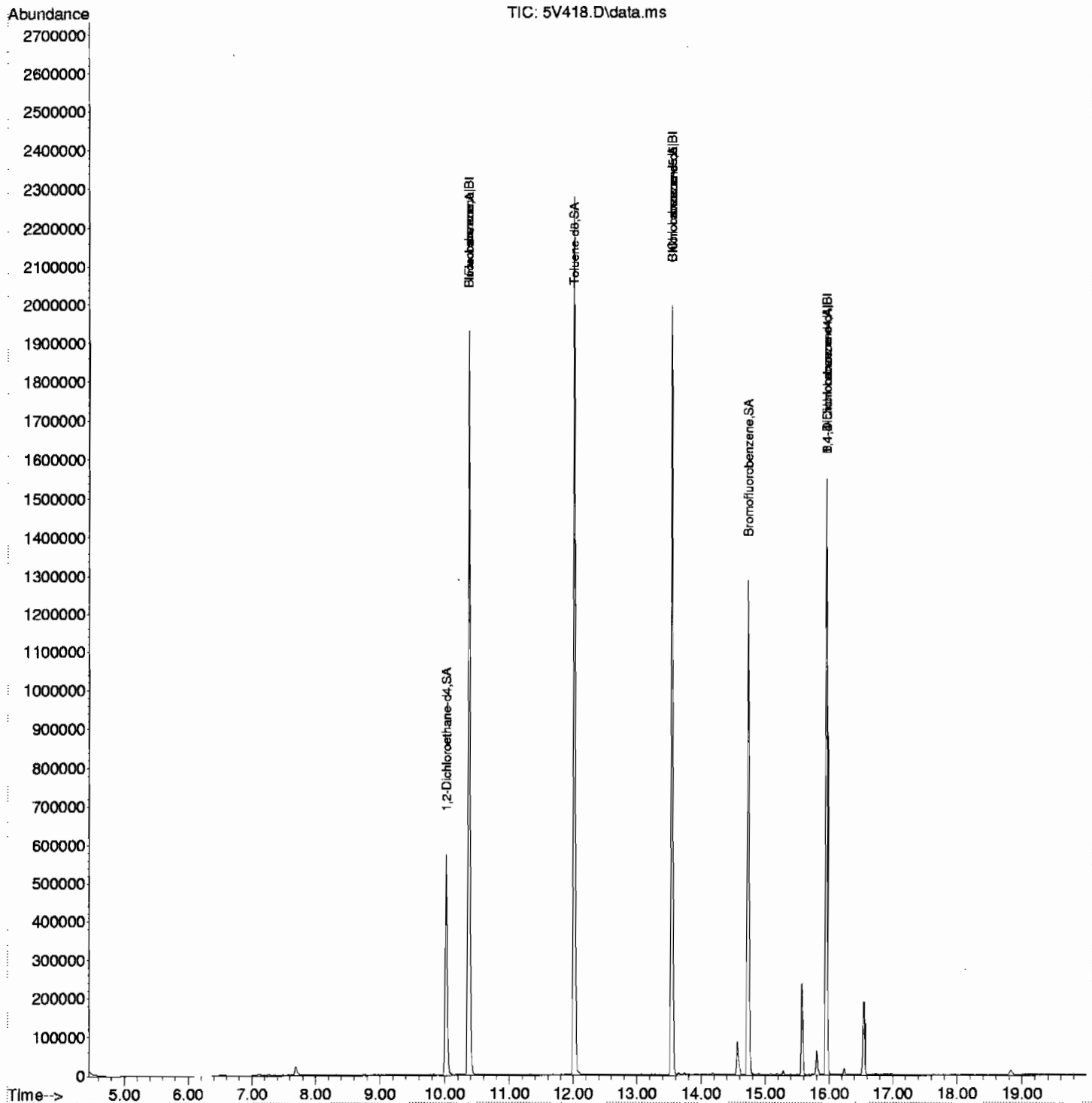
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

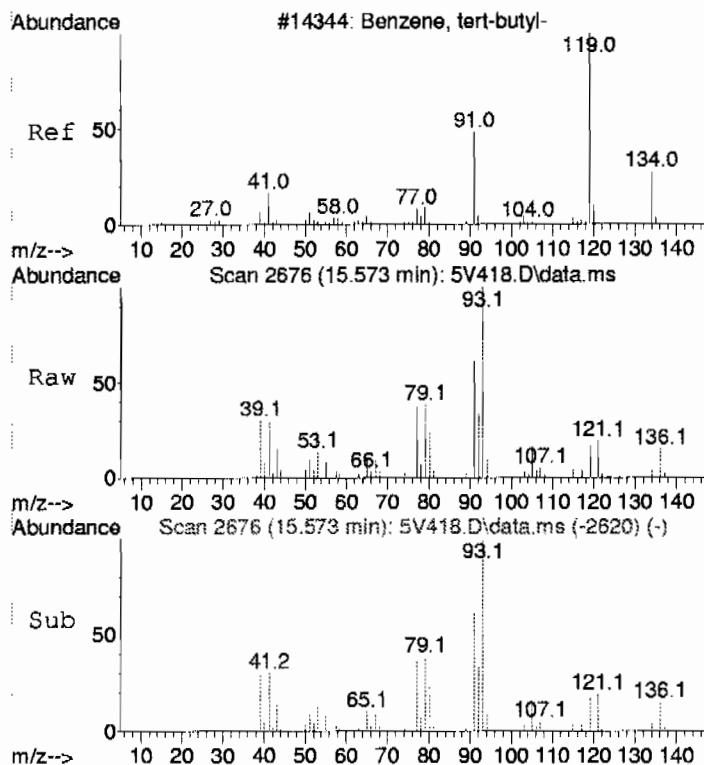
Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V418.D  
Acq On : 28 Jan 2010 4:49 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114013|946008|1|VOA|1|VOA8260BS|  
Misc : LANTL 5.0g N/A SOIL  
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 29 09:23:01 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

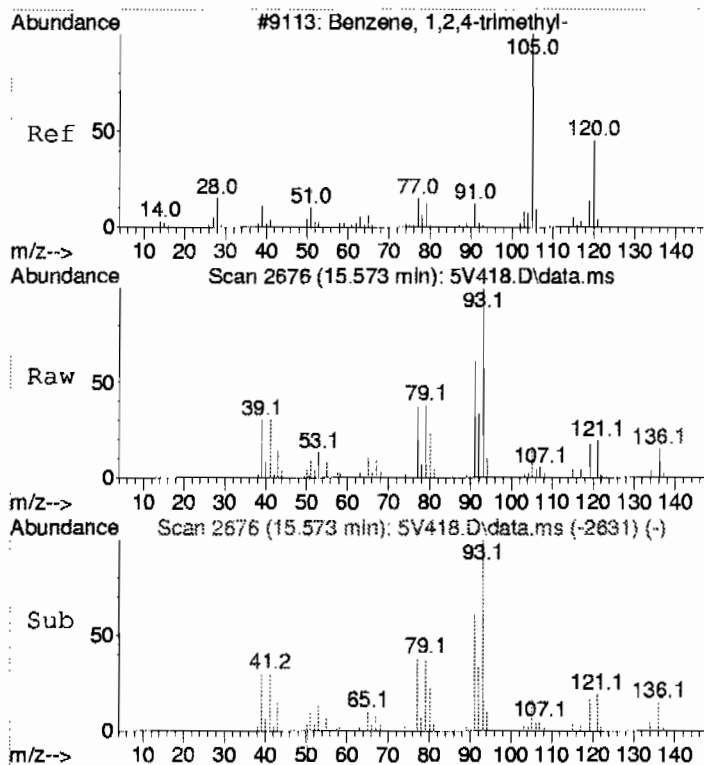
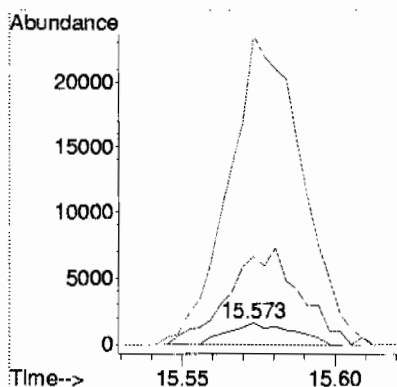
SubList :





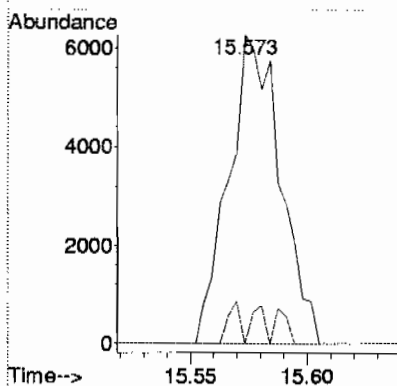
#69 BEFORE analyst DELETION  
tert-Butylbenzene  
Concen: 0.65 ug/L  
RT: 15.573 min Scan# 2676  
Delta R.T. 0.084 min  
Lab File: 5V418.D  
Acq: 28 Jan 2010 4:49 pm

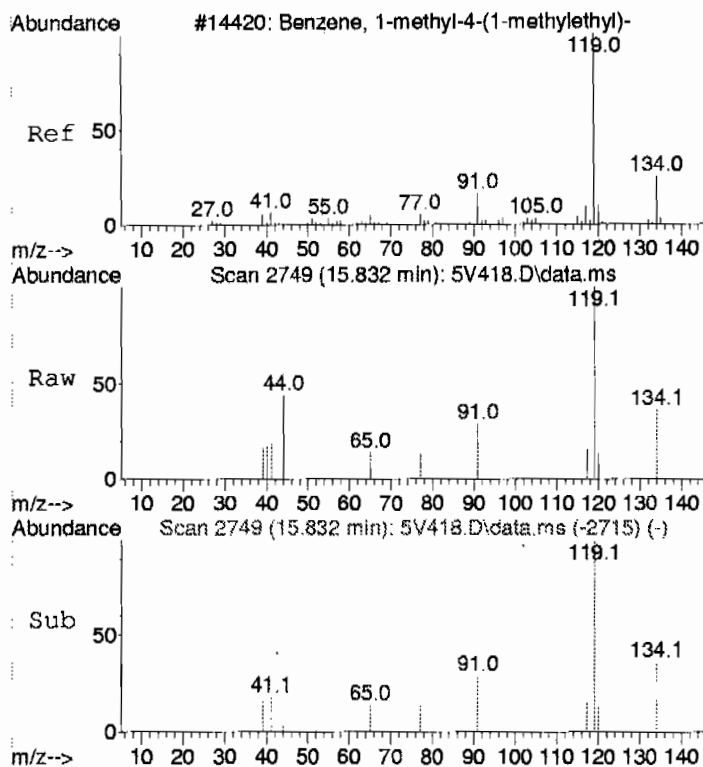
Tgt Ion:134 Resp: 2350  
Ion Ratio Lower Upper  
134 100  
119 480.9 395.2 455.2#  
91 1617.1 251.7 311.7#



#70 BEFORE analyst DELETION  
1,2,4-Trimethylbenzene  
Concen: 0.61 ug/L  
RT: 15.573 min Scan# 2676  
Delta R.T. 0.046 min  
Lab File: 5V418.D  
Acq: 28 Jan 2010 4:49 pm

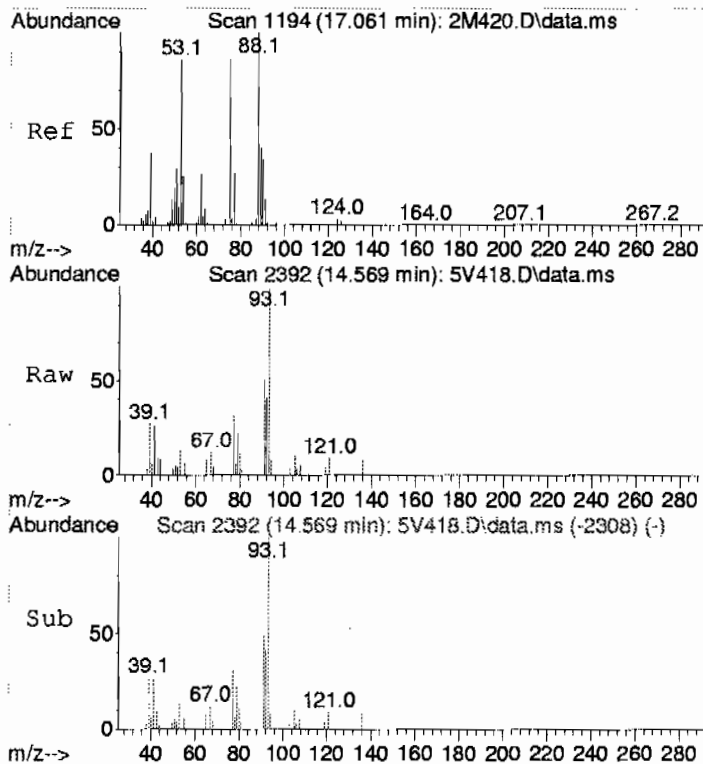
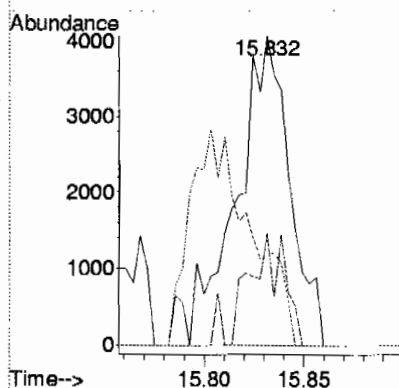
Tgt Ion:105 Resp: 9622  
Ion Ratio Lower Upper  
105 100  
120 3.1 18.3 78.3#





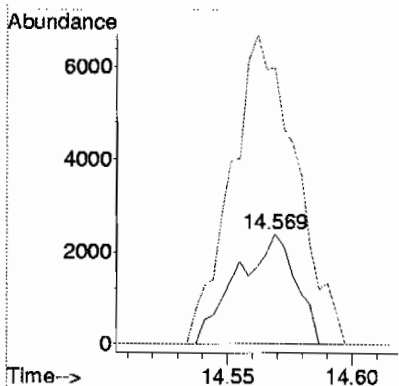
#72 BEFORE analyst DELETION  
4-Isopropyltoluene  
Concen: 0.46 ug/L  
RT: 15.832 min Scan# 2749  
Delta R.T. -0.001 min  
Lab File: 5V418.D  
Acq: 28 Jan 2010 4:49 pm

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 119     | 100   |       |       |
| 134     | 23.4  | 0.0   | 58.7  |
| 91      | 0.0   | 0.0   | 51.7  |

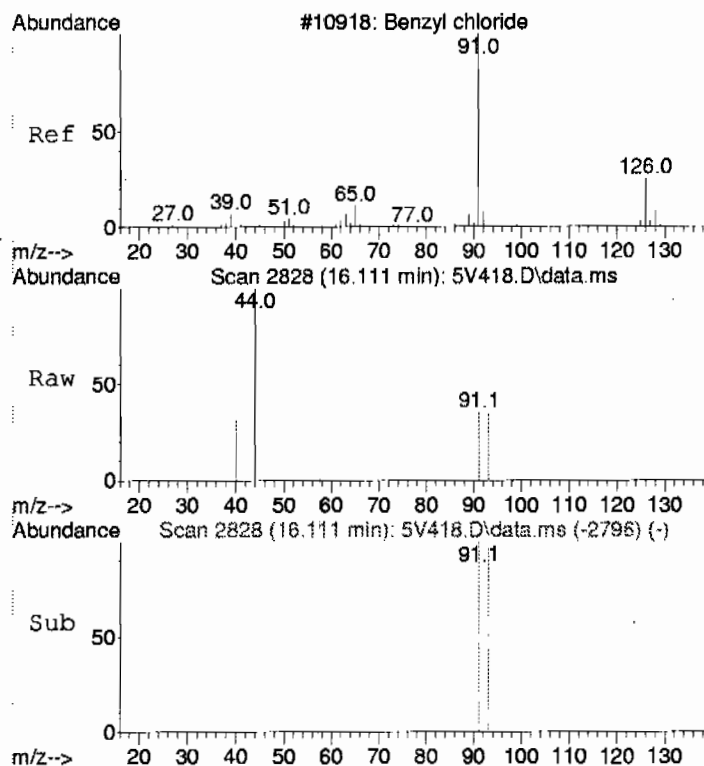


#107 BEFORE analyst DELETION  
cis-1,4-Dichloro-2-butene  
Concen: 2.48 ug/L  
RT: 14.569 min Scan# 2392  
Delta R.T. -0.004 min  
Lab File: 5V418.D  
Acq: 28 Jan 2010 4:49 pm

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 53      | 100   |       |        |
| 88      | 0.0   | 50.2  | 110.2# |
| 77      | 310.1 | 0.0   | 59.6#  |

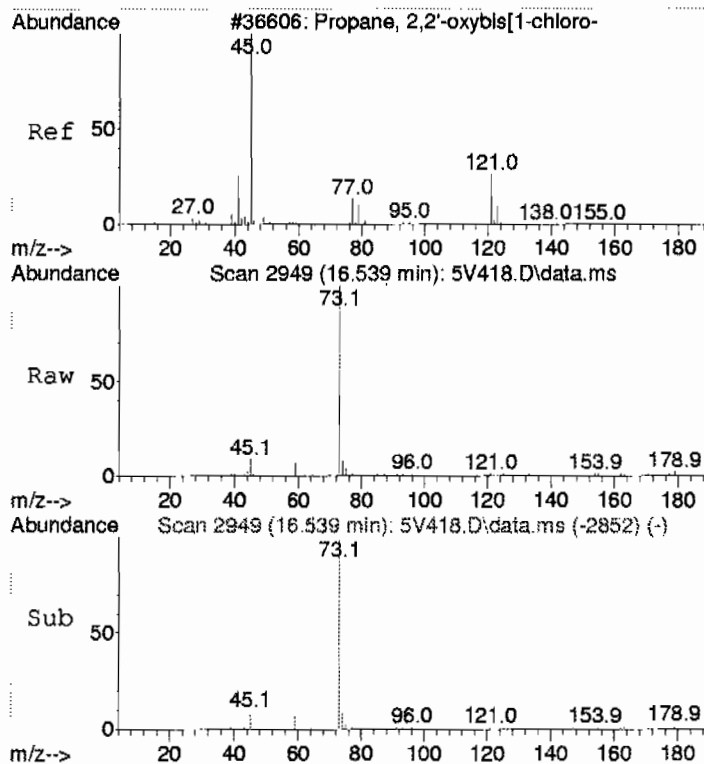
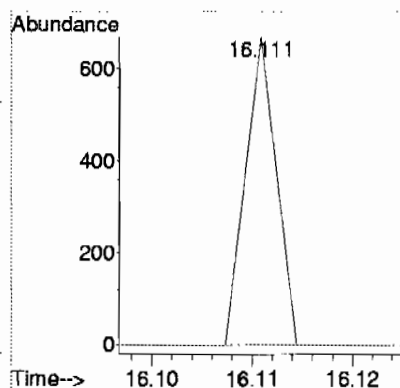






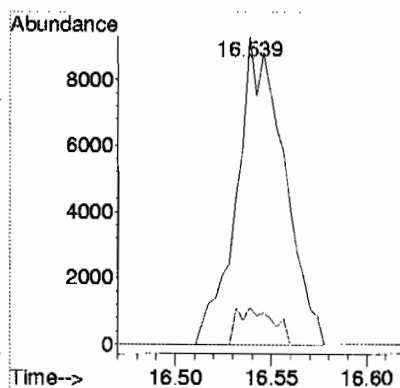
#111 BEFORE analyst DELETION  
Benzyl chloride  
Concen: 4.48 ug/L  
RT: 16.111 min Scan# 2828  
Delta R.T. 0.011 min  
Lab File: 5V418.D  
Acq: 28 Jan 2010 4:49 pm

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 91      | 100   | 142  |       |       |
| 126     | 0.0   | 0.0  | 51.6  |       |
| 65      | 0.0   | 0.0  | 41.9  |       |



#112 BEFORE analyst DELETION  
bis(2-Chloroisopropyl) ether  
Concen: 5.74 ug/L  
RT: 16.539 min Scan# 2949  
Delta R.T. 0.042 min  
Lab File: 5V418.D  
Acq: 28 Jan 2010 4:49 pm

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 45      | 100   | 15861 |       |       |
| 121     | 9.1   | 0.0   | 49.2  |       |



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V418.D  
Acq On : 28 Jan 2010 4:49 pm  
Operator : DXK1  
Sample : |245114013|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

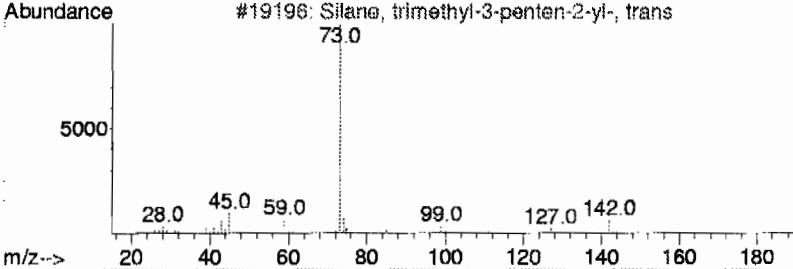
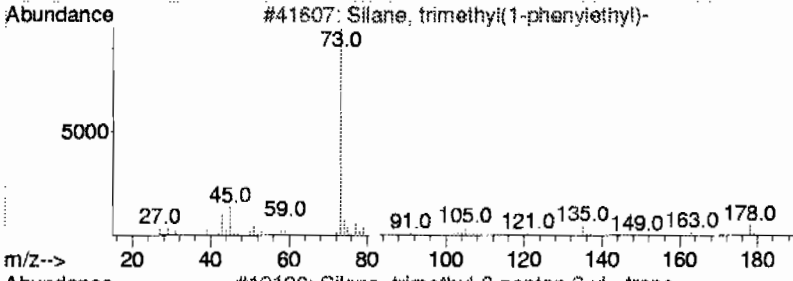
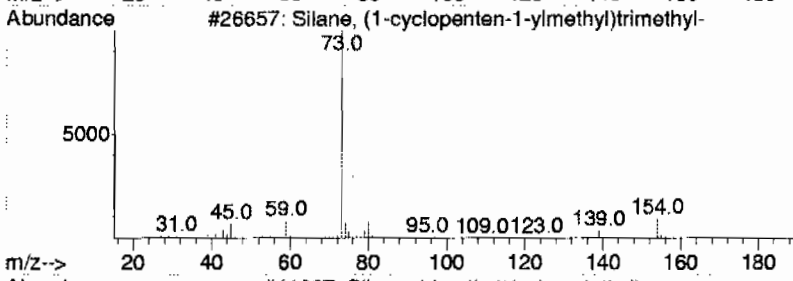
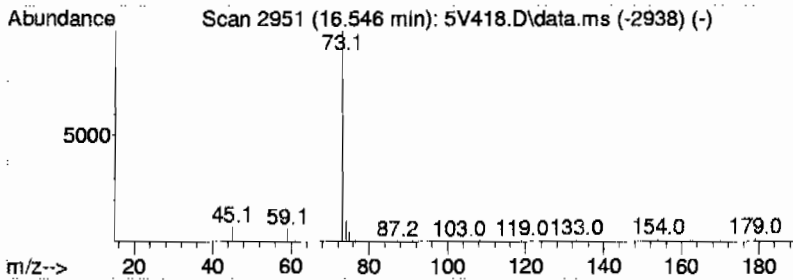
SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

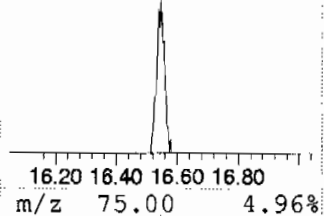
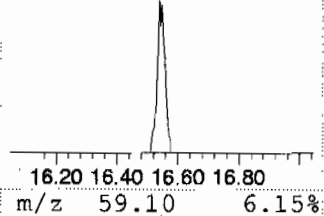
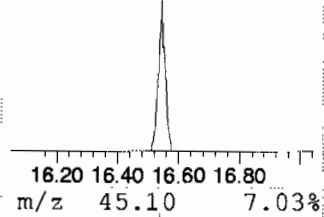
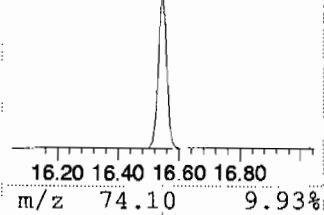
\*\*\*\*\*  
Peak Number 1 unknown siloxane Concentration Rank 1

| R.T.   | EstConc   | Area   | Relative to ISTD         | R.T.   |
|--------|-----------|--------|--------------------------|--------|
| 16.546 | 7.67 ug/L | 414674 | B 1,4-Dichlorobenzene-d4 | 15.962 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | Silane, (1-cyclopenten-1-ylmethy... | 154 | C9H18Si  | 075311-60-3 | 64   |
| 2    |    | Silane, trimethyl(1-phenylethyl)-   | 178 | C11H18Si | 017961-78-3 | 9    |
| 3    |    | Silane, trimethyl-3-penten-2-yl-... | 142 | C8H18Si  | 053264-56-5 | 9    |
| 4    |    | Cyclopropane, 2-methylene-1-pent... | 196 | C12H24Si | 167300-47-2 | 9    |
| 5    |    | Ethane, 1,2-diethoxy-               | 118 | C6H14O2  | 000629-14-1 | 5    |



m/z 73.10 100.00%



Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V418.D  
Acq On : 28 Jan 2010 4:49 pm  
Operator : DXK1  
Sample : |245114013|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

| TIC Top Hit name | RT     | EstConc | Units | Response | ---Internal Standard--- |        |         |      |
|------------------|--------|---------|-------|----------|-------------------------|--------|---------|------|
|                  |        |         |       |          | #                       | RT     | Resp    | Conc |
| unknown siloxane | 16.546 | 7.7     | ug/L  | 414674   | 6                       | 15.962 | 2701560 | 50.0 |

**Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 2

SDG Number: 10-1324  
Lab Sample ID: 245114014  
  
Client ID: RE15-10-8421  
Batch ID: 946008  
Run Date: 01/28/2010 17:15  
Prep Date: 01/28/2009 11:16  
Data File: 012810V55V419.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 12.5  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.14   | ug/kg | 0.388   | 1.14    |
| 74-87-3    | Chloromethane               | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 75-01-4    | Vinyl chloride              | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 74-83-9    | Bromomethane                | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 75-00-3    | Chloroethane                | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 67-64-1    | Acetone                     | U         | 5.71   | ug/kg | 1.90    | 5.71    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 74-88-4    | Iodomethane                 | U         | 5.71   | ug/kg | 1.83    | 5.71    |
| 75-09-2    | Methylene chloride          | U         | 5.71   | ug/kg | 2.28    | 5.71    |
| 75-15-0    | Carbon disulfide            | U         | 5.71   | ug/kg | 1.43    | 5.71    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 78-93-3    | 2-Butanone                  | U         | 5.71   | ug/kg | 1.71    | 5.71    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 67-66-3    | Chloroform                  | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 74-97-5    | Bromochloromethane          | U         | 1.14   | ug/kg | 0.377   | 1.14    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 71-43-2    | Benzene                     | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 79-01-6    | Trichloroethylene           | U         | 1.14   | ug/kg | 0.377   | 1.14    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 75-27-4    | Bromodichloromethane        | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 74-95-3    | Dibromomethane              | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.71   | ug/kg | 1.43    | 5.71    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 108-88-3   | Toluene                     | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 591-78-6   | 2-Hexanone                  | U         | 5.71   | ug/kg | 1.71    | 5.71    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 124-48-1   | Dibromochloromethane        | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 108-90-7   | Chlorobenzene               | U         | 1.14   | ug/kg | 0.343   | 1.14    |

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114014  
  
Client ID: RE15-10-8421  
Batch ID: 946008  
Run Date: 01/28/2010 17:15  
Prep Date: 01/28/2009 11:16  
Data File: 012810V55V419.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5J  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 12.5  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.28   | ug/kg | 0.343   | 2.28    |
| 95-47-6     | o-Xylene                              | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 100-42-5    | Styrene                               | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 75-25-2     | Bromoform                             | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 108-86-1    | Bromobenzene                          | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.71   | ug/kg | 1.83    | 5.71    |
|             | Trichlorotrifluoroethane              |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.14   | ug/kg | 0.343   | 1.14    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.14   | ug/kg | 0.343   | 1.14    |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V419.D  
Acq On : 28 Jan 2010 5:15 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114014|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 29 09:23:17 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT         | Rel RT   | QIon | Response | Conc  | Units |           |
|-------------------------------|--------|----------------|----------|------|----------|-------|-------|-----------|
| Internal Standards            |        |                |          |      |          |       |       | Dev (Min) |
| 1) Fluorobenzene              | 10.375 | 10.375         | 1.000    | 96   | 1626525  | 50.00 | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547 | 13.547         | 1.000    | 117  | 1045732  | 50.00 | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.963 | 15.962         | 1.000    | 152  | 459513   | 50.00 | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.375 | 10.375         | 1.000    | 96   | 1626525  | 50.00 | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547 | 13.547         | 1.000    | 117  | 1045732  | 50.00 | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.963 | 15.962         | 1.000    | 152  | 459513   | 50.00 | ug/L  | 0.00      |
| System Monitoring Compounds   |        |                |          |      |          |       |       | Dev (Min) |
| 29) 1,2-Dichloroethane-d4     | 10.025 | 10.021         | 0.966    | 65   | 419247   | 55.46 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 131 | Recovery | =    | 110.92%  |       |       |           |
| 43) Toluene-d8                | 12.020 | 12.016         | 0.887    | 98   | 1434166  | 50.29 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 75 - 129 | Recovery | =    | 100.58%  |       |       |           |
| 61) Bromofluorobenzene        | 14.739 | 14.739         | 0.923    | 95   | 499080   | 56.92 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 133 | Recovery | =    | 113.84%  |       |       |           |
| Target Compounds              | R.T.   | Exp RT         | Rel RT   | QIon | Response | Conc  | Units | QValue    |
| 2) Dichlorodifluoromethane    | 0.000  | 4.689          | 0.000    |      | 0        | N.D.  |       |           |
| 3) Chloromethane              | 5.031  | 5.051          | 0.485    | 50   | 332      | N.D.  |       |           |
| 4) Vinyl chloride             | 0.000  | 5.283          | 0.000    |      | 0        | N.D.  |       |           |
| 5) Bromomethane               | 0.000  | 5.877          | 0.000    |      | 0        | N.D.  |       |           |
| 6) Chloroethane               | 0.000  | 6.018          | 0.000    |      | 0        | N.D.  |       |           |
| 7) Trichlorofluoromethane     | 0.000  | 6.391          | 0.000    |      | 0        | N.D.  |       |           |
| 8) Ethyl ether                | 0.000  | 6.733          | 0.000    |      | 0        | N.D.  |       |           |
| 9) Acetone                    | 7.104  | 7.100          | 0.685    | 43   | 117      | N.D.  |       |           |
| 10) 1,1-Dichloroethylene      | 0.000  | 7.125          | 0.000    |      | 0        | N.D.  |       |           |
| 11) Iodomethane               | 0.000  | 7.373          | 0.000    |      | 0        | N.D.  |       |           |
| 12) Acetonitrile              | 7.705  | 7.450          | 0.743    | 41   | 114      | N.D.  |       |           |
| 13) Methyl acetate            | 0.000  | 7.493          | 0.000    |      | 0        | N.D.  |       |           |
| 14) Carbon disulfide          | 7.507  | 7.511          | 0.724    | 76   | 311      | N.D.  |       |           |
| 15) Methylene chloride        | 7.702  | 7.691          | 0.742    | 84   | 5239     | N.D.  |       |           |
| 16) tert-Butyl methyl ether   | 0.000  | 7.984          | 0.000    |      | 0        | N.D.  |       |           |
| 17) trans-1,2-Dichloroethy... | 0.000  | 8.030          | 0.000    |      | 0        | N.D.  |       |           |
| 18) Vinyl acetate             | 8.317  | 8.458          | 0.802    | 43   | 812      | N.D.  |       |           |
| 19) 1,1-Dichloroethane        | 0.000  | 8.511          | 0.000    |      | 0        | N.D.  |       |           |
| 20) 2-Butanone                | 0.000  | 9.077          | 0.000    |      | 0        | N.D.  |       |           |
| 21) cis-1,2-Dichloroethylene  | 0.000  | 9.144          | 0.000    |      | 0        | N.D.  |       |           |
| 22) 2,2-Dichloropropane       | 0.000  | 9.173          | 0.000    |      | 0        | N.D.  |       |           |
| 23) Bromochloromethane        | 0.000  | 9.417          | 0.000    |      | 0        | N.D.  |       |           |
| 24) Chloroform                | 0.000  | 9.452          | 0.000    |      | 0        | N.D.  |       |           |
| 25) 1,1,1-Trichloroethane     | 0.000  | 9.735          | 0.000    |      | 0        | N.D.  |       |           |
| 26) Cyclohexane               | 0.000  | 9.830          | 0.000    |      | 0        | N.D.  |       |           |
| 27) 1,1-Dichloropropene       | 0.000  | 9.887          | 0.000    |      | 0        | N.D.  |       |           |
| 28) Carbon tetrachloride      | 0.000  | 9.929          | 0.000    |      | 0        | N.D.  |       |           |
| 30) 1,2-Dichloroethane        | 0.000  | 10.103         | 0.000    |      | 0        | N.D.  |       |           |
| 31) Benzene                   | 10.372 | 10.127         | 1.000    | 78   | 1411     | N.D.  |       |           |
| 32) Cyclohexene               | 0.000  | 10.248         | 0.000    |      | 0        | N.D.  |       |           |
| 33) n-Butyl alcohol           | 0.000  | 10.460         | 0.000    |      | 0        | N.D.  |       |           |
| 34) Trichloroethylene         | 0.000  | 10.768         | 0.000    |      | 0        | N.D.  |       |           |
| 35) 1,2-Dichloropropane       | 0.000  | 11.004         | 0.000    |      | 0        | N.D.  |       |           |
| 36) Methylcyclohexane         | 0.000  | 11.019         | 0.000    |      | 0        | N.D.  |       |           |
| 37) Dibromomethane            | 0.000  | 11.146         | 0.000    |      | 0        | N.D.  |       |           |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V419.D  
Acq On : 28 Jan 2010 5:15 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114014|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 29 09:23:17 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|-------------------------------|--------|--------|--------|------|----------|------|-------|
| 38) Bromodichloromethane      | 0.000  | 11.256 | 0.000  |      | 0        | N.D. |       |
| 39) 2-Chloroethylvinyl ether  | 0.000  | 11.468 | 0.000  |      | 0        | N.D. |       |
| 40) cis-1,3-Dichloropropylene | 0.000  | 11.705 | 0.000  |      | 0        | N.D. |       |
| 42) 4-Methyl-2-pentanone      | 0.000  | 11.786 | 0.000  |      | 0        | N.D. |       |
| 44) Toluene                   | 12.094 | 12.090 | 0.893  | 91   | 232      | N.D. |       |
| 45) trans-1,3-Dichloroprop... | 12.016 | 12.239 | 0.887  | 75   | 116      | N.D. |       |
| 46) 1,1,2-Trichloroethane     | 0.000  | 12.465 | 0.000  |      | 0        | N.D. |       |
| 47) 2-Hexanone                | 0.000  | 12.631 | 0.000  |      | 0        | N.D. |       |
| 48) 1,3-Dichloropropane       | 0.000  | 12.656 | 0.000  |      | 0        | N.D. |       |
| 49) Tetrachloroethylene       | 12.684 | 12.691 | 0.936  | 164  | 240      | N.D. |       |
| 50) Dibromochloromethane      | 0.000  | 12.928 | 0.000  |      | 0        | N.D. |       |
| 51) 1,2-Dibromoethane         | 0.000  | 13.094 | 0.000  |      | 0        | N.D. |       |
| 52) Chlorobenzene             | 0.000  | 13.579 | 0.000  |      | 0        | N.D. |       |
| 53) 1,1,1,2-Tetrachloroethane | 0.000  | 13.636 | 0.000  |      | 0        | N.D. |       |
| 54) Ethylbenzene              | 13.646 | 13.639 | 1.007  | 91   | 118      | N.D. |       |
| 55) m,p-Xylenes               | 13.742 | 13.749 | 1.014  | 106  | 231      | N.D. |       |
| 56) o-Xylene                  | 0.000  | 14.184 | 0.000  |      | 0        | N.D. |       |
| 57) Styrene                   | 0.000  | 14.184 | 0.000  |      | 0        | N.D. |       |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D. |       |
| 60) Isopropylbenzene          | 0.000  | 14.537 | 0.000  |      | 0        | N.D. |       |
| 62) 1,1,2,2-Tetrachloroethane | 14.789 | 14.810 | 0.926  | 83   | 392      | N.D. |       |
| 63) 1,2,3-Trichloropropane    | 14.764 | 14.898 | 0.925  | 110  | 149      | N.D. |       |
| 64) Bromobenzene              | 0.000  | 14.951 | 0.000  |      | 0        | N.D. |       |
| 65) n-Propylbenzene           | 0.000  | 14.965 | 0.000  |      | 0m       | N.D. | d     |
| 66) 1,3,5-Trimethylbenzene    | 0.000  | 15.114 | 0.000  |      | 0        | N.D. |       |
| 67) 2-Chlorotoluene           | 0.000  | 15.117 | 0.000  |      | 0        | N.D. |       |
| 68) 4-Chlorotoluene           | 0.000  | 15.216 | 0.000  |      | 0        | N.D. |       |
| 69) tert-Butylbenzene         | 0.000  | 15.489 | 0.000  |      | 0        | N.D. |       |
| 70) 1,2,4-Trimethylbenzene    | 0.000  | 15.527 | 0.000  |      | 0        | N.D. |       |
| 71) sec-Butylbenzene          | 0.000  | 15.711 | 0.000  |      | 0        | N.D. |       |
| 72) 4-Isopropyltoluene        | 0.000  | 15.832 | 0.000  |      | 0        | N.D. |       |
| 73) 1,3-Dichlorobenzene       | 0.000  | 15.902 | 0.000  |      | 0        | N.D. |       |
| 74) 1,4-Dichlorobenzene       | 0.000  | 15.991 | 0.000  |      | 0        | N.D. |       |
| 75) n-Butylbenzene            | 0.000  | 16.277 | 0.000  |      | 0        | N.D. |       |
| 76) 1,2-Dichlorobenzene       | 0.000  | 16.422 | 0.000  |      | 0        | N.D. |       |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D. |       |
| 78) 1,2,4-Trichlorobenzene    | 0.000  | 18.371 | 0.000  |      | 0        | N.D. |       |
| 79) Hexachlorobutadiene       | 0.000  | 18.548 | 0.000  |      | 0        | N.D. |       |
| 80) Naphthalene               | 18.769 | 18.762 | 1.176  | 128  | 394      | N.D. |       |
| 81) 1,2,3-Trichlorobenzene    | 0.000  | 19.116 | 0.000  |      | 0        | N.D. |       |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D. |       |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D. |       |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D. |       |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D. |       |
| 87) Isopropyl Alcohol         | 0.000  | 7.175  | 0.000  |      | 0        | N.D. |       |
| 88) Allyl chloride            | 7.705  | 7.546  | 0.743  | 41   | 114      | N.D. |       |
| 89) tert-Butyl Alcohol        | 0.000  | 7.673  | 0.000  |      | 0        | N.D. |       |
| 90) Acrylonitrile             | 0.000  | 7.928  | 0.000  |      | 0        | N.D. |       |
| 91) Isopropyl ether           | 0.000  | 8.483  | 0.000  |      | 0        | N.D. |       |
| 92) 2-Chloro-1,3-butadiene    | 0.000  | 8.617  | 0.000  |      | 0        | N.D. |       |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D. |       |
| 94) Ethyl acetate             | 0.000  | 9.088  | 0.000  |      | 0        | N.D. |       |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V419.D  
Acq On : 28 Jan 2010 5:15 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114014|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 29 09:23:17 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|--------|--------|--------|------|----------|------|-------|
| 95) Propionitrile              | 0.000  | 9.148  | 0.000  |      | 0        | N.D. |       |
| 96) Methacrylonitrile          | 0.000  | 9.332  | 0.000  |      | 0        | N.D. |       |
| 97) Tetrahydrofuran            | 0.000  | 9.466  | 0.000  |      | 0        | N.D. |       |
| 98) Isobutyl alcohol           | 0.000  | 9.770  | 0.000  |      | 0        | N.D. |       |
| 99) Methyl tert-amyl ether     | 0.000  | 10.138 | 0.000  |      | 0        | N.D. |       |
| 100) Methyl methacrylate       | 0.000  | 10.969 | 0.000  |      | 0        | N.D. |       |
| 101) 1,4-Dioxane               | 0.000  | 11.089 | 0.000  |      | 0        | N.D. |       |
| 102) 2-Nitropropane            | 0.000  | 11.443 | 0.000  |      | 0        | N.D. |       |
| 104) Ethyl methacrylate        | 0.000  | 12.235 | 0.000  |      | 0        | N.D. |       |
| 106) 1-Chlorohexane            | 0.000  | 13.438 | 0.000  |      | 0        | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 14.739 | 14.573 | 0.923  | 53   | 113      | N.D. |       |
| 108) Cyclohexanone             | 0.000  | 14.693 | 0.000  |      | 0m       | N.D. | d     |
| 109) trans-1,4-Dichloro-2-b... | 0.000  | 14.856 | 0.000  |      | 0m       | N.D. | d     |
| 110) Pentachloroethane         | 0.000  | 15.559 | 0.000  |      | 0        | N.D. |       |
| 111) Benzyl chloride           | 0.000  | 16.100 | 0.000  |      | 0        | N.D. |       |
| 112) bis(2-Chloroisopropyl)... | 0.000  | 16.497 | 0.000  |      | 0m       | N.D. | d     |

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

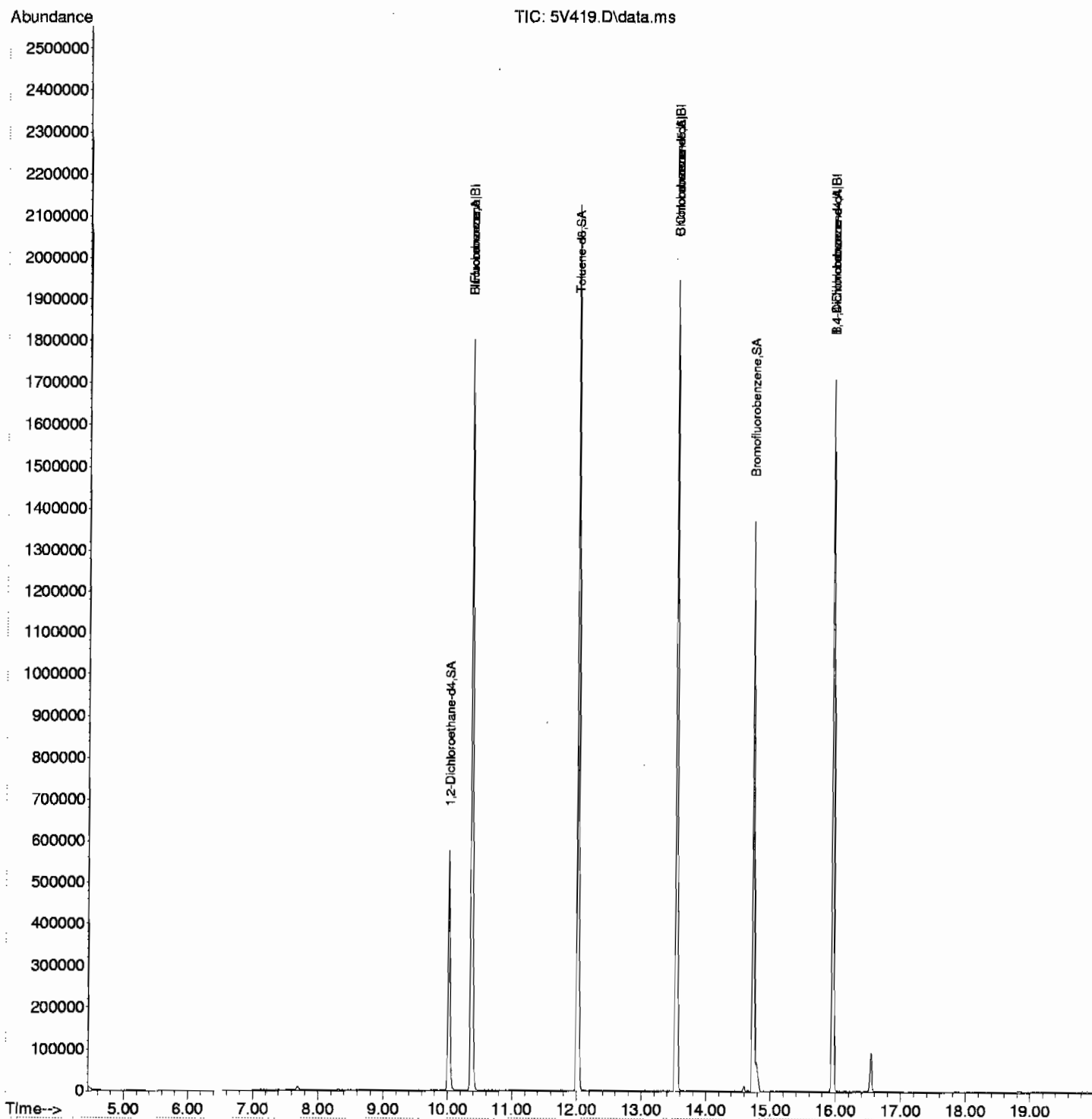


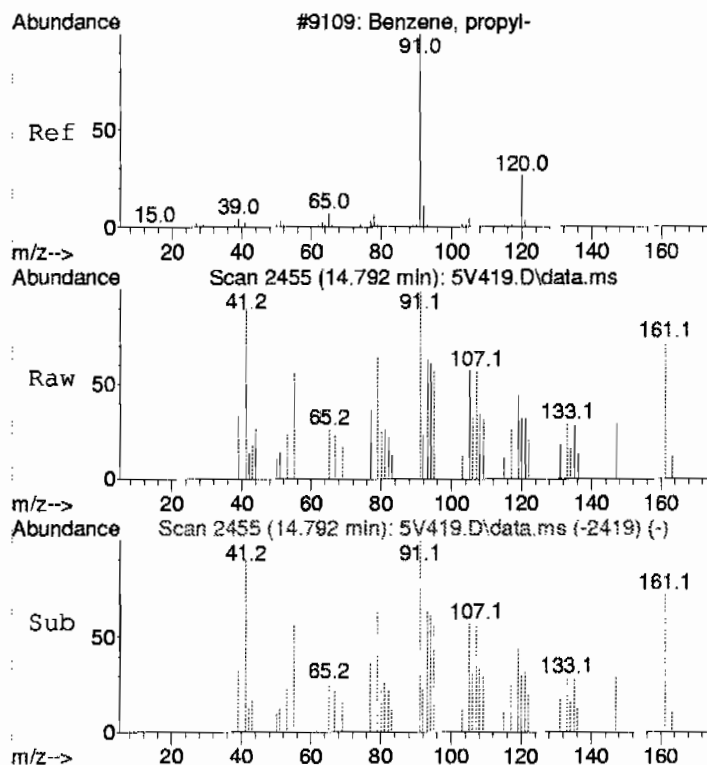
Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V419.D  
Acq On : 28 Jan 2010 5:15 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114014|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 29 09:23:17 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

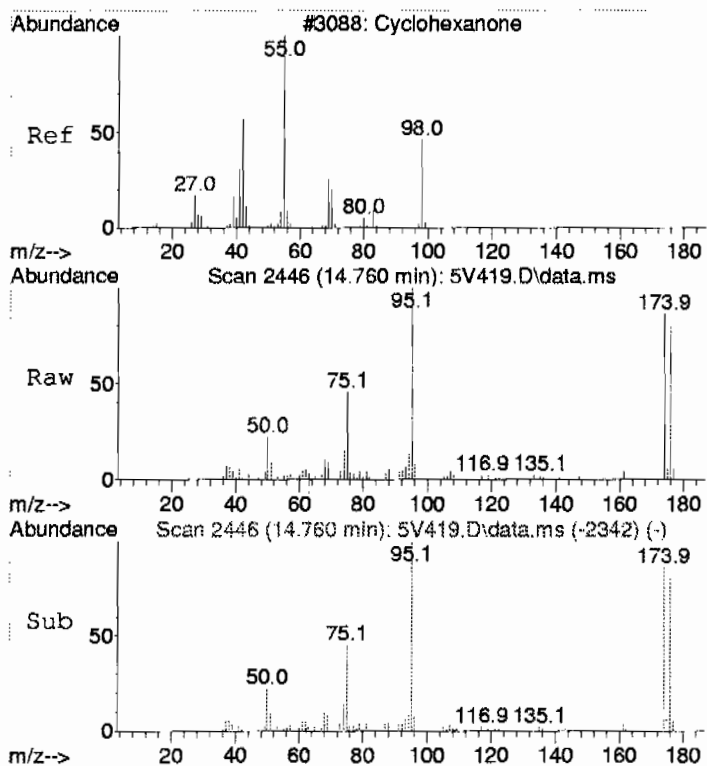
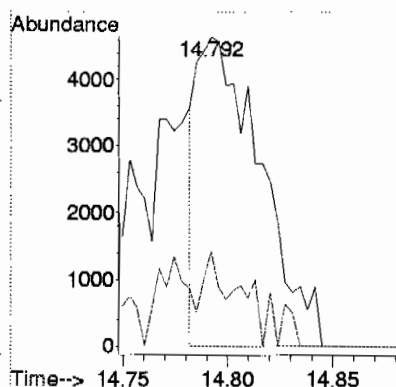
SubList :





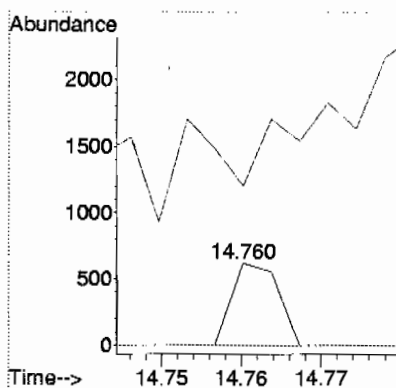
#65 BEFORE analyst DELETION  
n-Propylbenzene  
Concen: 0.40 ug/L  
RT: 14.792 min Scan# 2455  
Delta R.T. -0.173 min  
Lab File: 5V419.D  
Acq: 28 Jan 2010 5:15 pm

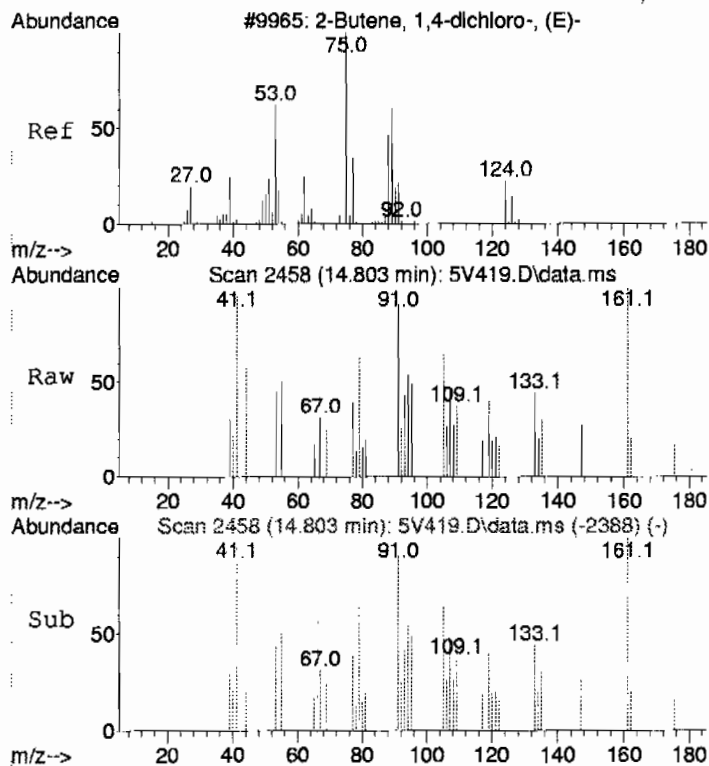
Tgt Ion: 91 Resp: 9914  
Ion Ratio Lower Upper  
91 100  
120 16.1 0.0 53.6



#108 BEFORE analyst DELETION  
Cyclohexanone  
Concen: 28.56 ug/L  
RT: 14.760 min Scan# 2446  
Delta R.T. 0.067 min  
Lab File: 5V419.D  
Acq: 28 Jan 2010 5:15 pm

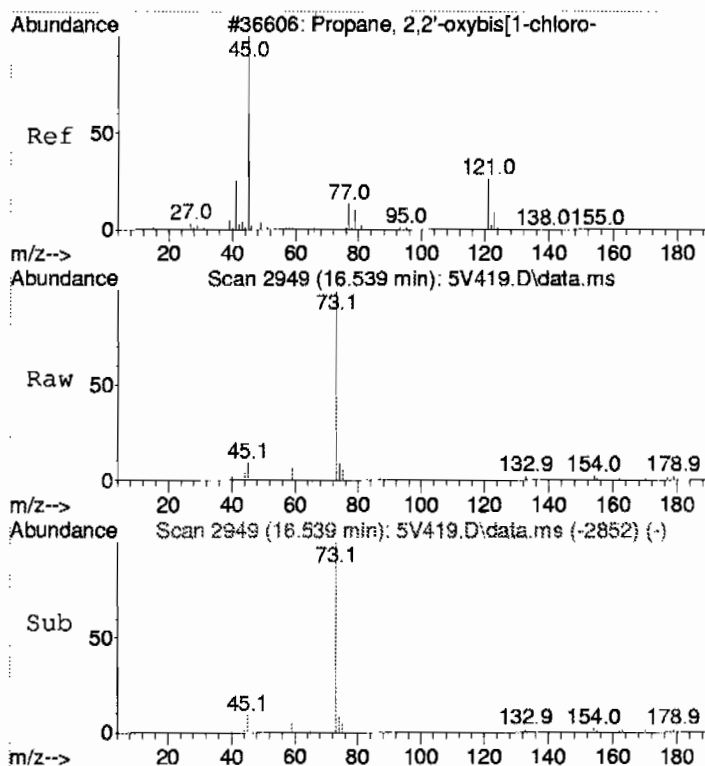
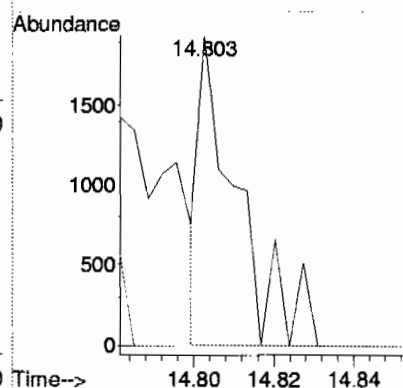
Tgt Ion: 42 Resp: 248  
Ion Ratio Lower Upper  
42 100  
55 376.2 104.7 164.7#  
98 0.0 21.5 81.5#





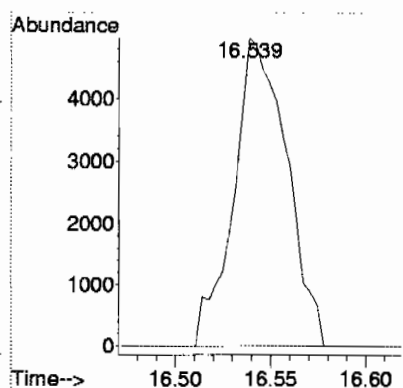
#109 BEFORE analyst DELETION  
trans-1,4-Dichloro-2-butene  
Concen: 0.78 ug/L  
RT: 14.803 min Scan# 2458  
Delta R.T. -0.053 min  
Lab File: 5V419.D  
Acq: 28 Jan 2010 5:15 pm

Tgt Ion: 53 Resp: 1309  
Ion Ratio Lower Upper  
53 100  
88 0.0 7.6 67.6#  
75 0.0 86.0 146.0#



#112 BEFORE analyst DELETION  
bis(2-Chloroisopropyl)ether  
Concen: 3.16 ug/L  
RT: 16.539 min Scan# 2949  
Delta R.T. 0.042 min  
Lab File: 5V419.D  
Acq: 28 Jan 2010 5:15 pm

Tgt Ion: 45 Resp: 9662  
Ion Ratio Lower Upper  
45 100  
121 0.0 0.0 49.2



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V419.D  
Acq On : 28 Jan 2010 5:15 pm  
Operator : DXK1  
Sample : |245114014|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V419.D  
Acq On : 28 Jan 2010 5:15 pm  
Operator : DXK1  
Sample : |245114014|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
|------------------|----|---------|-------|----------|---|----|------|------|
|------------------|----|---------|-------|----------|---|----|------|------|

---Internal Standard---

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114015

Client ID: RE15-10-8420  
 Batch ID: 946008  
 Run Date: 01/28/2010 17:41  
 Prep Date: 01/28/2009 11:17  
 Data File: 012810V5SV420.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 30.1  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.    | Parname                     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.43   | ug/kg | 0.487   | 1.43    |
| 74-87-3    | Chloromethane               | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 75-01-4    | Vinyl chloride              | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 74-83-9    | Bromomethane                | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 75-00-3    | Chloroethane                | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 67-64-1    | Acetone                     | U         | 7.16   | ug/kg | 2.38    | 7.16    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 74-88-4    | Iodomethane                 | U         | 7.16   | ug/kg | 2.29    | 7.16    |
| 75-09-2    | Methylene chloride          | U         | 7.16   | ug/kg | 2.86    | 7.16    |
| 75-15-0    | Carbon disulfide            | U         | 7.16   | ug/kg | 1.79    | 7.16    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 78-93-3    | 2-Butanone                  | U         | 7.16   | ug/kg | 2.15    | 7.16    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 67-66-3    | Chloroform                  | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 74-97-5    | Bromochloromethane          | U         | 1.43   | ug/kg | 0.472   | 1.43    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 71-43-2    | Benzene                     | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 79-01-6    | Trichloroethylene           | U         | 1.43   | ug/kg | 0.472   | 1.43    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 75-27-4    | Bromodichloromethane        | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 74-95-3    | Dibromomethane              | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 7.16   | ug/kg | 1.79    | 7.16    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 108-88-3   | Toluene                     | J         | 0.501  | ug/kg | 0.429   | 1.43    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 591-78-6   | 2-Hexanone                  | U         | 7.16   | ug/kg | 2.15    | 7.16    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 124-48-1   | Dibromochloromethane        | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 108-90-7   | Chlorobenzene               | U         | 1.43   | ug/kg | 0.429   | 1.43    |

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114015  
  
Client ID: RE15-10-8420  
Batch ID: 946008  
Run Date: 01/28/2010 17:41  
Prep Date: 01/28/2009 11:17  
Data File: 012810V5SV420.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 30.1  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.86   | ug/kg | 0.429   | 2.86    |
| 95-47-6     | o-Xylene                              | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 100-42-5    | Styrene                               | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 75-25-2     | Bromoform                             | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 108-86-1    | Bromobenzene                          | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 7.16   | ug/kg | 2.29    | 7.16    |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.43   | ug/kg | 0.429   | 1.43    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.43   | ug/kg | 0.429   | 1.43    |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V420.D  
Acq On : 28 Jan 2010 5:41 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114015|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 29 09:23:22 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc  | Units |           |
|-------------------------------|--------|--------|--------|------|----------|-------|-------|-----------|
| Internal Standards            |        |        |        |      |          |       |       | Dev (Min) |
| 1) Fluorobenzene              | 10.375 | 10.375 | 1.000  | 96   | 1640187  | 50.00 | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547 | 13.547 | 1.000  | 117  | 977773   | 50.00 | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.963 | 15.962 | 1.000  | 152  | 371128   | 50.00 | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.375 | 10.375 | 1.000  | 96   | 1640187  | 50.00 | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547 | 13.547 | 1.000  | 117  | 977773   | 50.00 | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.963 | 15.962 | 1.000  | 152  | 371128   | 50.00 | ug/L  | 0.00      |

|                             |        |        |          |          |         |         |      |           |
|-----------------------------|--------|--------|----------|----------|---------|---------|------|-----------|
| System Monitoring Compounds |        |        |          |          |         |         |      | Dev (Min) |
| 29) 1,2-Dichloroethane-d4   | 10.018 | 10.021 | 0.966    | 65       | 394401  | 51.74   | ug/L | 0.00      |
| Spiked Amount               | 50.000 | Range  | 68 - 131 | Recovery | =       | 103.48% |      |           |
| 43) Toluene-d8              | 12.016 | 12.016 | 0.887    | 98       | 1406576 | 52.75   | ug/L | 0.00      |
| Spiked Amount               | 50.000 | Range  | 75 - 129 | Recovery | =       | 105.50% |      |           |
| 61) Bromofluorobenzene      | 14.739 | 14.739 | 0.923    | 95       | 417359  | 58.93   | ug/L | 0.00      |
| Spiked Amount               | 50.000 | Range  | 68 - 133 | Recovery | =       | 117.86% |      |           |

| Target Compounds              | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units | QValue |
|-------------------------------|--------|--------|--------|------|----------|------|-------|--------|
| 2) Dichlorodifluoromethane    | 0.000  | 4.689  | 0.000  |      | 0        | N.D. |       |        |
| 3) Chloromethane              | 5.031  | 5.051  | 0.485  | 50   | 152      | N.D. |       |        |
| 4) Vinyl chloride             | 0.000  | 5.283  | 0.000  |      | 0        | N.D. |       |        |
| 5) Bromomethane               | 0.000  | 5.877  | 0.000  |      | 0        | N.D. |       |        |
| 6) Chloroethane               | 0.000  | 6.018  | 0.000  |      | 0        | N.D. |       |        |
| 7) Trichlorofluoromethane     | 0.000  | 6.391  | 0.000  |      | 0        | N.D. |       |        |
| 8) Ethyl ether                | 0.000  | 6.733  | 0.000  |      | 0        | N.D. |       |        |
| 9) Acetone                    | 7.097  | 7.100  | 0.684  | 43   | 4612     | N.D. |       |        |
| 10) 1,1-Dichloroethylene      | 7.259  | 7.125  | 0.700  | 61   | 1220     | N.D. |       |        |
| 11) Iodomethane               | 0.000  | 7.373  | 0.000  |      | 0        | N.D. |       |        |
| 12) Acetonitrile              | 7.687  | 7.450  | 0.741  | 41   | 112      | N.D. |       |        |
| 13) Methyl acetate            | 7.712  | 7.493  | 0.743  | 43   | 110      | N.D. |       |        |
| 14) Carbon disulfide          | 7.507  | 7.511  | 0.724  | 76   | 227      | N.D. |       |        |
| 15) Methylene chloride        | 7.680  | 7.691  | 0.740  | 84   | 7892     | N.D. |       |        |
| 16) tert-Butyl methyl ether   | 0.000  | 7.984  | 0.000  |      | 0        | N.D. |       |        |
| 17) trans-1,2-Dichloroethy... | 0.000  | 8.030  | 0.000  |      | 0        | N.D. |       |        |
| 18) Vinyl acetate             | 8.313  | 8.458  | 0.801  | 43   | 1490     | N.D. |       |        |
| 19) 1,1-Dichloroethane        | 0.000  | 8.511  | 0.000  |      | 0        | N.D. |       |        |
| 20) 2-Butanone                | 9.084  | 9.077  | 0.876  | 43   | 260      | N.D. |       |        |
| 21) cis-1,2-Dichloroethylene  | 0.000  | 9.144  | 0.000  |      | 0        | N.D. |       |        |
| 22) 2,2-Dichloropropane       | 0.000  | 9.173  | 0.000  |      | 0        | N.D. |       |        |
| 23) Bromochloromethane        | 0.000  | 9.417  | 0.000  |      | 0        | N.D. |       |        |
| 24) Chloroform                | 0.000  | 9.452  | 0.000  |      | 0        | N.D. |       |        |
| 25) 1,1,1-Trichloroethane     | 0.000  | 9.735  | 0.000  |      | 0        | N.D. |       |        |
| 26) Cyclohexane               | 9.830  | 9.830  | 0.948  | 56   | 572      | N.D. |       |        |
| 27) 1,1-Dichloropropene       | 0.000  | 9.887  | 0.000  |      | 0        | N.D. |       |        |
| 28) Carbon tetrachloride      | 0.000  | 9.929  | 0.000  |      | 0        | N.D. |       |        |
| 30) 1,2-Dichloroethane        | 0.000  | 10.103 | 0.000  |      | 0        | N.D. |       |        |
| 31) Benzene                   | 10.124 | 10.127 | 0.976  | 78   | 396      | N.D. |       |        |
| 32) Cyclohexene               | 0.000  | 10.248 | 0.000  |      | 0        | N.D. |       |        |
| 33) n-Butyl alcohol           | 0.000  | 10.460 | 0.000  |      | 0m       | N.D. | d     |        |
| 34) Trichloroethylene         | 0.000  | 10.768 | 0.000  |      | 0        | N.D. |       |        |
| 35) 1,2-Dichloropropane       | 0.000  | 11.004 | 0.000  |      | 0        | N.D. |       |        |
| 36) Methylcyclohexane         | 0.000  | 11.019 | 0.000  |      | 0        | N.D. |       |        |
| 37) Dibromomethane            | 0.000  | 11.146 | 0.000  |      | 0        | N.D. |       |        |



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V420.D  
Acq On : 28 Jan 2010 5:41 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114015|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 29 09:23:22 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc      | Units |
|-------------------------------|--------|--------|--------|------|----------|-----------|-------|
| 38) Bromodichloromethane      | 0.000  | 11.256 | 0.000  |      | 0        | N.D.      |       |
| 39) 2-Chloroethylvinyl ether  | 0.000  | 11.468 | 0.000  |      | 0        | N.D.      |       |
| 40) cis-1,3-Dichloropropylene | 0.000  | 11.705 | 0.000  |      | 0        | N.D.      |       |
| 42) 4-Methyl-2-pentanone      | 0.000  | 11.786 | 0.000  |      | 0        | N.D.      |       |
| 44) Toluene                   | 12.090 | 12.090 | 0.892  | 91   | 8241     | 0.35 ug/L | 94    |
| 45) trans-1,3-Dichloroprop... | 12.027 | 12.239 | 0.888  | 75   | 109      | N.D.      |       |
| 46) 1,1,2-Trichloroethane     | 0.000  | 12.465 | 0.000  |      | 0        | N.D.      |       |
| 47) 2-Hexanone                | 0.000  | 12.631 | 0.000  |      | 0        | N.D.      |       |
| 48) 1,3-Dichloropropane       | 0.000  | 12.656 | 0.000  |      | 0        | N.D.      |       |
| 49) Tetrachloroethylene       | 0.000  | 12.691 | 0.000  |      | 0        | N.D.      |       |
| 50) Dibromochloromethane      | 0.000  | 12.928 | 0.000  |      | 0        | N.D.      |       |
| 51) 1,2-Dibromoethane         | 0.000  | 13.094 | 0.000  |      | 0        | N.D.      |       |
| 52) Chlorobenzene             | 0.000  | 13.579 | 0.000  |      | 0        | N.D.      |       |
| 53) 1,1,1,2-Tetrachloroethane | 0.000  | 13.636 | 0.000  |      | 0        | N.D.      |       |
| 54) Ethylbenzene              | 13.636 | 13.639 | 1.007  | 91   | 1046     | N.D.      |       |
| 55) m,p-Xylenes               | 13.752 | 13.749 | 1.015  | 106  | 780      | N.D.      |       |
| 56) o-Xylene                  | 0.000  | 14.184 | 0.000  |      | 0        | N.D.      |       |
| 57) Styrene                   | 0.000  | 14.184 | 0.000  |      | 0        | N.D.      |       |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D.      |       |
| 60) Isopropylbenzene          | 0.000  | 14.537 | 0.000  |      | 0        | N.D.      |       |
| 62) 1,1,2,2-Tetrachloroethane | 0.000  | 14.810 | 0.000  |      | 0        | N.D.      |       |
| 63) 1,2,3-Trichloropropane    | 0.000  | 14.898 | 0.000  |      | 0        | N.D.      |       |
| 64) Bromobenzene              | 0.000  | 14.951 | 0.000  |      | 0        | N.D.      |       |
| 65) n-Propylbenzene           | 14.898 | 14.965 | 0.933  | 91   | 112      | N.D.      |       |
| 66) 1,3,5-Trimethylbenzene    | 0.000  | 15.114 | 0.000  |      | 0        | N.D.      |       |
| 67) 2-Chlorotoluene           | 0.000  | 15.117 | 0.000  |      | 0        | N.D.      |       |
| 68) 4-Chlorotoluene           | 0.000  | 15.216 | 0.000  |      | 0        | N.D.      |       |
| 69) tert-Butylbenzene         | 0.000  | 15.489 | 0.000  |      | 0        | N.D.      |       |
| 70) 1,2,4-Trimethylbenzene    | 0.000  | 15.527 | 0.000  |      | 0        | N.D.      |       |
| 71) sec-Butylbenzene          | 0.000  | 15.711 | 0.000  |      | 0        | N.D.      |       |
| 72) 4-Isopropyltoluene        | 15.835 | 15.832 | 0.992  | 119  | 223      | N.D.      |       |
| 73) 1,3-Dichlorobenzene       | 0.000  | 15.902 | 0.000  |      | 0        | N.D.      |       |
| 74) 1,4-Dichlorobenzene       | 0.000  | 15.991 | 0.000  |      | 0        | N.D.      |       |
| 75) n-Butylbenzene            | 0.000  | 16.277 | 0.000  |      | 0        | N.D.      |       |
| 76) 1,2-Dichlorobenzene       | 0.000  | 16.422 | 0.000  |      | 0        | N.D.      |       |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D.      |       |
| 78) 1,2,4-Trichlorobenzene    | 0.000  | 18.371 | 0.000  |      | 0        | N.D.      |       |
| 79) Hexachlorobutadiene       | 0.000  | 18.548 | 0.000  |      | 0        | N.D.      |       |
| 80) Naphthalene               | 18.769 | 18.762 | 1.176  | 128  | 112      | N.D.      |       |
| 81) 1,2,3-Trichlorobenzene    | 0.000  | 19.116 | 0.000  |      | 0        | N.D.      |       |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D.      |       |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D.      |       |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D.      |       |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D.      |       |
| 87) Isopropyl Alcohol         | 7.267  | 7.175  | 0.700  | 45   | 3102     | N.D.      |       |
| 88) Allyl chloride            | 7.687  | 7.546  | 0.741  | 41   | 112      | N.D.      |       |
| 89) tert-Butyl Alcohol        | 7.670  | 7.673  | 0.739  | 59   | 107      | N.D.      |       |
| 90) Acrylonitrile             | 0.000  | 7.928  | 0.000  |      | 0        | N.D.      |       |
| 91) Isopropyl ether           | 0.000  | 8.483  | 0.000  |      | 0        | N.D.      |       |
| 92) 2-Chloro-1,3-butadiene    | 0.000  | 8.617  | 0.000  |      | 0        | N.D.      |       |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D.      |       |
| 94) Ethyl acetate             | 9.084  | 9.088  | 0.876  | 43   | 260      | N.D.      |       |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V420.D  
Acq On : 28 Jan 2010 5:41 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114015|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 29 09:23:22 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.  | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|-------|--------|--------|------|----------|------|-------|
| 95) Propionitrile              | 0.000 | 9.148  | 0.000  |      | 0        | N.D. |       |
| 96) Methacrylonitrile          | 9.463 | 9.332  | 0.912  | 41   | 233      | N.D. |       |
| 97) Tetrahydrofuran            | 9.459 | 9.466  | 0.912  | 42   | 960      | N.D. |       |
| 98) Isobutyl alcohol           | 9.809 | 9.770  | 0.945  | 41   | 119      | N.D. |       |
| 99) Methyl tert-amyl ether     | 0.000 | 10.138 | 0.000  |      | 0        | N.D. |       |
| 100) Methyl methacrylate       | 0.000 | 10.969 | 0.000  |      | 0        | N.D. |       |
| 101) 1,4-Dioxane               | 0.000 | 11.089 | 0.000  |      | 0        | N.D. |       |
| 102) 2-Nitropropane            | 0.000 | 11.443 | 0.000  |      | 0        | N.D. |       |
| 104) Ethyl methacrylate        | 0.000 | 12.235 | 0.000  |      | 0        | N.D. |       |
| 106) 1-Chlorohexane            | 0.000 | 13.438 | 0.000  |      | 0        | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 0.000 | 14.573 | 0.000  |      | 0        | N.D. |       |
| 108) Cyclohexanone             | 0.000 | 14.693 | 0.000  |      | 0        | N.D. |       |
| 109) trans-1,4-Dichloro-2-b... | 0.000 | 14.856 | 0.000  |      | 0        | N.D. |       |
| 110) Pentachloroethane         | 0.000 | 15.559 | 0.000  |      | 0        | N.D. |       |
| 111) Benzyl chloride           | 0.000 | 16.100 | 0.000  |      | 0        | N.D. |       |
| 112) bis(2-Chloroisopropyl)... | 0.000 | 16.497 | 0.000  |      | 0        | N.D. |       |

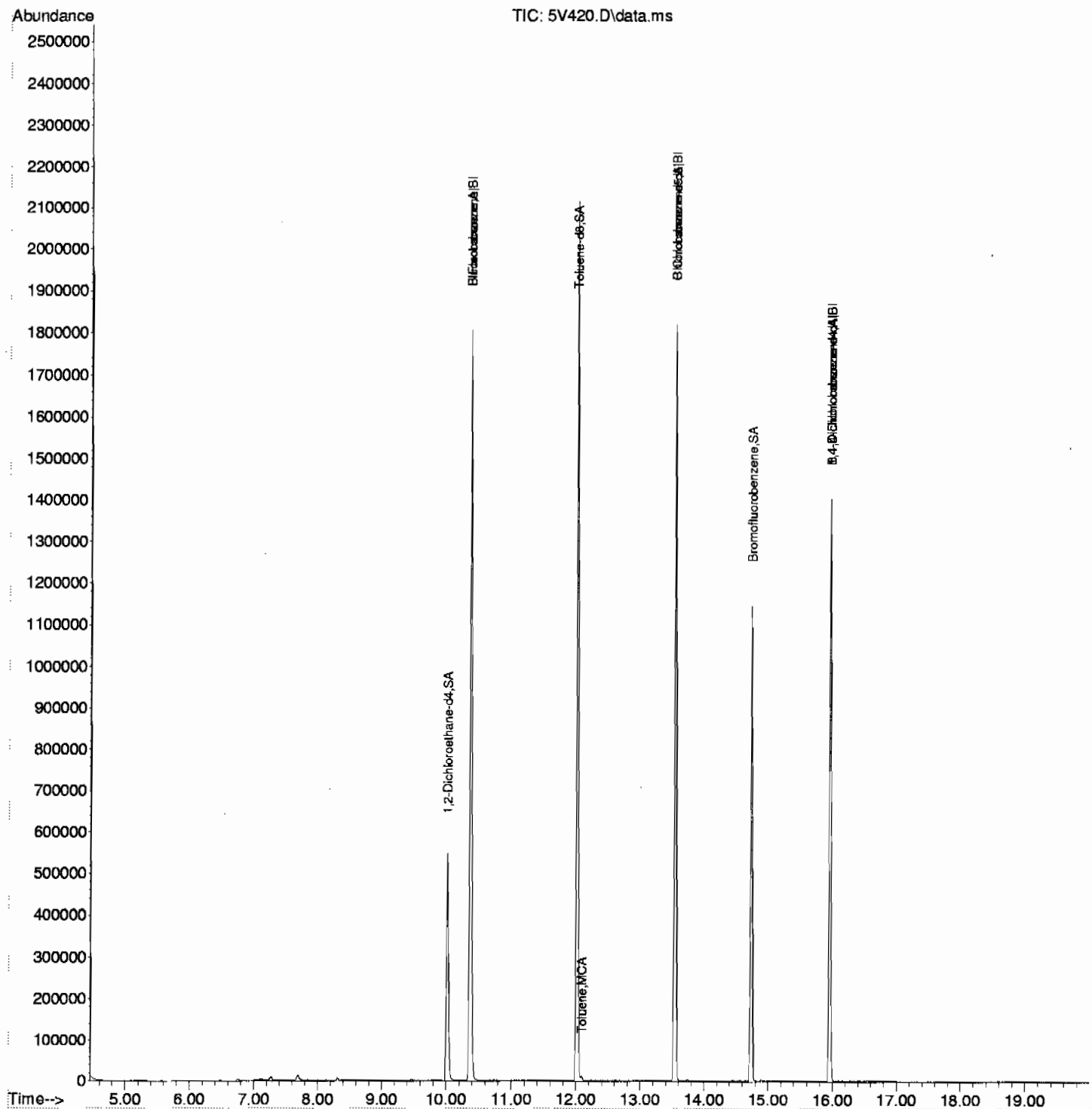
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

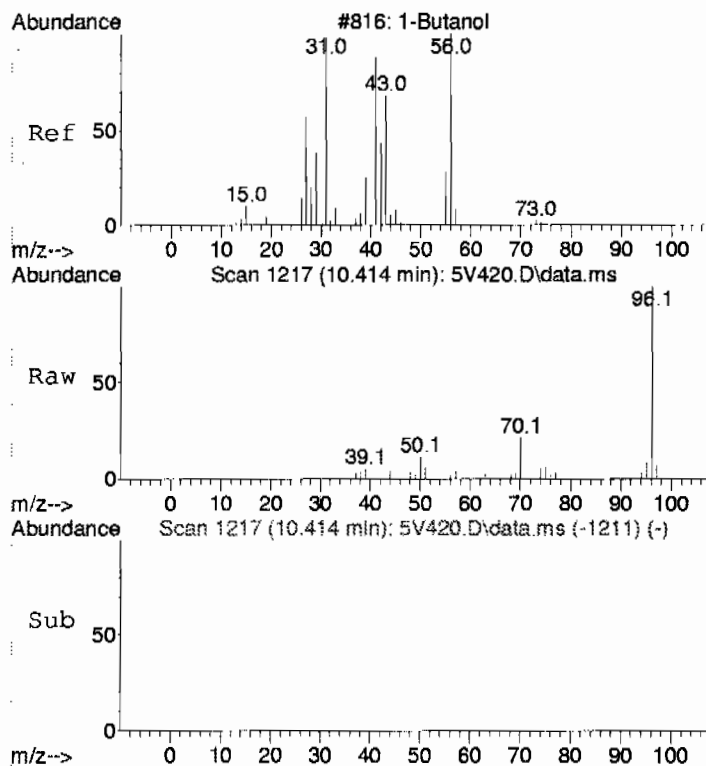
Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V420.D  
Acq On : 28 Jan 2010 5:41 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114015|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 29 09:23:22 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

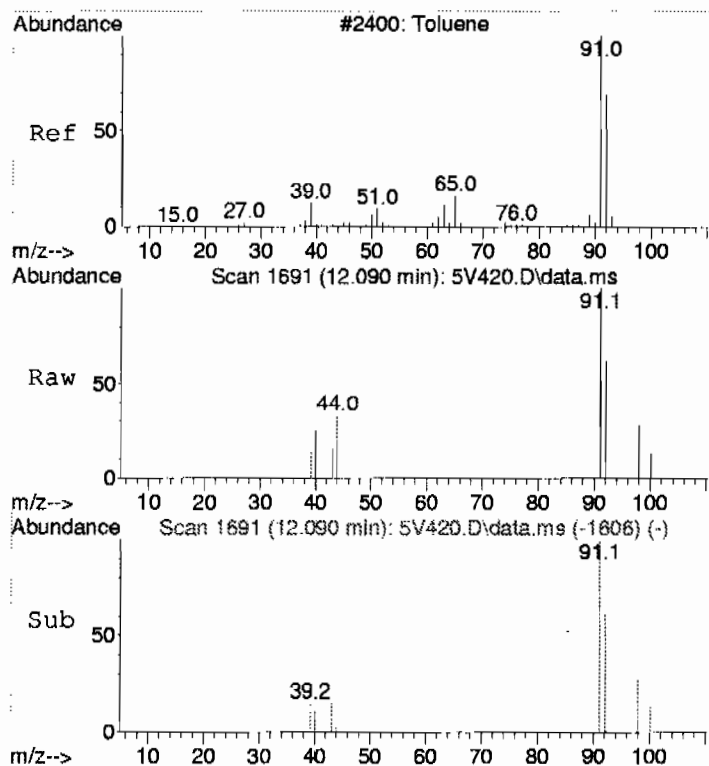
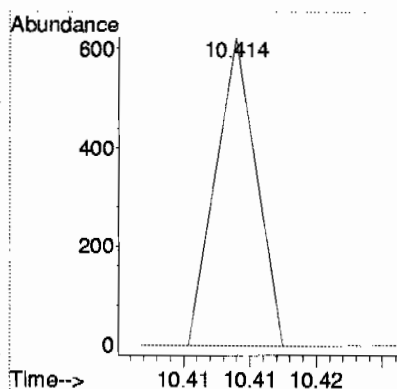
SubList :





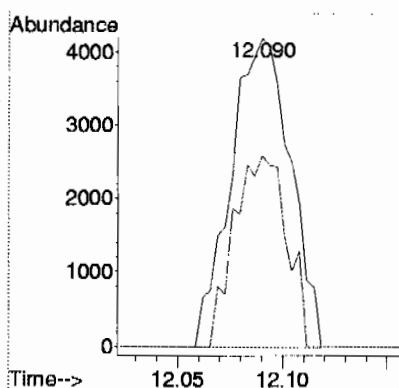
#33 BEFORE analyst DELETION  
n-Butyl alcohol  
Concen: 98.21 ug/L  
RT: 10.414 min Scan# 1217  
Delta R.T. -0.046 min  
Lab File: 5V420.D  
Acq: 28 Jan 2010 5:41 pm

Tgt Ion: 56 Resp: 132  
Ion Ratio Lower Upper  
56 100  
41 0.0 47.2 107.2#  
43 0.0 31.2 91.2#



#44  
Toluene  
Concen: 0.35 ug/L  
RT: 12.090 min Scan# 1691  
Delta R.T. 0.000 min  
Lab File: 5V420.D  
Acq: 28 Jan 2010 5:41 pm

Tgt Ion: 91 Resp: 8241  
Ion Ratio Lower Upper  
91 100  
92 54.6 28.7 88.7



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V420.D  
Acq On : 28 Jan 2010 5:41 pm  
Operator : DXK1  
Sample : |245114015|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V420.D  
Acq On : 28 Jan 2010 5:41 pm  
Operator : DXK1  
Sample : |245114015|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
|------------------|----|---------|-------|----------|---|----|------|------|
|------------------|----|---------|-------|----------|---|----|------|------|

|--Internal Standard---|

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114003

Client ID: RE15-10-8411REDL  
Batch ID: 946008  
Run Date: 01/28/2010 20:15  
Prep Date: 01/28/2010 15:10  
Data File: 012810V55V426.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 15.4  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 50  
Purge Vol: 5 mL  
Final Volume: 10 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 118    | ug/kg | 40.2    | 118     |
| 74-87-3    | Chloromethane               | U         | 118    | ug/kg | 35.4    | 118     |
| 75-01-4    | Vinyl chloride              | U         | 118    | ug/kg | 35.4    | 118     |
| 74-83-9    | Bromomethane                | U         | 118    | ug/kg | 35.4    | 118     |
| 75-00-3    | Chloroethane                | U         | 118    | ug/kg | 35.4    | 118     |
| 75-69-4    | Trichlorofluoromethane      | U         | 118    | ug/kg | 35.4    | 118     |
| 67-64-1    | Acetone                     |           | 689    | ug/kg | 196     | 591     |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 118    | ug/kg | 35.4    | 118     |
| 74-88-4    | Iodomethane                 | U         | 591    | ug/kg | 189     | 591     |
| 75-09-2    | Methylene chloride          | U         | 591    | ug/kg | 236     | 591     |
| 75-15-0    | Carbon disulfide            | U         | 591    | ug/kg | 148     | 591     |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 118    | ug/kg | 35.4    | 118     |
| 75-34-3    | 1,1-Dichloroethane          | U         | 118    | ug/kg | 35.4    | 118     |
| 78-93-3    | 2-Butanone                  | U         | 591    | ug/kg | 177     | 591     |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 118    | ug/kg | 35.4    | 118     |
| 594-20-7   | 2,2-Dichloropropane         | U         | 118    | ug/kg | 35.4    | 118     |
| 67-66-3    | Chloroform                  | U         | 118    | ug/kg | 35.4    | 118     |
| 74-97-5    | Bromochloromethane          | U         | 118    | ug/kg | 39.0    | 118     |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 118    | ug/kg | 35.4    | 118     |
| 563-58-6   | 1,1-Dichloropropene         | U         | 118    | ug/kg | 35.4    | 118     |
| 56-23-5    | Carbon tetrachloride        | U         | 118    | ug/kg | 35.4    | 118     |
| 107-06-2   | 1,2-Dichloroethane          | U         | 118    | ug/kg | 35.4    | 118     |
| 71-43-2    | Benzene                     | U         | 118    | ug/kg | 35.4    | 118     |
| 79-01-6    | Trichloroethylene           | U         | 118    | ug/kg | 39.0    | 118     |
| 78-87-5    | 1,2-Dichloropropane         | U         | 118    | ug/kg | 35.4    | 118     |
| 75-27-4    | Bromodichloromethane        | U         | 118    | ug/kg | 35.4    | 118     |
| 74-95-3    | Dibromomethane              | U         | 118    | ug/kg | 35.4    | 118     |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 591    | ug/kg | 148     | 591     |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 118    | ug/kg | 35.4    | 118     |
| 108-88-3   | Toluene                     | U         | 118    | ug/kg | 35.4    | 118     |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 118    | ug/kg | 35.4    | 118     |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 118    | ug/kg | 35.4    | 118     |
| 591-78-6   | 2-Hexanone                  | U         | 591    | ug/kg | 177     | 591     |
| 142-28-9   | 1,3-Dichloropropane         | U         | 118    | ug/kg | 35.4    | 118     |
| 127-18-4   | Tetrachloroethylene         | U         | 118    | ug/kg | 35.4    | 118     |
| 124-48-1   | Dibromochloromethane        | U         | 118    | ug/kg | 35.4    | 118     |
| 106-93-4   | 1,2-Dibromoethane           | U         | 118    | ug/kg | 35.4    | 118     |
| 108-90-7   | Chlorobenzene               | U         | 118    | ug/kg | 35.4    | 118     |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 245114003  
 Client ID: RE15-10-8411REDL  
 Batch ID: 946008  
 Run Date: 01/28/2010 20:15  
 Prep Date: 01/28/2010 15:10  
 Data File: 012810V5SV426.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 % Moisture: 15.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 50  
 Purge Vol: 5 mL  
 Final Volume: 10 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDI/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 118    | ug/kg | 35.4    | 118     |
| 179601-23-1 | m,p-Xylenes                           | U         | 236    | ug/kg | 35.4    | 236     |
| 95-47-6     | o-Xylene                              | U         | 118    | ug/kg | 35.4    | 118     |
| 100-42-5    | Styrene                               | U         | 118    | ug/kg | 35.4    | 118     |
| 75-25-2     | Bromoform                             | U         | 118    | ug/kg | 35.4    | 118     |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 118    | ug/kg | 35.4    | 118     |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 118    | ug/kg | 35.4    | 118     |
| 108-86-1    | Bromobenzene                          | U         | 118    | ug/kg | 35.4    | 118     |
| 103-65-1    | n-Propylbenzene                       | U         | 118    | ug/kg | 35.4    | 118     |
| 95-49-8     | 2-Chlorotoluene                       | U         | 118    | ug/kg | 35.4    | 118     |
| 98-82-8     | Isopropylbenzene                      | U         | 118    | ug/kg | 35.4    | 118     |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 118    | ug/kg | 35.4    | 118     |
| 106-43-4    | 4-Chlorotoluene                       | U         | 118    | ug/kg | 35.4    | 118     |
| 98-06-6     | tert-Butylbenzene                     | U         | 118    | ug/kg | 35.4    | 118     |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 118    | ug/kg | 35.4    | 118     |
| 135-98-8    | sec-Butylbenzene                      | U         | 118    | ug/kg | 35.4    | 118     |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 118    | ug/kg | 35.4    | 118     |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 118    | ug/kg | 35.4    | 118     |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 118    | ug/kg | 35.4    | 118     |
| 104-51-8    | n-Butylbenzene                        | U         | 118    | ug/kg | 35.4    | 118     |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 118    | ug/kg | 35.4    | 118     |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 591    | ug/kg | 189     | 591     |
|             | Trichlorotrifluoroethane              |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 118    | ug/kg | 35.4    | 118     |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 118    | ug/kg | 35.4    | 118     |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V426.D  
Acq On : 28 Jan 2010 8:15 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114003|946008|50|VOA|2|VOA8260BS|  
Misc : LANL 100uL N/A SOIL  
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 10 10:44:23 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.     | Exp RT | Rel RT   | QIon | Response | Conc  | Units |           |
|-------------------------------|----------|--------|----------|------|----------|-------|-------|-----------|
| Internal Standards            |          |        |          |      |          |       |       | Dev (Min) |
| 1) Fluorobenzene              | 10.375   | 10.375 | 1.000    | 96   | 1945561  | 50.00 | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547   | 13.547 | 1.000    | 117  | 1234625  | 50.00 | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.959   | 15.962 | 1.000    | 152  | 582613   | 50.00 | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.375   | 10.375 | 1.000    | 96   | 1945561  | 50.00 | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547   | 13.547 | 1.000    | 117  | 1234625  | 50.00 | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.959   | 15.962 | 1.000    | 152  | 582613   | 50.00 | ug/L  | 0.00      |
| System Monitoring Compounds   |          |        |          |      |          |       |       | Dev (Min) |
| 29) 1,2-Dichloroethane-d4     | 10.018   | 10.021 | 0.966    | 65   | 463688   | 51.28 | ug/L  | 0.00      |
| Spiked Amount 50.000          | Range 68 | - 131  | Recovery | =    | 102.56%  |       |       |           |
| 43) Toluene-d8                | 12.016   | 12.016 | 0.887    | 98   | 1674259  | 49.72 | ug/L  | 0.00      |
| Spiked Amount 50.000          | Range 75 | - 129  | Recovery | =    | 99.44%   |       |       |           |
| 61) Bromofluorobenzene        | 14.739   | 14.739 | 0.924    | 95   | 585169   | 52.63 | ug/L  | 0.00      |
| Spiked Amount 50.000          | Range 68 | - 133  | Recovery | =    | 105.26%  |       |       |           |
| Target Compounds              |          |        |          |      |          |       |       | QValue    |
| 2) Dichlorodifluoromethane    | 0.000    | 4.689  | 0.000    |      | 0        | N.D.  |       |           |
| 3) Chloromethane              | 5.061    | 5.051  | 0.488    | 50   | 337      | N.D.  |       |           |
| 4) Vinyl chloride             | 0.000    | 5.283  | 0.000    |      | 0        | N.D.  |       |           |
| 5) Bromomethane               | 5.686    | 5.877  | 0.548    | 94   | 153      | N.D.  |       |           |
| 6) Chloroethane               | 0.000    | 6.018  | 0.000    |      | 0        | N.D.  |       |           |
| 7) Trichlorofluoromethane     | 0.000    | 6.391  | 0.000    |      | 0        | N.D.  |       |           |
| 8) Ethyl ether                | 0.000    | 6.733  | 0.000    |      | 0        | N.D.  |       |           |
| 9) Acetone                    | 7.111    | 7.100  | 0.685    | 43   | 42519    | 5.83  | ug/L  | 91        |
| 10) 1,1-Dichloroethylene      | 0.000    | 7.125  | 0.000    |      | 0        | N.D.  |       |           |
| 11) Iodomethane               | 0.000    | 7.373  | 0.000    |      | 0        | N.D.  |       |           |
| 12) Acetonitrile              | 7.443    | 7.450  | 0.717    | 41   | 121      | N.D.  |       |           |
| 13) Methyl acetate            | 7.507    | 7.493  | 0.724    | 43   | 7884     | N.D.  |       |           |
| 14) Carbon disulfide          | 7.500    | 7.511  | 0.723    | 76   | 128      | N.D.  |       |           |
| 15) Methylene chloride        | 7.687    | 7.691  | 0.741    | 84   | 4057     | N.D.  |       |           |
| 16) tert-Butyl methyl ether   | 0.000    | 7.984  | 0.000    |      | 0        | N.D.  |       |           |
| 17) trans-1,2-Dichloroethy... | 0.000    | 8.030  | 0.000    |      | 0        | N.D.  |       |           |
| 18) Vinyl acetate             | 8.299    | 8.458  | 0.800    | 43   | 232      | N.D.  |       |           |
| 19) 1,1-Dichloroethane        | 0.000    | 8.511  | 0.000    |      | 0        | N.D.  |       |           |
| 20) 2-Butanone                | 9.084    | 9.077  | 0.876    | 43   | 8802     | N.D.  |       |           |
| 21) cis-1,2-Dichloroethylene  | 0.000    | 9.144  | 0.000    |      | 0        | N.D.  |       |           |
| 22) 2,2-Dichloropropane       | 0.000    | 9.173  | 0.000    |      | 0        | N.D.  |       |           |
| 23) Bromochloromethane        | 0.000    | 9.417  | 0.000    |      | 0        | N.D.  |       |           |
| 24) Chloroform                | 0.000    | 9.452  | 0.000    |      | 0        | N.D.  |       |           |
| 25) 1,1,1-Trichloroethane     | 0.000    | 9.735  | 0.000    |      | 0        | N.D.  |       |           |
| 26) Cyclohexane               | 0.000    | 9.830  | 0.000    |      | 0        | N.D.  |       |           |
| 27) 1,1-Dichloropropene       | 0.000    | 9.887  | 0.000    |      | 0        | N.D.  |       |           |
| 28) Carbon tetrachloride      | 0.000    | 9.929  | 0.000    |      | 0        | N.D.  |       |           |
| 30) 1,2-Dichloroethane        | 0.000    | 10.103 | 0.000    |      | 0        | N.D.  |       |           |
| 31) Benzene                   | 10.375   | 10.127 | 1.000    | 78   | 2374     | N.D.  |       |           |
| 32) Cyclohexene               | 0.000    | 10.248 | 0.000    |      | 0        | N.D.  |       |           |
| 33) n-Butyl alcohol           | 0.000    | 10.460 | 0.000    |      | 0        | N.D.  |       |           |
| 34) Trichloroethylene         | 0.000    | 10.768 | 0.000    |      | 0        | N.D.  |       |           |
| 35) 1,2-Dichloropropane       | 0.000    | 11.004 | 0.000    |      | 0        | N.D.  |       |           |
| 36) Methylcyclohexane         | 0.000    | 11.019 | 0.000    |      | 0        | N.D.  |       |           |
| 37) Dibromomethane            | 0.000    | 11.146 | 0.000    |      | 0        | N.D.  |       |           |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V426.D  
Acq On : 28 Jan 2010 8:15 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114003|946008|50|VOA|2|VOA8260BS|  
Misc : LANL 100uL N/A SOIL  
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 10 10:44:23 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|-------------------------------|--------|--------|--------|------|----------|------|-------|
| 38) Bromodichloromethane      | 0.000  | 11.256 | 0.000  |      | 0        | N.D. |       |
| 39) 2-Chloroethylvinyl ether  | 0.000  | 11.468 | 0.000  |      | 0        | N.D. |       |
| 40) cis-1,3-Dichloropropylene | 0.000  | 11.705 | 0.000  |      | 0        | N.D. |       |
| 42) 4-Methyl-2-pentanone      | 0.000  | 11.786 | 0.000  |      | 0        | N.D. |       |
| 44) Toluene                   | 12.101 | 12.090 | 0.893  | 91   | 6025     | N.D. |       |
| 45) trans-1,3-Dichloroprop... | 0.000  | 12.239 | 0.000  |      | 0        | N.D. |       |
| 46) 1,1,2-Trichloroethane     | 0.000  | 12.465 | 0.000  |      | 0        | N.D. |       |
| 47) 2-Hexanone                | 0.000  | 12.631 | 0.000  |      | 0        | N.D. |       |
| 48) 1,3-Dichloropropane       | 0.000  | 12.656 | 0.000  |      | 0        | N.D. |       |
| 49) Tetrachloroethylene       | 0.000  | 12.691 | 0.000  |      | 0        | N.D. |       |
| 50) Dibromochloromethane      | 0.000  | 12.928 | 0.000  |      | 0        | N.D. |       |
| 51) 1,2-Dibromoethane         | 0.000  | 13.094 | 0.000  |      | 0        | N.D. |       |
| 52) Chlorobenzene             | 0.000  | 13.579 | 0.000  |      | 0        | N.D. |       |
| 53) 1,1,1,2-Tetrachloroethane | 0.000  | 13.636 | 0.000  |      | 0        | N.D. |       |
| 54) Ethylbenzene              | 13.547 | 13.639 | 1.000  | 91   | 2276     | N.D. |       |
| 55) m,p-Xylenes               | 0.000  | 13.749 | 0.000  |      | 0        | N.D. |       |
| 56) o-Xylene                  | 0.000  | 14.184 | 0.000  |      | 0        | N.D. |       |
| 57) Styrene                   | 0.000  | 14.184 | 0.000  |      | 0        | N.D. |       |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D. |       |
| 60) Isopropylbenzene          | 0.000  | 14.537 | 0.000  |      | 0m       | N.D. | d     |
| 62) 1,1,2,2-Tetrachloroethane | 14.732 | 14.810 | 0.923  | 83   | 118      | N.D. |       |
| 63) 1,2,3-Trichloropropane    | 0.000  | 14.898 | 0.000  |      | 0        | N.D. |       |
| 64) Bromobenzene              | 0.000  | 14.951 | 0.000  |      | 0        | N.D. |       |
| 65) n-Propylbenzene           | 15.181 | 14.965 | 0.951  | 91   | 4167     | N.D. |       |
| 66) 1,3,5-Trimethylbenzene    | 0.000  | 15.114 | 0.000  |      | 0        | N.D. |       |
| 67) 2-Chlorotoluene           | 0.000  | 15.117 | 0.000  |      | 0        | N.D. |       |
| 68) 4-Chlorotoluene           | 15.181 | 15.216 | 0.951  | 91   | 4167     | N.D. |       |
| 69) tert-Butylbenzene         | 0.000  | 15.489 | 0.000  |      | 0m       | N.D. | d     |
| 70) 1,2,4-Trimethylbenzene    | 0.000  | 15.527 | 0.000  |      | 0m       | N.D. | d     |
| 71) sec-Butylbenzene          | 0.000  | 15.711 | 0.000  |      | 0m       | N.D. | d     |
| 72) 4-Isopropyltoluene        | 0.000  | 15.832 | 0.000  |      | 0m       | N.D. | d     |
| 73) 1,3-Dichlorobenzene       | 0.000  | 15.902 | 0.000  |      | 0        | N.D. |       |
| 74) 1,4-Dichlorobenzene       | 0.000  | 15.991 | 0.000  |      | 0        | N.D. |       |
| 75) n-Butylbenzene            | 16.118 | 16.277 | 1.010  | 91   | 5658     | N.D. |       |
| 76) 1,2-Dichlorobenzene       | 0.000  | 16.422 | 0.000  |      | 0        | N.D. |       |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D. |       |
| 78) 1,2,4-Trichlorobenzene    | 18.386 | 18.371 | 1.152  | 180  | 113      | N.D. |       |
| 79) Hexachlorobutadiene       | 0.000  | 18.548 | 0.000  |      | 0        | N.D. |       |
| 80) Naphthalene               | 18.769 | 18.762 | 1.176  | 128  | 1056     | N.D. |       |
| 81) 1,2,3-Trichlorobenzene    | 0.000  | 19.116 | 0.000  |      | 0        | N.D. |       |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D. |       |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D. |       |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D. |       |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D. |       |
| 87) Isopropyl Alcohol         | 7.192  | 7.175  | 0.693  | 45   | 155      | N.D. |       |
| 88) Allyl chloride            | 7.443  | 7.546  | 0.717  | 41   | 121      | N.D. |       |
| 89) tert-Butyl Alcohol        | 0.000  | 7.673  | 0.000  |      | 0        | N.D. |       |
| 90) Acrylonitrile             | 0.000  | 7.928  | 0.000  |      | 0        | N.D. |       |
| 91) Isopropyl ether           | 0.000  | 8.483  | 0.000  |      | 0        | N.D. |       |
| 92) 2-Chloro-1,3-butadiene    | 0.000  | 8.617  | 0.000  |      | 0        | N.D. |       |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D. |       |
| 94) Ethyl acetate             | 9.084  | 9.088  | 0.876  | 43   | 8802     | N.D. |       |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V426.D  
Acq On : 28 Jan 2010 8:15 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114003|946008|50|VOA|2|VOA8260BS|  
Misc : LANL 100uL N/A SOIL  
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 10 10:44:23 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|--------|--------|--------|------|----------|------|-------|
| 95) Propionitrile              | 0.000  | 9.148  | 0.000  |      | 0        | N.D. |       |
| 96) Methacrylonitrile          | 0.000  | 9.332  | 0.000  |      | 0        | N.D. |       |
| 97) Tetrahydrofuran            | 9.466  | 9.466  | 0.912  | 42   | 118      | N.D. |       |
| 98) Isobutyl alcohol           | 0.000  | 9.770  | 0.000  |      | 0        | N.D. |       |
| 99) Methyl tert-amyl ether     | 0.000  | 10.138 | 0.000  |      | 0        | N.D. |       |
| 100) Methyl methacrylate       | 0.000  | 10.969 | 0.000  |      | 0        | N.D. |       |
| 101) 1,4-Dioxane               | 0.000  | 11.089 | 0.000  |      | 0        | N.D. |       |
| 102) 2-Nitropropane            | 0.000  | 11.443 | 0.000  |      | 0        | N.D. |       |
| 104) Ethyl methacrylate        | 0.000  | 12.235 | 0.000  |      | 0        | N.D. |       |
| 106) 1-Chlorohexane            | 0.000  | 13.438 | 0.000  |      | 0        | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 0.000  | 14.573 | 0.000  |      | 0m       | N.D. | d     |
| 108) Cyclohexanone             | 0.000  | 14.693 | 0.000  |      | 0m       | N.D. | d     |
| 109) trans-1,4-Dichloro-2-b... | 14.838 | 14.856 | 0.930  | 53   | 107      | N.D. |       |
| 110) Pentachloroethane         | 0.000  | 15.559 | 0.000  |      | 0        | N.D. |       |
| 111) Benzyl chloride           | 0.000  | 16.100 | 0.000  |      | 0m       | N.D. | d     |
| 112) bis(2-Chloroisopropyl)... | 0.000  | 16.497 | 0.000  |      | 0m       | N.D. | d     |

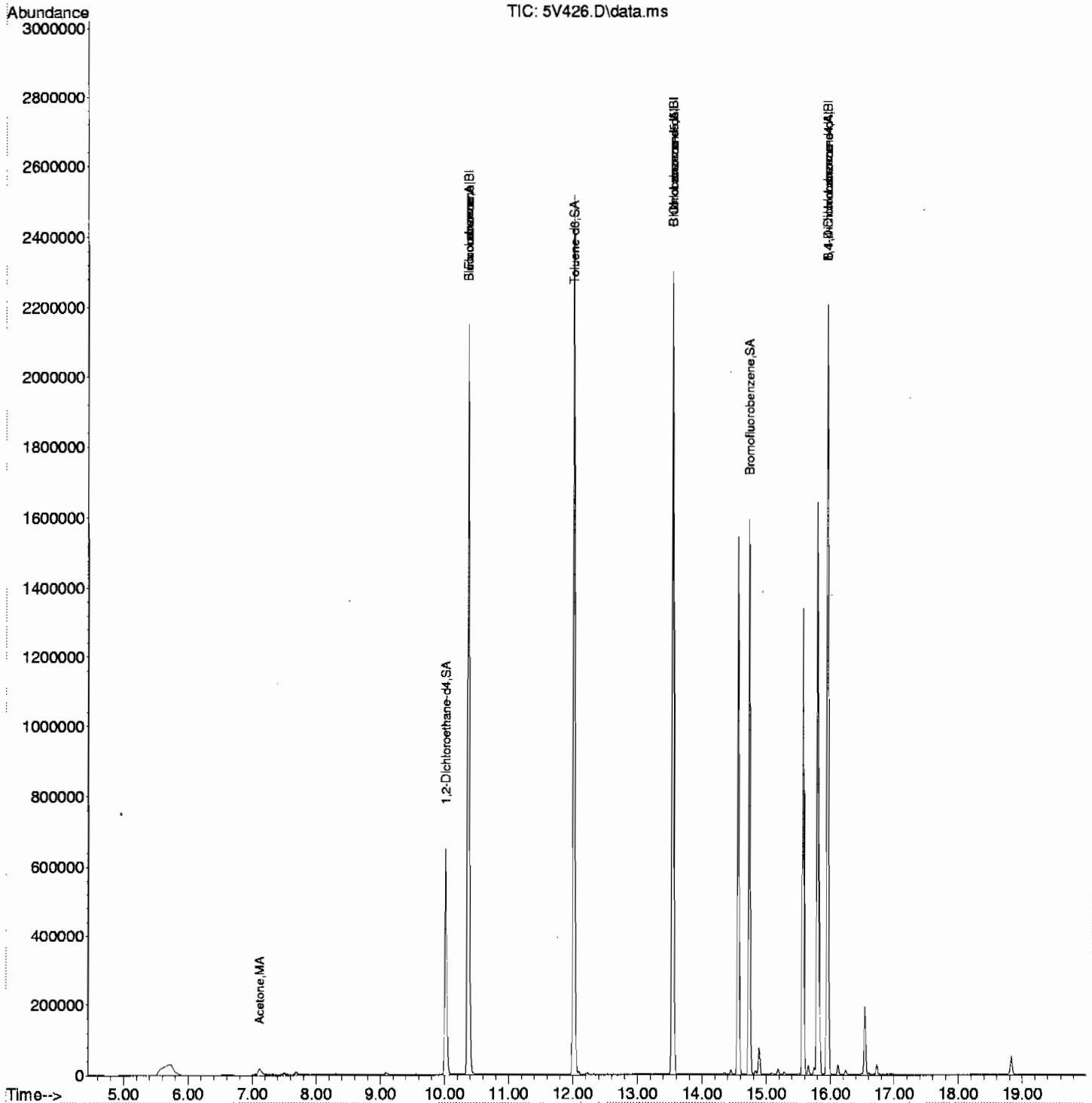
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

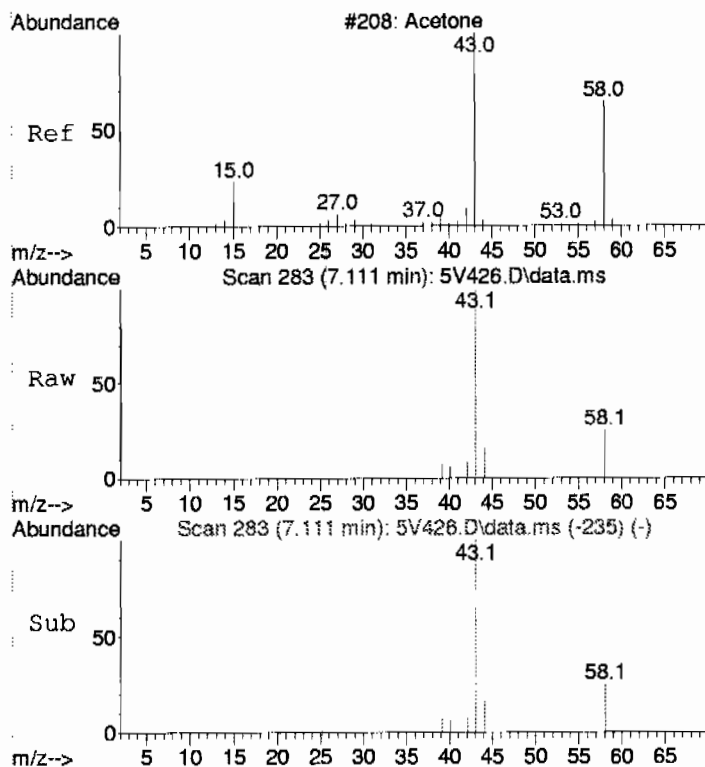
Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V426.D  
Acq On : 28 Jan 2010 8:15 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114003|946008|50|VOA|2|VOA8260BS|  
Misc : LANL 100uL N/A SOIL  
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 10 10:44:23 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

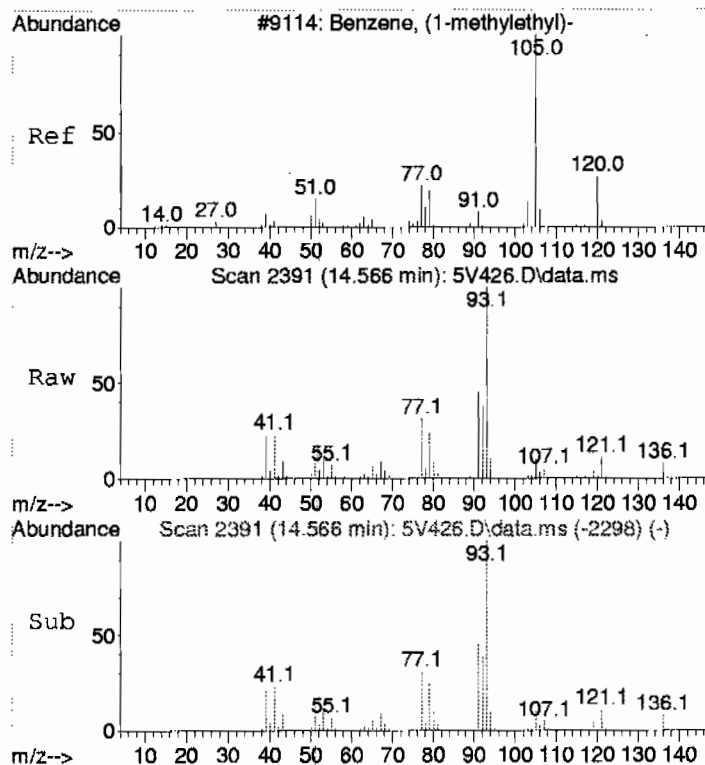
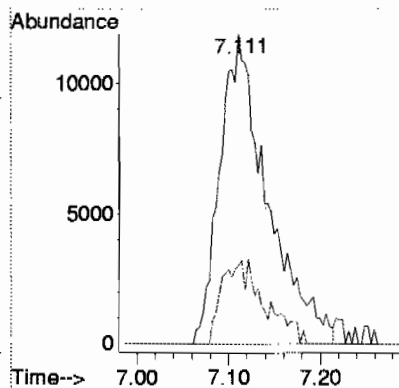
SubList :





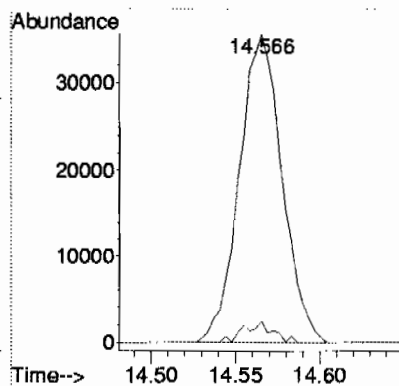
#9  
Acetone  
Concen: 5.83 ug/L  
RT: 7.111 min Scan# 283  
Delta R.T. 0.011 min  
Lab File: 5V426.D  
Acq: 28 Jan 2010 8:15 pm

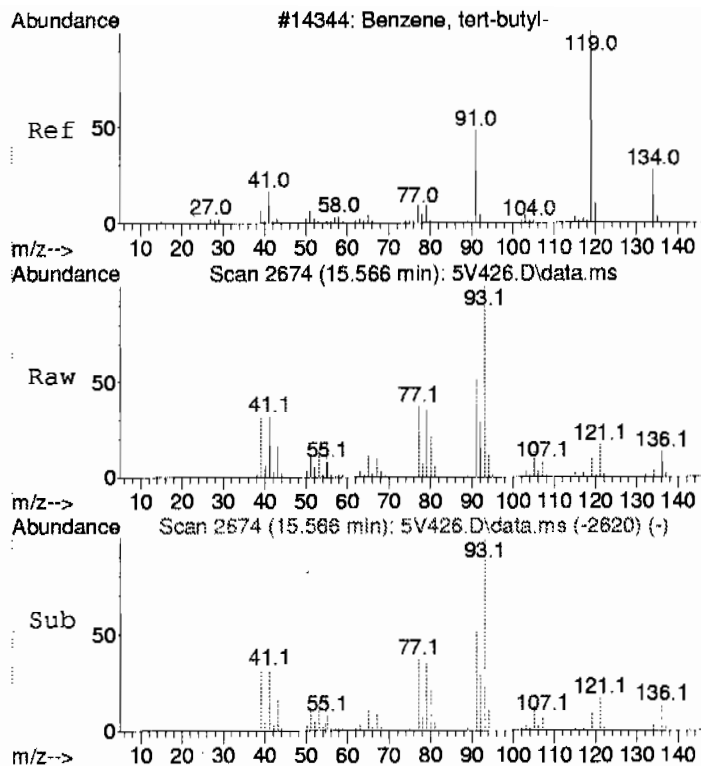
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 58      | 24.5  | 0.0   | 59.5  |



#60 BEFORE analyst DELETION  
Isopropylbenzene  
Concen: 2.38 ug/L  
RT: 14.566 min Scan# 2391  
Delta R.T. 0.029 min  
Lab File: 5V426.D  
Acq: 28 Jan 2010 8:15 pm

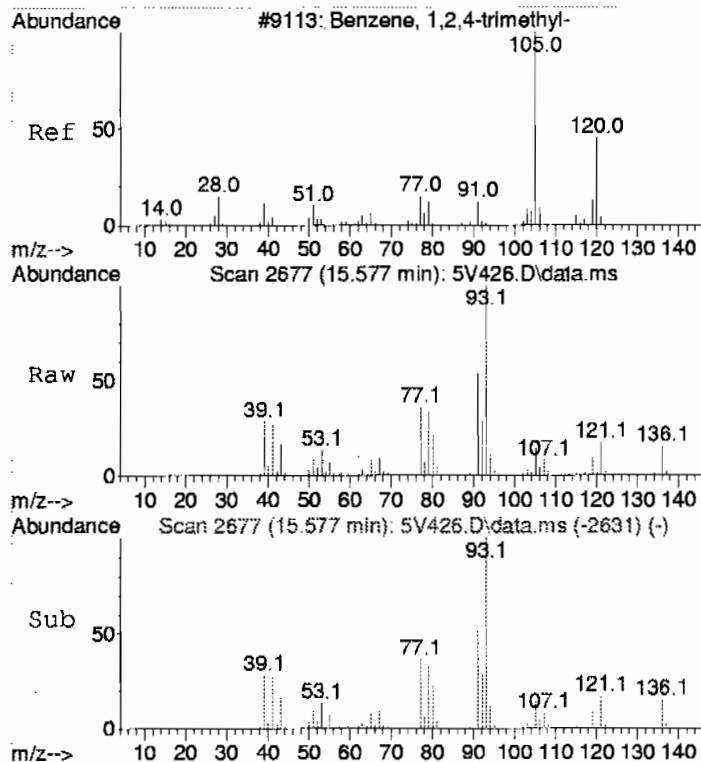
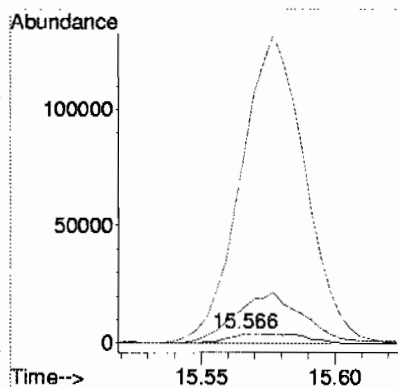
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 120     | 4.6   | 0.0   | 57.9  |





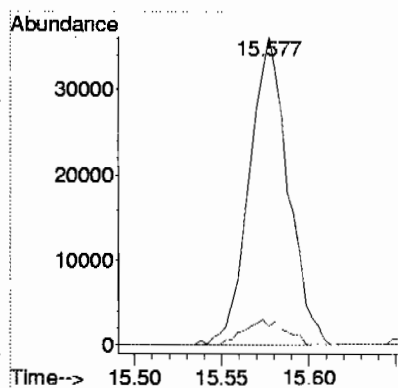
#69 BEFORE analyst DELETION  
tert-Butylbenzene  
Concen: 1.48 ug/L  
RT: 15.566 min Scan# 2674  
Delta R.T. 0.077 min  
Lab File: 5V426.D  
Acq: 28 Jan 2010 8:15 pm

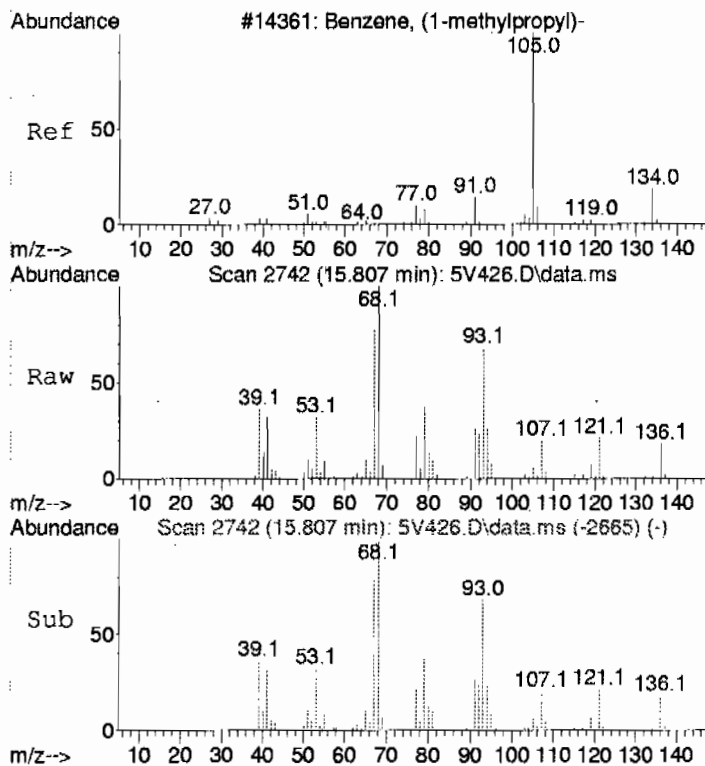
Tgt Ion:134 Resp: 7540  
Ion Ratio Lower Upper  
134 100  
119 482.8 395.2 455.2#  
91 2842.0 251.7 311.7#



#70 BEFORE analyst DELETION  
1,2,4-Trimethylbenzene  
Concen: 2.51 ug/L  
RT: 15.577 min Scan# 2677  
Delta R.T. 0.050 min  
Lab File: 5V426.D  
Acq: 28 Jan 2010 8:15 pm

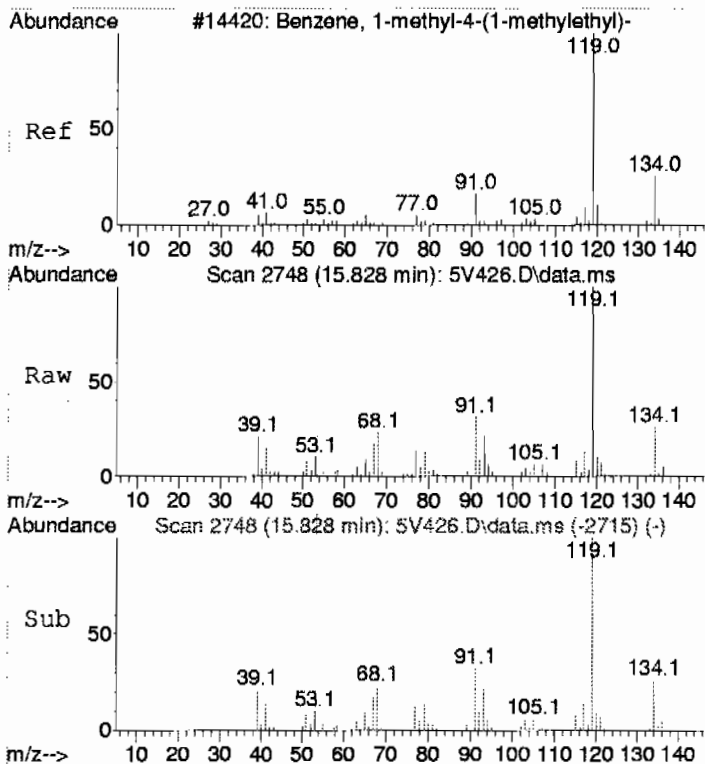
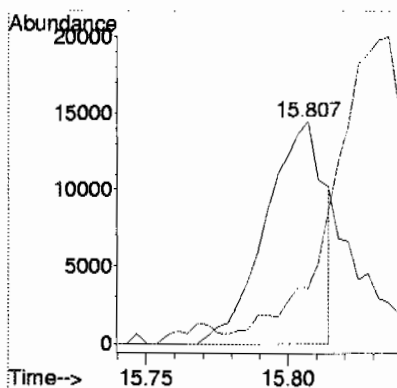
Tgt Ion:105 Resp: 55875  
Ion Ratio Lower Upper  
105 100  
120 8.6 18.3 78.3#





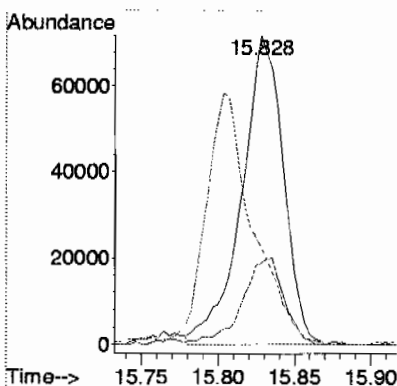
#71 BEFORE analyst DELETION  
sec-Butylbenzene  
Concen: 0.70 ug/L  
RT: 15.807 min Scan# 2742  
Delta R.T. 0.096 min  
Lab File: 5V426.D  
Acq: 28 Jan 2010 8:15 pm

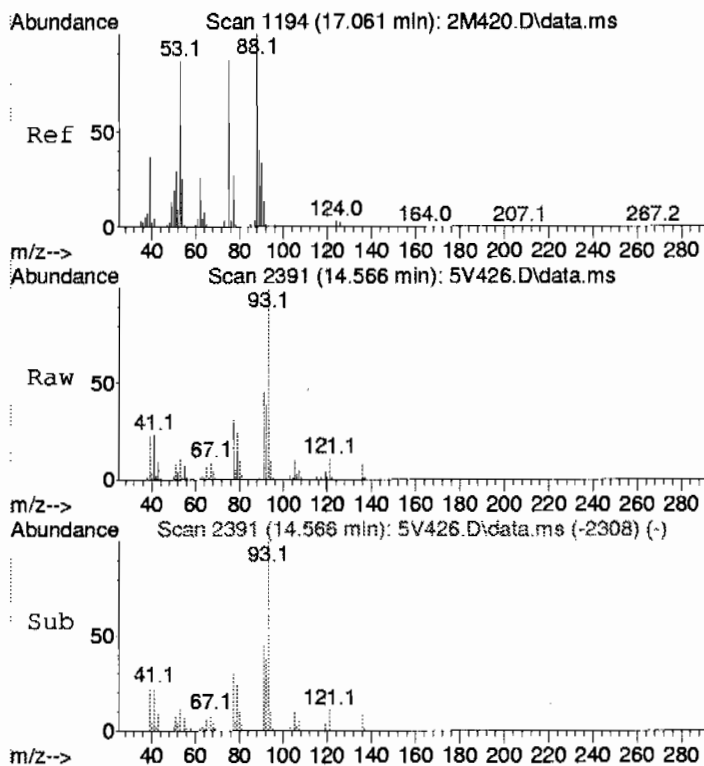
Tgt Ion:105 Resp: 20483  
Ion Ratio Lower Upper  
105 100  
134 6.1 0.0 51.4



#72 BEFORE analyst DELETION  
4-Isopropyltoluene  
Concen: 5.94 ug/L  
RT: 15.828 min Scan# 2748  
Delta R.T. -0.004 min  
Lab File: 5V426.D  
Acq: 28 Jan 2010 8:15 pm

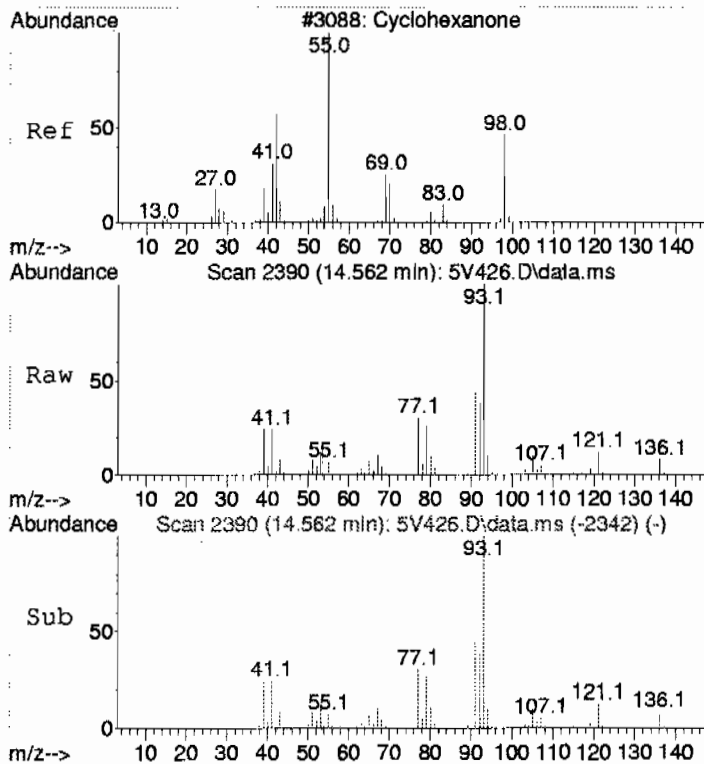
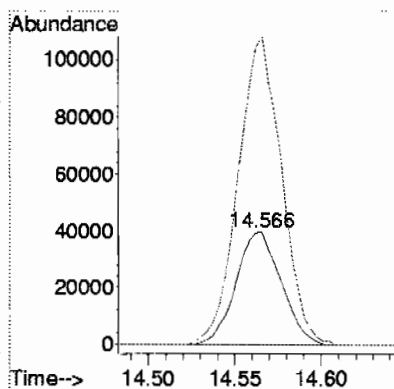
Tgt Ion:119 Resp: 135930  
Ion Ratio Lower Upper  
119 100  
134 28.1 0.0 58.7  
91 91.1 0.0 51.7#





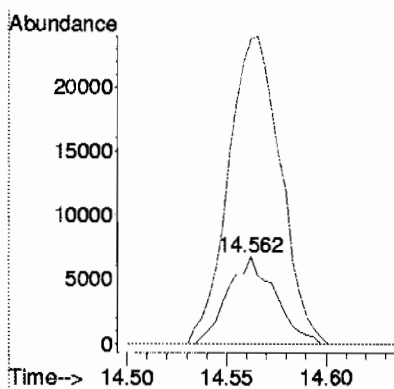
#107 BEFORE analyst DELETION  
 cis-1,4-Dichloro-2-butene  
 Concen: 32.41 ug/L  
 RT: 14.566 min Scan# 2391  
 Delta R.T. -0.007 min  
 Lab File: 5V426.D  
 Acq: 28 Jan 2010 8:15 pm

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 53      | 100   |       |        |
| 88      | 0.0   | 50.2  | 110.2# |
| 77      | 263.2 | 0.0   | 59.6#  |

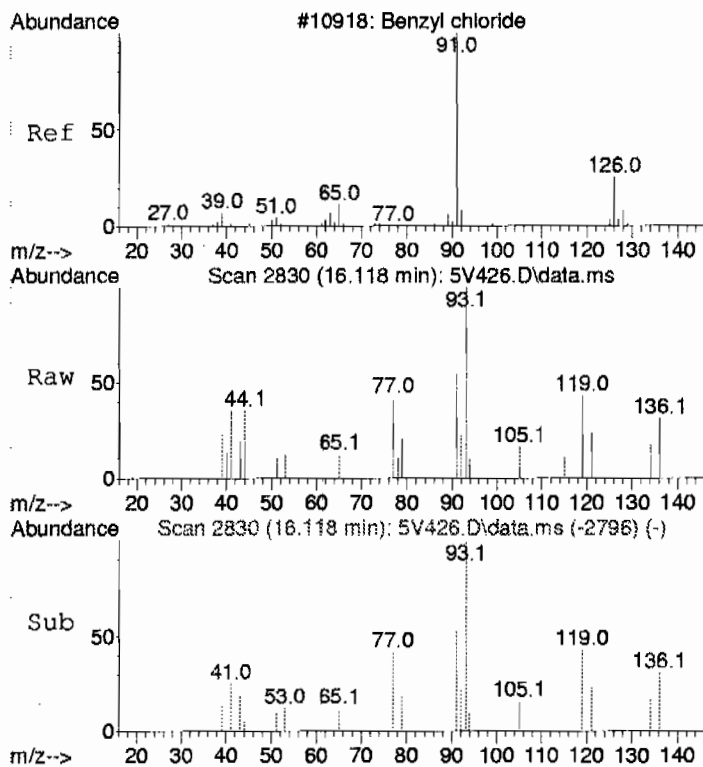


#108 BEFORE analyst DELETION  
 Cyclohexanone  
 Concen: 44.64 ug/L  
 RT: 14.562 min Scan# 2390  
 Delta R.T. -0.131 min  
 Lab File: 5V426.D  
 Acq: 28 Jan 2010 8:15 pm

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 42      | 100   |       |        |
| 55      | 390.0 | 104.7 | 164.7# |
| 98      | 0.0   | 21.5  | 81.5#  |

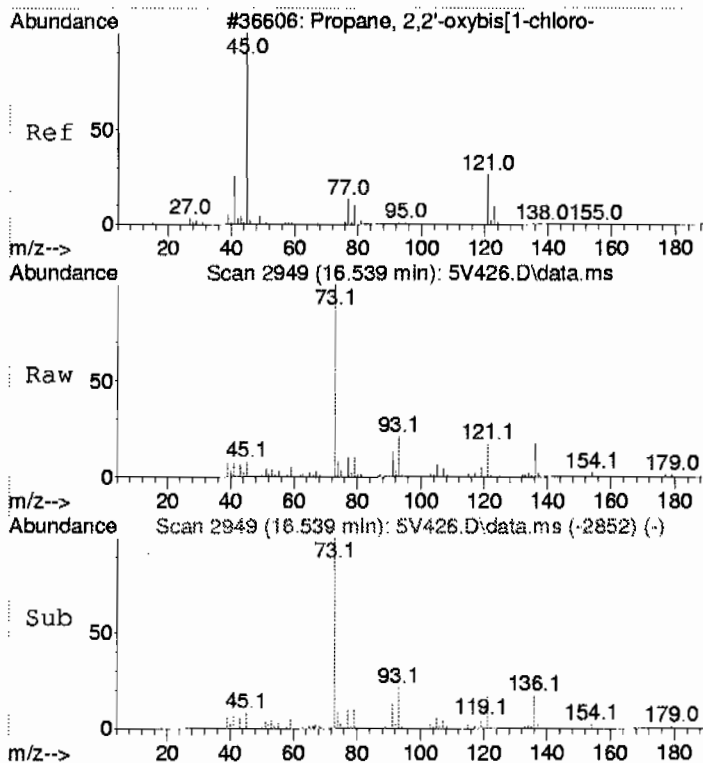
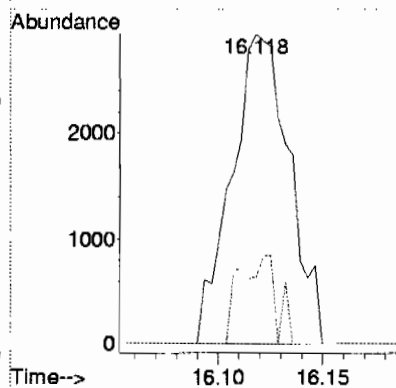






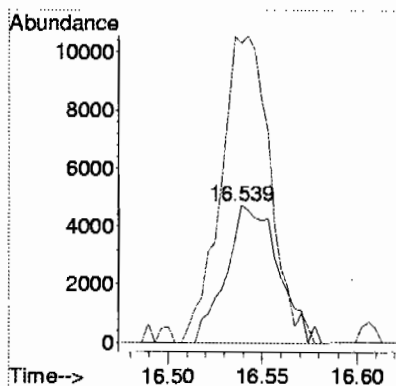
#111 BEFORE analyst DELETION  
Benzyl chloride  
Concen: 4.94 ug/L  
RT: 16.118 min Scan# 2830  
Delta R.T. 0.018 min  
Lab File: 5V426.D  
Acq: 28 Jan 2010 8:15 pm

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 126     | 0.0   | 0.0   | 51.6  |
| 65      | 18.7  | 0.0   | 41.9  |



#112 BEFORE analyst DELETION  
bis(2-Chloroisopropyl) ether  
Concen: 2.34 ug/L  
RT: 16.539 min Scan# 2949  
Delta R.T. 0.042 min  
Lab File: 5V426.D  
Acq: 28 Jan 2010 8:15 pm

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 45      | 100   |       |       |
| 121     | 212.1 | 0.0   | 49.2# |



Library Search Compound Report

GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V426.D  
Acq On : 28 Jan 2010 8:15 pm  
Operator : DXK1  
Sample : |245114003|946008|50|VOA|2|VOA8260BS|  
Misc : LANL 100uL N/A SOIL  
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V426.D  
Acq On : 28 Jan 2010 8:15 pm  
Operator : DXK1  
Sample : |245114003|946008|50|VOA|2|VOA8260BS|  
Misc : LANL 100uL N/A SOIL  
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

| TIC Top Hit name | RT | EstConc | Units | Response | ---Internal Standard--- |
|------------------|----|---------|-------|----------|-------------------------|
|                  |    |         |       | #        | RT Resp Conc            |

**Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 2

SDG Number: 10-1324  
Lab Sample ID: 245114006

Client ID: RE15-10-8413  
Batch ID: 946008  
Run Date: 01/31/2010 16:34  
Prep Date: 01/31/2009 10:37  
Data File: 013110V55V713.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
% Moisture: 10.6  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | HU        | 1.12   | ug/kg | 0.380   | 1.12    |
| 74-87-3    | Chloromethane               | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 75-01-4    | Vinyl chloride              | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 74-83-9    | Bromomethane                | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 75-00-3    | Chloroethane                | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 75-69-4    | Trichlorofluoromethane      | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 67-64-1    | Acetone                     | H         | 54.4   | ug/kg | 1.86    | 5.59    |
| 75-35-4    | 1,1-Dichloroethylene        | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 74-88-4    | Iodomethane                 | HU        | 5.59   | ug/kg | 1.79    | 5.59    |
| 75-09-2    | Methylene chloride          | HI        | 4.18   | ug/kg | 2.24    | 5.59    |
| 75-15-0    | Carbon disulfide            | HU        | 5.59   | ug/kg | 1.40    | 5.59    |
| 156-60-5   | trans-1,2-Dichloroethylene  | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 75-34-3    | 1,1-Dichloroethane          | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 78-93-3    | 2-Butanone                  | HU        | 5.59   | ug/kg | 1.68    | 5.59    |
| 156-59-2   | cis-1,2-Dichloroethylene    | HI        | 1.12   | ug/kg | 0.336   | 1.12    |
| 594-20-7   | 2,2-Dichloropropane         | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 67-66-3    | Chloroform                  | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 74-97-5    | Bromochloromethane          | HU        | 1.12   | ug/kg | 0.369   | 1.12    |
| 71-55-6    | 1,1,1-Trichloroethane       | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 563-58-6   | 1,1-Dichloropropene         | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 56-23-5    | Carbon tetrachloride        | HI        | 1.12   | ug/kg | 0.336   | 1.12    |
| 107-06-2   | 1,2-Dichloroethane          | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 71-43-2    | Benzene                     | HI        | 1.12   | ug/kg | 0.336   | 1.12    |
| 79-01-6    | Trichloroethylene           | HU        | 1.12   | ug/kg | 0.369   | 1.12    |
| 78-87-5    | 1,2-Dichloropropane         | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 75-27-4    | Bromodichloromethane        | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 74-95-3    | Dibromomethane              | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 108-10-1   | 4-Methyl-2-pentanone        | HU        | 5.59   | ug/kg | 1.40    | 5.59    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 108-88-3   | Toluene                     | H         | 1.44   | ug/kg | 0.336   | 1.12    |
| 10061-02-6 | trans-1,3-Dichloropropylene | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 79-00-5    | 1,1,2-Trichloroethane       | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 591-78-6   | 2-Hexanone                  | HI        | 5.59   | ug/kg | 1.68    | 5.59    |
| 142-28-9   | 1,3-Dichloropropane         | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 127-18-4   | Tetrachloroethylene         | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 124-48-1   | Dibromochloromethane        | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 106-93-4   | 1,2-Dibromoethane           | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 108-90-7   | Chlorobenzene               | HU        | 1.12   | ug/kg | 0.336   | 1.12    |

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114006  
  
Client ID: RE15-10-8413  
Batch ID: 946008  
Run Date: 01/31/2010 16:34  
Prep Date: 01/31/2009 10:37  
Data File: 013110V5SV713.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
% Moisture: 10.6  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parname                               | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 179601-23-1 | m,p-Xylenes                           | HU        | 2.24   | ug/kg | 0.336   | 2.24    |
| 95-47-6     | o-Xylene                              | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 100-42-5    | Styrene                               | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 75-25-2     | Bromoform                             | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 96-18-4     | 1,2,3-Trichloropropane                | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 108-86-1    | Bromobenzene                          | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 103-65-1    | n-Propylbenzene                       | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 95-49-8     | 2-Chlorotoluene                       | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 98-82-8     | Isopropylbenzene                      | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 106-43-4    | 4-Chlorotoluene                       | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 98-06-6     | tert-Butylbenzene                     | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 135-98-8    | sec-Butylbenzene                      | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 99-87-6     | 4-Isopropyltoluene                    | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 541-73-1    | 1,3-Dichlorobenzene                   | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 106-46-7    | 1,4-Dichlorobenzene                   | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 104-51-8    | n-Butylbenzene                        | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | HU        | 5.59   | ug/kg | 1.79    | 5.59    |
|             | Trichlorotrifluoroethane              |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | HU        | 1.12   | ug/kg | 0.336   | 1.12    |
| 95-50-1     | 1,2-Dichlorobenzene                   | HU        | 1.12   | ug/kg | 0.336   | 1.12    |

**Tentatively Identified Compound Summary**

| CAS No.     | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|-------------|---------------------------------------|-------|-----------|-------|-----|------|
|             | unknown                               | 6.5   | 77.1      | ug/kg | 0   | J    |
| 000105-37-3 | Propanoic acid, ethyl ester           | 10.91 | 5.64      | ug/kg | 91  | NJ   |
| 000105-54-4 | Butanoic acid, ethyl ester            | 12.46 | 6.78      | ug/kg | 91  | NJ   |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V713.D  
Acq On : 31 Jan 2010 4:34 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114006|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 01 09:39:53 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT   | QIon     | Response  | Conc   | Units |           |
|-------------------------------|--------|--------|----------|----------|-----------|--------|-------|-----------|
| Internal Standards            |        |        |          |          |           |        |       | Dev (Min) |
| 1) Fluorobenzene              | 10.375 | 10.375 | 1.000    | 96       | 1524904   | 50.00  | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547 | 13.547 | 1.000    | 117      | 1006998   | 50.00  | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.962 | 15.962 | 1.000    | 152      | 459699    | 50.00  | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.375 | 10.375 | 1.000    | 96       | 1524904   | 50.00  | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547 | 13.547 | 1.000    | 117      | 1006998   | 50.00  | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.962 | 15.962 | 1.000    | 152      | 459699    | 50.00  | ug/L  | 0.00      |
| System Monitoring Compounds   |        |        |          |          |           |        |       | Dev (Min) |
| 29) 1,2-Dichloroethane-d4     | 10.021 | 10.021 | 0.966    | 65       | 379976    | 53.61  | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range  | 68 - 131 | Recovery | = 107.22% |        |       |           |
| 43) Toluene-d8                | 12.016 | 12.016 | 0.887    | 98       | 1346114   | 49.01  | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range  | 75 - 129 | Recovery | = 98.02%  |        |       |           |
| 61) Bromofluorobenzene        | 14.739 | 14.739 | 0.923    | 95       | 483103    | 55.07  | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range  | 68 - 133 | Recovery | = 110.14% |        |       |           |
| Target Compounds              |        |        |          |          |           |        |       | QValue    |
| 2) Dichlorodifluoromethane    | 0.000  | 4.689  | 0.000    |          | 0         | N.D.   |       |           |
| 3) Chloromethane              | 5.242  | 5.051  | 0.505    | 50       | 670       | N.D.   |       |           |
| 4) Vinyl chloride             | 0.000  | 5.283  | 0.000    |          | 0         | N.D.   |       |           |
| 5) Bromomethane               | 0.000  | 5.877  | 0.000    |          | 0         | N.D.   |       |           |
| 6) Chloroethane               | 0.000  | 6.018  | 0.000    |          | 0         | N.D.   |       |           |
| 7) Trichlorofluoromethane     | 0.000  | 6.391  | 0.000    |          | 0         | N.D.   |       |           |
| 8) Ethyl ether                | 0.000  | 6.733  | 0.000    |          | 0         | N.D.   |       |           |
| 9) Acetone                    | 7.100  | 7.100  | 0.684    | 43       | 278060    | 48.64  | ug/L  | 89        |
| 10) 1,1-Dichloroethylene      | 0.000  | 7.125  | 0.000    |          | 0m        | N.D.   | d     |           |
| 11) Iodomethane               | 0.000  | 7.373  | 0.000    |          | 0         | N.D.   |       |           |
| 12) Acetonitrile              | 7.489  | 7.450  | 0.722    | 41       | 129       | N.D.   |       |           |
| 13) Methyl acetate            | 0.000  | 7.493  | 0.000    |          | 0m        | N.D.   | d     |           |
| 14) Carbon disulfide          | 7.511  | 7.511  | 0.724    | 76       | 1384      | N.D.   |       |           |
| 15) Methylene chloride        | 7.694  | 7.691  | 0.742    | 84       | 24294     | 3.74   | ug/L  | 84        |
| 16) tert-Butyl methyl ether   | 0.000  | 7.984  | 0.000    |          | 0         | N.D.   |       |           |
| 17) trans-1,2-Dichloroethy... | 0.000  | 8.030  | 0.000    |          | 0         | N.D.   |       |           |
| 18) Vinyl acetate             | 8.423  | 8.458  | 0.812    | 43       | 12521     | N.D.   |       |           |
| 19) 1,1-Dichloroethane        | 0.000  | 8.511  | 0.000    |          | 0         | N.D.   |       |           |
| 20) 2-Butanone                | 0.000  | 9.077  | 0.000    |          | 0m        | N.D.   | d     |           |
| 21) cis-1,2-Dichloroethylene  | 9.137  | 9.144  | 0.881    | 61       | 126       | N.D.   |       |           |
| 22) 2,2-Dichloropropane       | 0.000  | 9.173  | 0.000    |          | 0         | N.D.   |       |           |
| 23) Bromochloromethane        | 0.000  | 9.417  | 0.000    |          | 0         | N.D.   |       |           |
| 24) Chloroform                | 0.000  | 9.452  | 0.000    |          | 0         | N.D.   |       |           |
| 25) 1,1,1-Trichloroethane     | 0.000  | 9.735  | 0.000    |          | 0         | N.D.   |       |           |
| 26) Cyclohexane               | 9.823  | 9.830  | 0.947    | 56       | 537       | N.D.   |       |           |
| 27) 1,1-Dichloropropene       | 0.000  | 9.887  | 0.000    |          | 0         | N.D.   |       |           |
| 28) Carbon tetrachloride      | 0.000  | 9.929  | 0.000    |          | 0         | N.D.   |       |           |
| 30) 1,2-Dichloroethane        | 0.000  | 10.103 | 0.000    |          | 0         | N.D.   |       |           |
| 31) Benzene                   | 10.124 | 10.127 | 0.976    | 78       | 1402      | N.D.   |       |           |
| 32) Cyclohexene               | 10.357 | 10.248 | 0.998    | 67       | 115       | N.D.   |       |           |
| 33) n-Butyl alcohol           | 10.463 | 10.460 | 1.009    | 56       | 53710     | 333.87 | ug/L  | 87        |
| 34) Trichloroethylene         | 0.000  | 10.768 | 0.000    |          | 0         | N.D.   |       |           |
| 35) 1,2-Dichloropropane       | 0.000  | 11.004 | 0.000    |          | 0         | N.D.   |       |           |
| 36) Methylcyclohexane         | 10.902 | 11.019 | 1.051    | 83       | 112       | N.D.   |       |           |
| 37) Dibromomethane            | 0.000  | 11.146 | 0.000    |          | 0         | N.D.   |       |           |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V713.D  
Acq On : 31 Jan 2010 4:34 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114006|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 01 09:39:53 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc  | Units |    |
|-------------------------------|--------|--------|--------|------|----------|-------|-------|----|
| 38) Bromodichloromethane      | 0.000  | 11.256 | 0.000  |      | 0        | N.D.  |       |    |
| 39) 2-Chloroethylvinyl ether  | 0.000  | 11.468 | 0.000  |      | 0        | N.D.  |       |    |
| 40) cis-1,3-Dichloropropylene | 0.000  | 11.705 | 0.000  |      | 0        | N.D.  |       |    |
| 42) 4-Methyl-2-pentanone      | 0.000  | 11.786 | 0.000  |      | 0        | N.D.  |       |    |
| 44) Toluene                   | 12.087 | 12.090 | 0.892  | 91   | 31022    | 1.29  | ug/L  | 98 |
| 45) trans-1,3-Dichloroprop... | 12.016 | 12.239 | 0.887  | 75   | 111      | N.D.  |       |    |
| 46) 1,1,2-Trichloroethane     | 0.000  | 12.465 | 0.000  |      | 0        | N.D.  |       |    |
| 47) 2-Hexanone                | 12.635 | 12.631 | 0.933  | 43   | 518      | N.D.  |       |    |
| 48) 1,3-Dichloropropane       | 0.000  | 12.656 | 0.000  |      | 0        | N.D.  |       |    |
| 49) Tetrachloroethylene       | 0.000  | 12.691 | 0.000  |      | 0        | N.D.  |       |    |
| 50) Dibromochloromethane      | 0.000  | 12.928 | 0.000  |      | 0        | N.D.  |       |    |
| 51) 1,2-Dibromoethane         | 0.000  | 13.094 | 0.000  |      | 0        | N.D.  |       |    |
| 52) Chlorobenzene             | 0.000  | 13.579 | 0.000  |      | 0        | N.D.  |       |    |
| 53) 1,1,1,2-Tetrachloroethane | 0.000  | 13.636 | 0.000  |      | 0        | N.D.  |       |    |
| 54) Ethylbenzene              | 13.639 | 13.639 | 1.007  | 91   | 1258     | N.D.  |       |    |
| 55) m,p-Xylenes               | 13.752 | 13.749 | 1.015  | 106  | 328      | N.D.  |       |    |
| 56) o-Xylene                  | 0.000  | 14.184 | 0.000  |      | 0        | N.D.  |       |    |
| 57) Styrene                   | 14.187 | 14.184 | 1.047  | 104  | 314      | N.D.  |       |    |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D.  |       |    |
| 60) Isopropylbenzene          | 0.000  | 14.537 | 0.000  |      | 0m       | N.D.  | d     |    |
| 62) 1,1,2,2-Tetrachloroethane | 0.000  | 14.810 | 0.000  |      | 0        | N.D.  |       |    |
| 63) 1,2,3-Trichloropropane    | 0.000  | 14.898 | 0.000  |      | 0        | N.D.  |       |    |
| 64) Bromobenzene              | 0.000  | 14.951 | 0.000  |      | 0        | N.D.  |       |    |
| 65) n-Propylbenzene           | 14.891 | 14.965 | 0.933  | 91   | 4522     | N.D.  |       |    |
| 66) 1,3,5-Trimethylbenzene    | 0.000  | 15.114 | 0.000  |      | 0        | N.D.  |       |    |
| 67) 2-Chlorotoluene           | 0.000  | 15.117 | 0.000  |      | 0        | N.D.  |       |    |
| 68) 4-Chlorotoluene           | 15.206 | 15.216 | 0.953  | 91   | 110      | N.D.  |       |    |
| 69) tert-Butylbenzene         | 15.577 | 15.489 | 0.976  | 134  | 468      | N.D.  |       |    |
| 70) 1,2,4-Trimethylbenzene    | 15.581 | 15.527 | 0.976  | 105  | 3362     | N.D.  |       |    |
| 71) sec-Butylbenzene          | 15.800 | 15.711 | 0.990  | 105  | 1180     | N.D.  |       |    |
| 72) 4-Isopropyltoluene        | 0.000  | 15.832 | 0.000  |      | 0m       | N.D.  | d     |    |
| 73) 1,3-Dichlorobenzene       | 0.000  | 15.902 | 0.000  |      | 0        | N.D.  |       |    |
| 74) 1,4-Dichlorobenzene       | 0.000  | 15.991 | 0.000  |      | 0        | N.D.  |       |    |
| 75) n-Butylbenzene            | 16.118 | 16.277 | 1.010  | 91   | 804      | N.D.  |       |    |
| 76) 1,2-Dichlorobenzene       | 0.000  | 16.422 | 0.000  |      | 0        | N.D.  |       |    |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D.  |       |    |
| 78) 1,2,4-Trichlorobenzene    | 0.000  | 18.371 | 0.000  |      | 0        | N.D.  |       |    |
| 79) Hexachlorobutadiene       | 0.000  | 18.548 | 0.000  |      | 0        | N.D.  |       |    |
| 80) Naphthalene               | 18.762 | 18.762 | 1.175  | 128  | 541      | N.D.  |       |    |
| 81) 1,2,3-Trichlorobenzene    | 0.000  | 19.116 | 0.000  |      | 0        | N.D.  |       |    |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D.  |       |    |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D.  |       |    |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D.  |       |    |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D.  |       |    |
| 87) Isopropyl Alcohol         | 0.000  | 7.175  | 0.000  |      | 0m       | N.D.  | d     |    |
| 88) Allyl chloride            | 7.489  | 7.546  | 0.722  | 41   | 129      | N.D.  |       |    |
| 89) tert-Butyl Alcohol        | 7.677  | 7.673  | 0.740  | 59   | 354      | N.D.  |       |    |
| 90) Acrylonitrile             | 0.000  | 7.928  | 0.000  |      | 0        | N.D.  |       |    |
| 91) Isopropyl ether           | 8.476  | 8.483  | 0.817  | 45   | 295      | N.D.  |       |    |
| 92) 2-Chloro-1,3-butadiene    | 8.437  | 8.617  | 0.813  | 53   | 108      | N.D.  |       |    |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D.  |       |    |
| 94) Ethyl acetate             | 9.095  | 9.088  | 0.877  | 43   | 99828    | 14.24 | ug/L  | 91 |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V713.D  
Acq On : 31 Jan 2010 4:34 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114006|946008|1|VOA|1|VOA8260BS|  
Misc : LNL 5.0g N/A SOIL  
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 01 09:39:53 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.  | Exp RT | Rel RT | QIon | Response | Conc  | Units   |
|--------------------------------|-------|--------|--------|------|----------|-------|---------|
| 95) Propionitrile              | 0.000 | 9.148  | 0.000  |      | 0        | N.D.  |         |
| 96) Methacrylonitrile          | 9.095 | 9.332  | 0.877  | 41   | 284      | N.D.  |         |
| 97) Tetrahydrofuran            | 9.466 | 9.466  | 0.912  | 42   | 345      | N.D.  |         |
| 98) Isobutyl alcohol           | 9.774 | 9.770  | 0.942  | 41   | 7780     | 30.26 | ug/L 94 |
| 99) Methyl tert-amyl ether     | 0.000 | 10.138 | 0.000  |      | 0        | N.D.  |         |
| 100) Methyl methacrylate       | 0.000 | 10.969 | 0.000  |      | 0        | N.D.  |         |
| 101) 1,4-Dioxane               | 0.000 | 11.089 | 0.000  |      | 0        | N.D.  |         |
| 102) 2-Nitropropane            | 0.000 | 11.443 | 0.000  |      | 0        | N.D.  |         |
| 104) Ethyl methacrylate        | 0.000 | 12.235 | 0.000  |      | 0        | N.D.  |         |
| 106) 1-Chlorohexane            | 0.000 | 13.438 | 0.000  |      | 0        | N.D.  |         |
| 107) cis-1,4-Dichloro-2-butene | 0.000 | 14.573 | 0.000  |      | 0m       | N.D.  | d       |
| 108) Cyclohexanone             | 0.000 | 14.693 | 0.000  |      | 0m       | N.D.  | d       |
| 109) trans-1,4-Dichloro-2-b... | 0.000 | 14.856 | 0.000  |      | 0m       | N.D.  | d       |
| 110) Pentachloroethane         | 0.000 | 15.559 | 0.000  |      | 0        | N.D.  |         |
| 111) Benzyl chloride           | 0.000 | 16.100 | 0.000  |      | 0m       | N.D.  | d       |
| 112) bis(2-Chloroisopropyl)... | 0.000 | 16.497 | 0.000  |      | 0m       | N.D.  | d       |

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

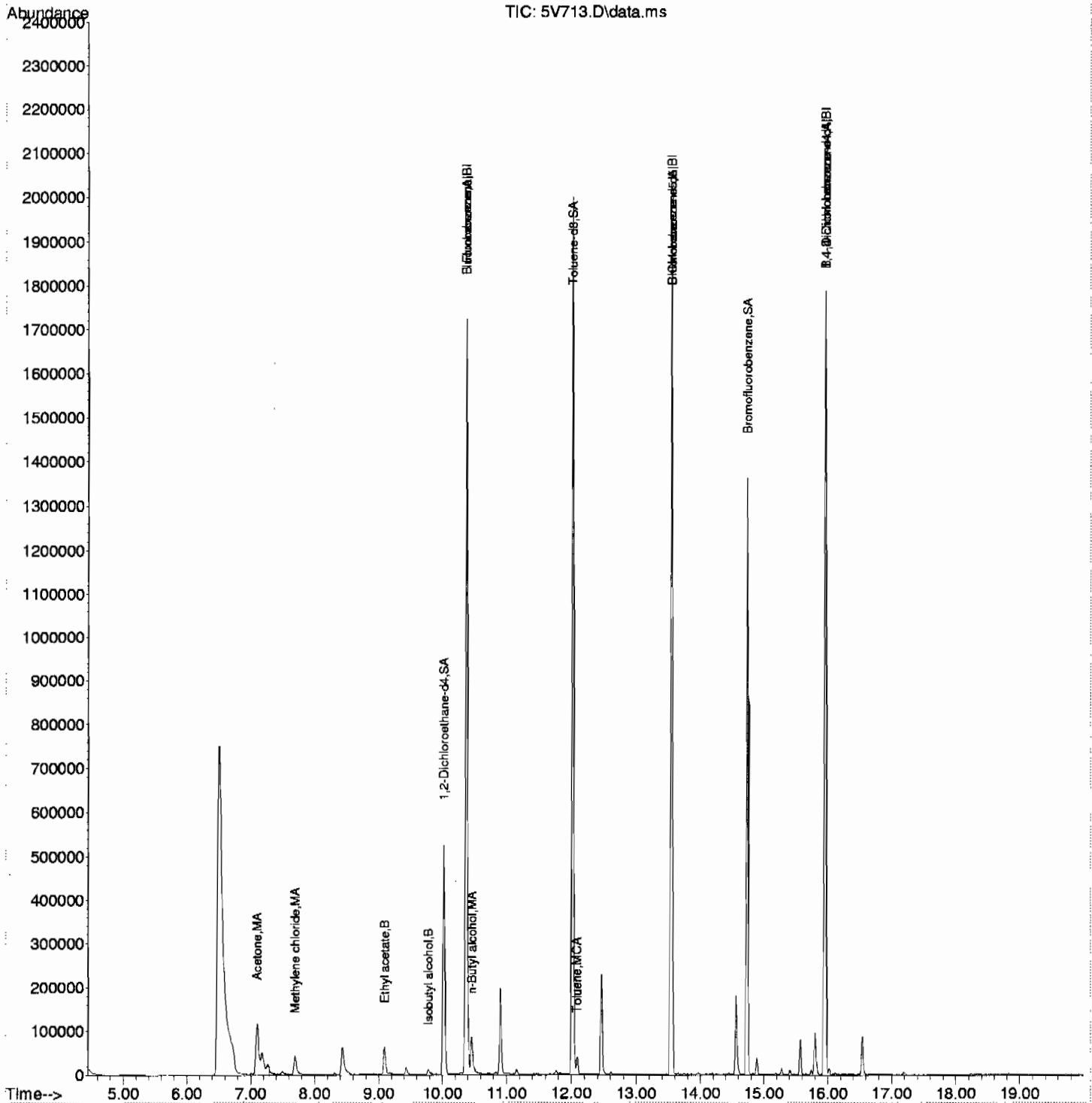


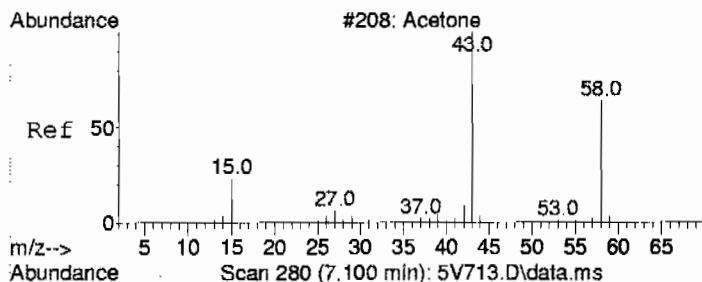
Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V713.D  
Acq On : 31 Jan 2010 4:34 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |245114006|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 01 09:39:53 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :





#9

Acetone

Concen: 48.64 ug/L

RT: 7.100 min Scan# 280

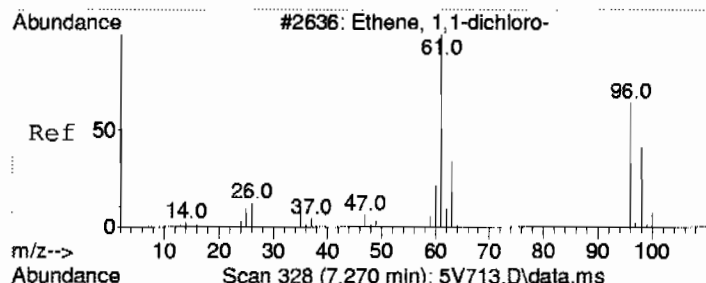
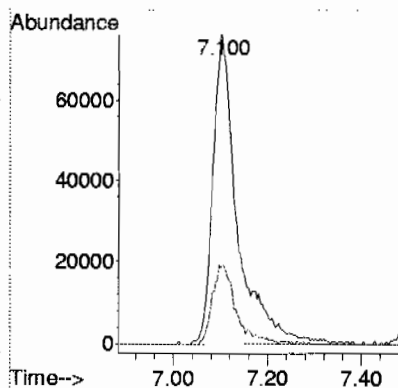
Delta R.T. 0.000 min

Lab File: 5V713.D

Acq: 31 Jan 2010 4:34 pm

Tgt Ion: 43 Resp: 278060

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 58  | 23.8  | 0.0   | 59.5  |



#10 BEFORE analyst DELETION

1,1-Dichloroethylene

Concen: 0.46 ug/L

RT: 7.270 min Scan# 328

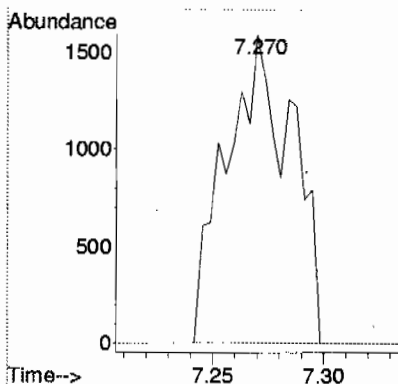
Delta R.T. 0.145 min

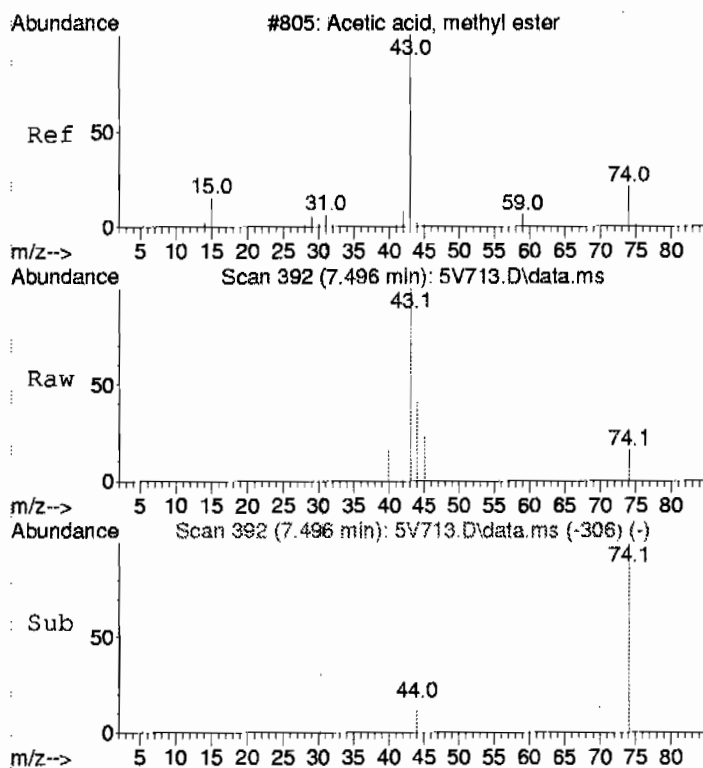
Lab File: 5V713.D

Acq: 31 Jan 2010 4:34 pm

Tgt Ion: 61 Resp: 3288

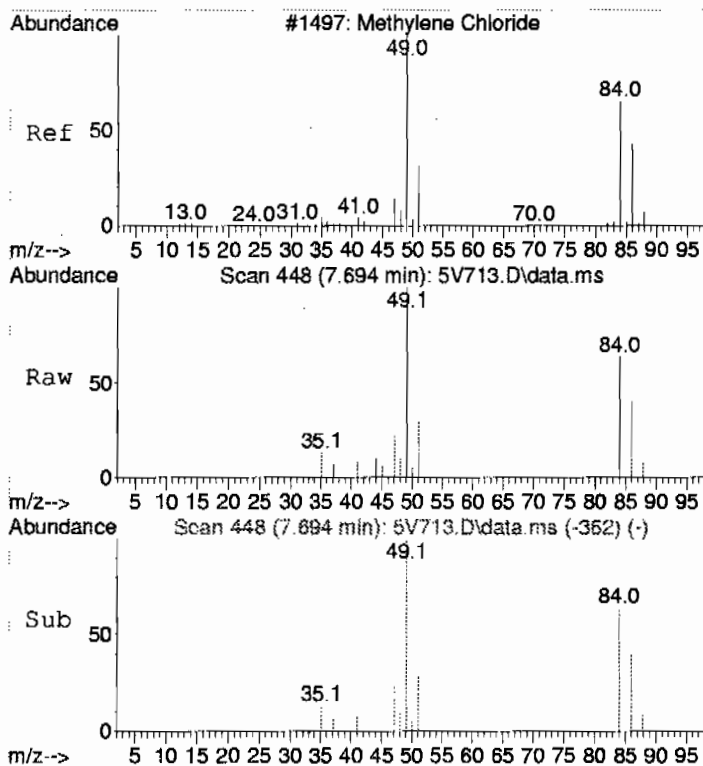
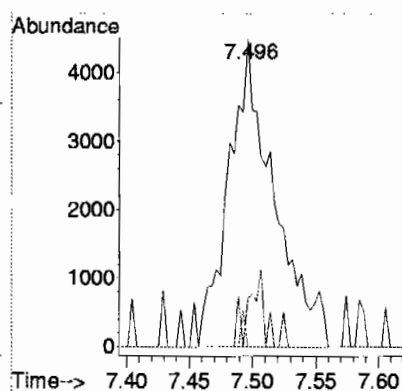
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 61  | 100   |       |       |
| 96  | 0.0   | 27.1  | 87.1# |
| 63  | 0.0   | 0.9   | 60.9# |





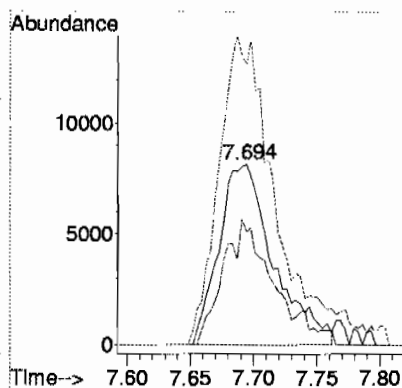
#13 BEFORE analyst DELETION  
Methyl acetate  
Concen: 1.96 ug/L  
RT: 7.496 min Scan# 392  
Delta R.T. 0.003 min  
Lab File: 5V713.D  
Acq: 31 Jan 2010 4:34 pm

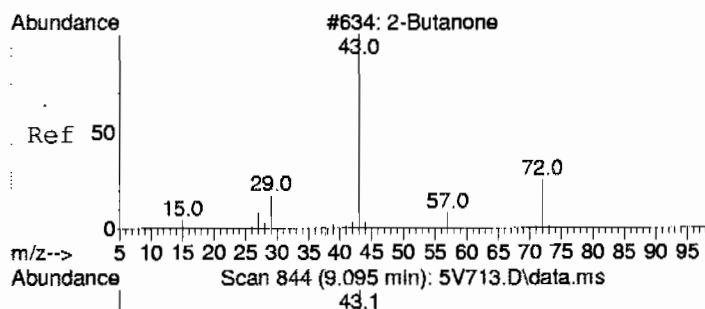
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 43    | Resp: | 11204 |
| Ion Ratio | Lower | Upper |       |
| 43        | 100   |       |       |
| 74        | 8.5   | 0.0   | 47.6  |
| 59        | 1.0   | 0.0   | 36.8  |



#15  
Methylene chloride  
Concen: 3.74 ug/L  
RT: 7.694 min Scan# 448  
Delta R.T. 0.003 min  
Lab File: 5V713.D  
Acq: 31 Jan 2010 4:34 pm

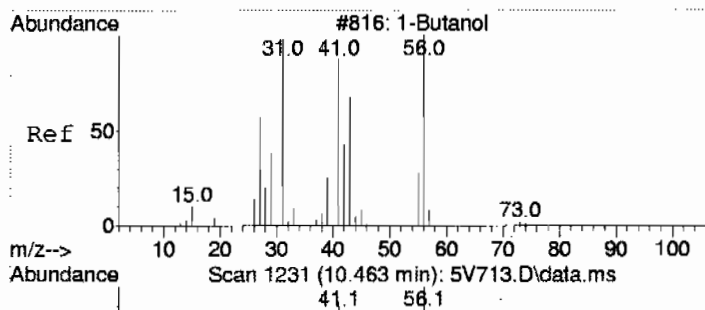
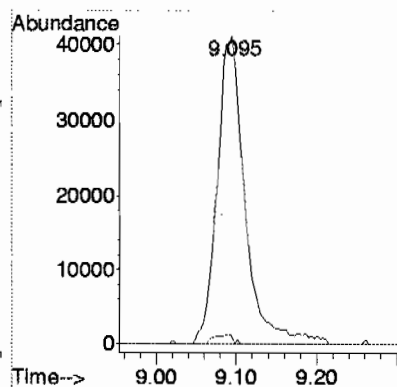
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 84    | Resp: | 24294 |
| Ion Ratio | Lower | Upper |       |
| 84        | 100   |       |       |
| 86        | 65.1  | 33.2  | 93.2  |
| 49        | 183.5 | 125.4 | 185.4 |





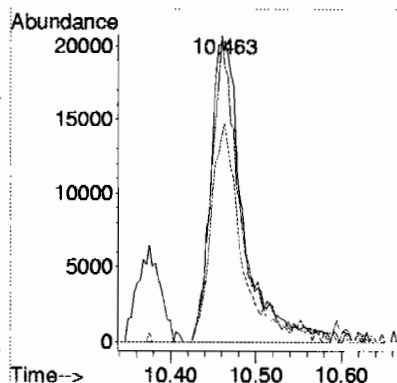
#20 BEFORE analyst DELETION  
2-Butanone  
Concen: 15.25 ug/L  
RT: 9.095 min Scan# 844  
Delta R.T. 0.018 min  
Lab File: 5V713.D  
Acq: 31 Jan 2010 4:34 pm

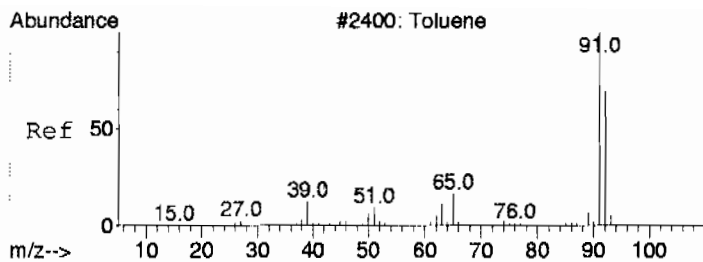
Tgt Ion: 43 Resp: 99828  
Ion Ratio Lower Upper  
43 100  
72 1.9 0.0 50.5



#33  
n-Butyl alcohol  
Concen: 333.87 ug/L  
RT: 10.463 min Scan# 1231  
Delta R.T. 0.003 min  
Lab File: 5V713.D  
Acq: 31 Jan 2010 4:34 pm

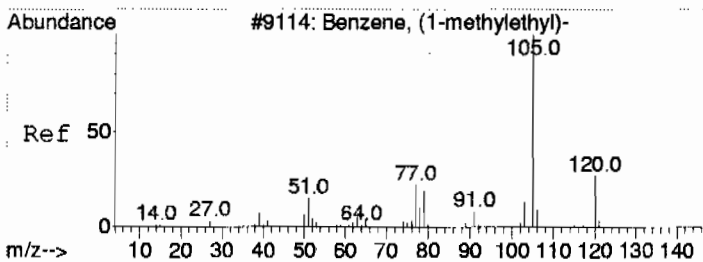
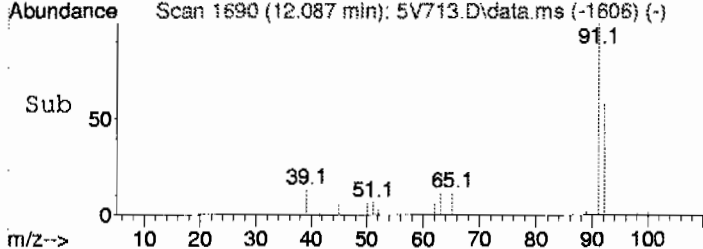
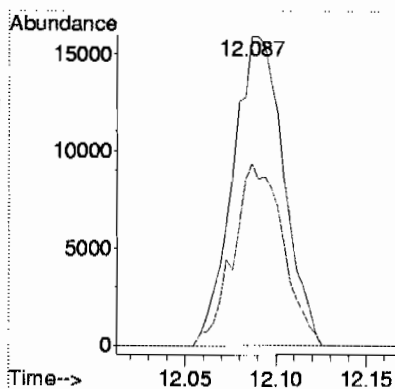
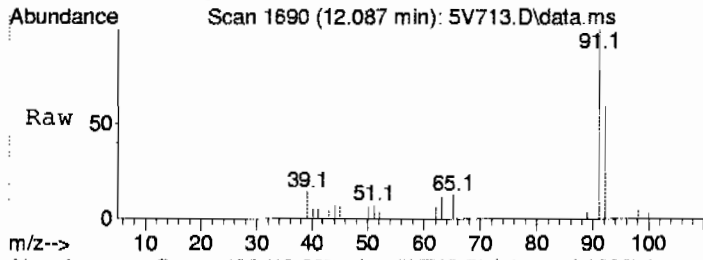
Tgt Ion: 56 Resp: 53710  
Ion Ratio Lower Upper  
56 100  
41 92.9 47.2 107.2  
43 66.3 31.2 91.2





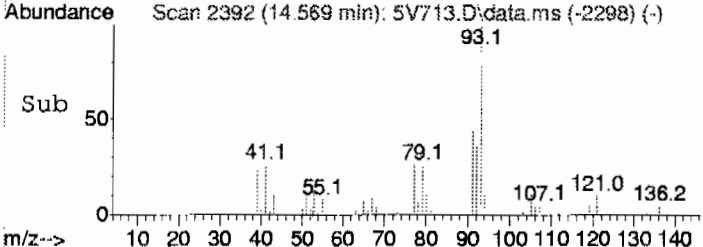
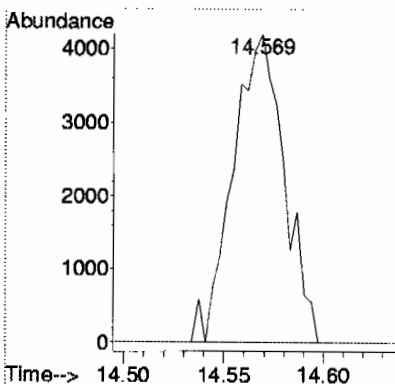
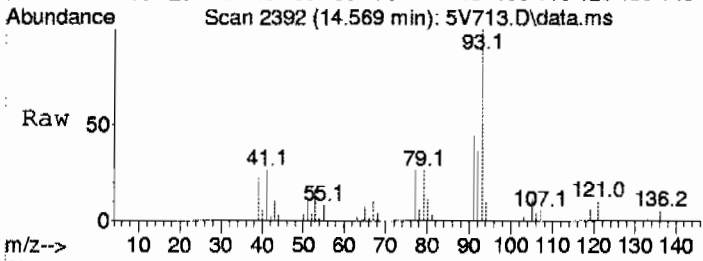
#44  
Toluene  
Concen: 1.29 ug/L  
RT: 12.087 min Scan# 1690  
Delta R.T. -0.003 min  
Lab File: 5V713.D  
Acq: 31 Jan 2010 4:34 pm

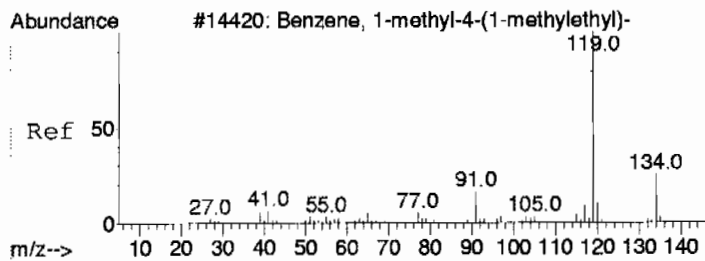
Tgt Ion: 91 Resp: 31022  
Ion Ratio Lower Upper  
91 100  
92 57.2 28.7 88.7



#60 BEFORE analyst DELETION  
Isopropylbenzene  
Concen: 0.36 ug/L  
RT: 14.569 min Scan# 2392  
Delta R.T. 0.032 min  
Lab File: 5V713.D  
Acq: 31 Jan 2010 4:34 pm

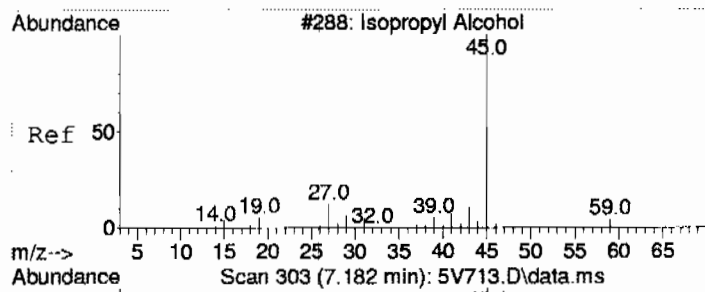
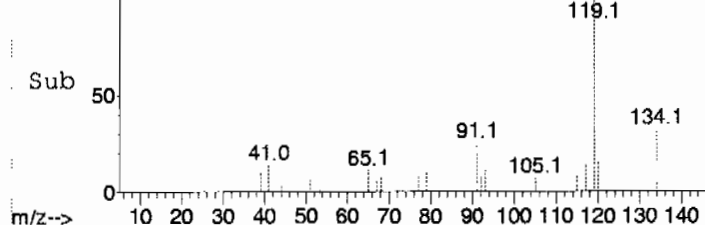
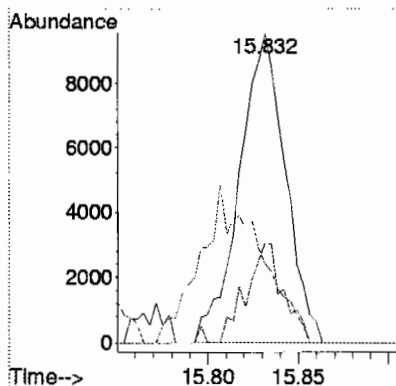
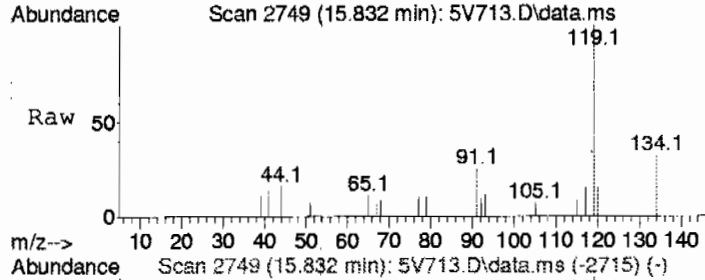
Tgt Ion: 105 Resp: 7519  
Ion Ratio Lower Upper  
105 100  
120 0.0 0.0 57.9





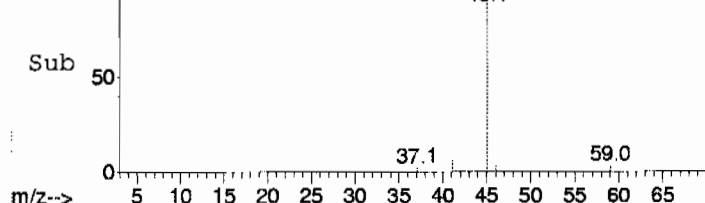
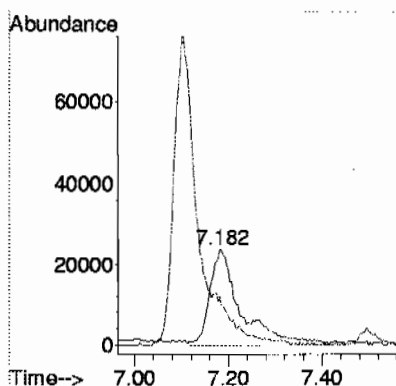
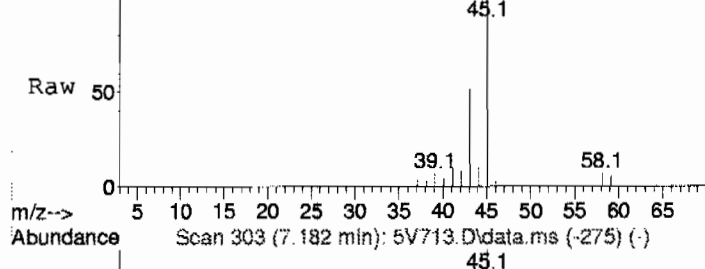
#72 BEFORE analyst DELETION  
4-Isopropyltoluene  
Concen: 0.93 ug/L  
RT: 15.832 min Scan# 2749  
Delta R.T. -0.000 min  
Lab File: 5V713.D  
Acq: 31 Jan 2010 4:34 pm

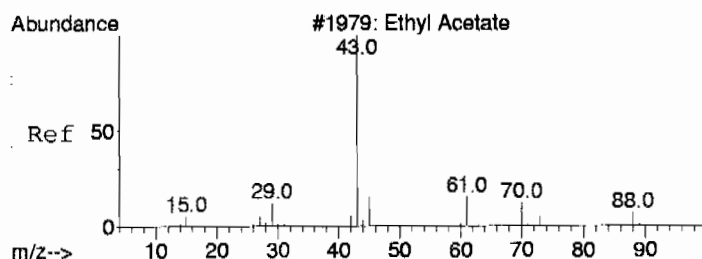
| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 119     | 100   | 16789 |       |       |
| 134     | 25.8  | 0.0   | 58.7  |       |
| 91      | 0.0   | 0.0   | 51.7  |       |



#87 BEFORE analyst DELETION  
Isopropyl Alcohol  
Concen: 245.87 ug/L  
RT: 7.182 min Scan# 303  
Delta R.T. 0.007 min  
Lab File: 5V713.D  
Acq: 31 Jan 2010 4:34 pm

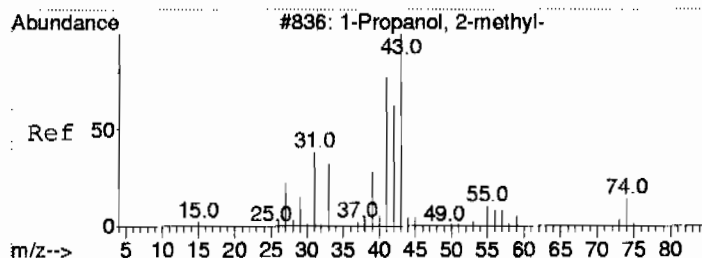
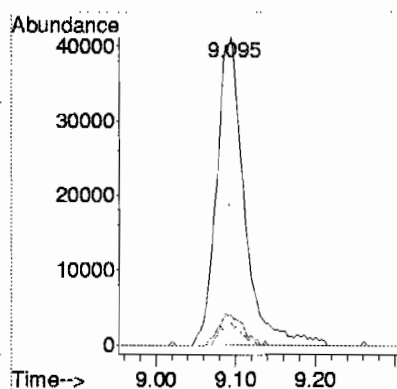
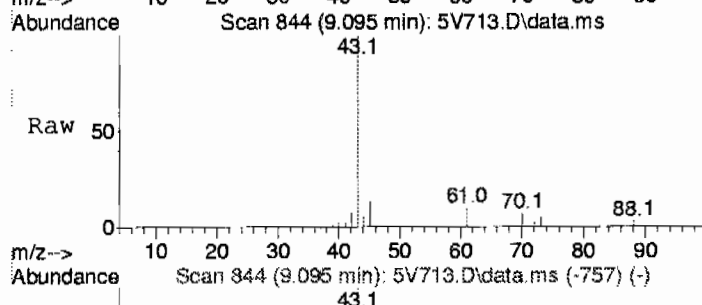
| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 45      | 100   | 111618 |       |       |
| 43      | 0.0   | 0.0    | 50.1  |       |





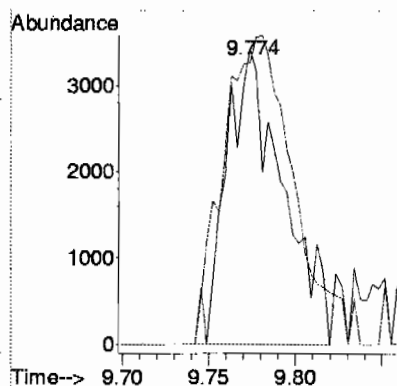
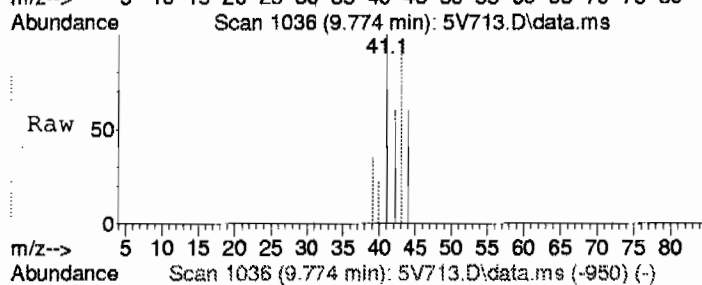
#94  
Ethyl acetate  
Concen: 14.24 ug/L  
RT: 9.095 min Scan# 844  
Delta R.T. 0.007 min  
Lab File: 5V713.D  
Acq: 31 Jan 2010 4:34 pm

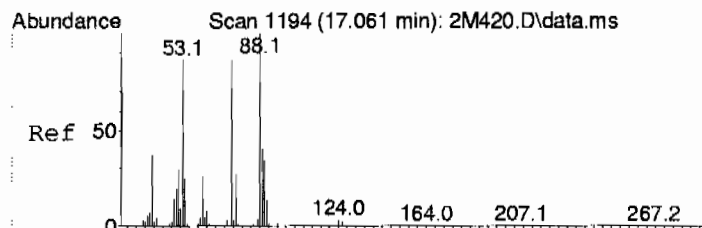
Tgt Ion: 43 Resp: 99828  
Ion Ratio Lower Upper  
43 100  
61 8.9 0.0 42.3  
70 5.6 0.0 38.6



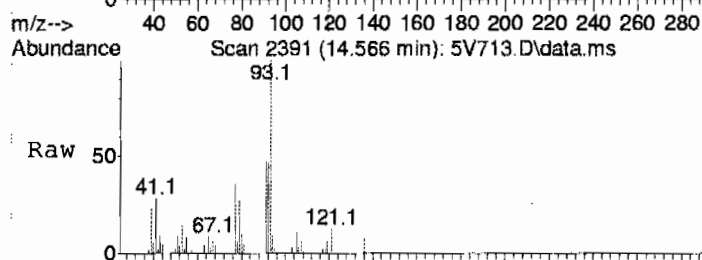
#98  
Isobutyl alcohol  
Concen: 30.26 ug/L  
RT: 9.774 min Scan# 1036  
Delta R.T. 0.004 min  
Lab File: 5V713.D  
Acq: 31 Jan 2010 4:34 pm

Tgt Ion: 41 Resp: 7780  
Ion Ratio Lower Upper  
41 100  
43 129.5 107.1 167.1

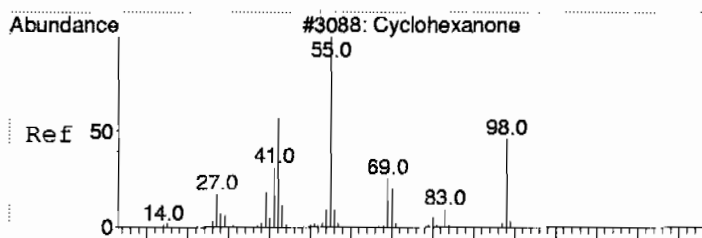
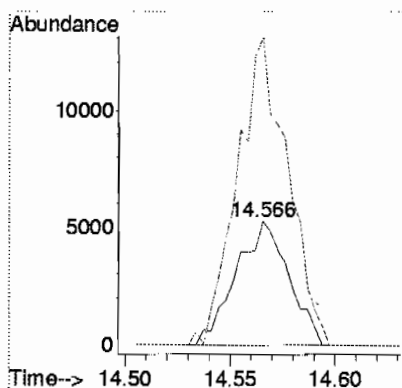
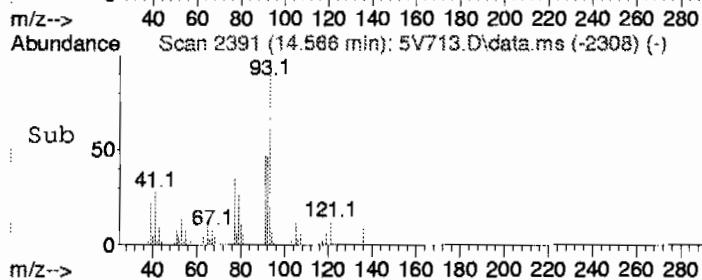




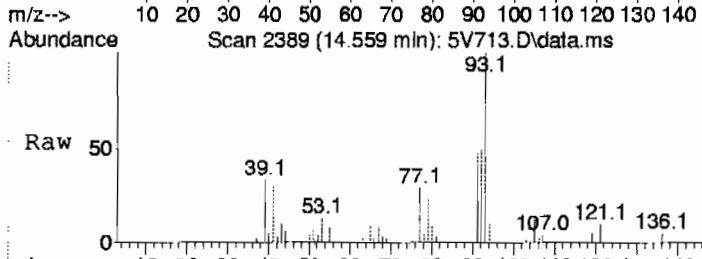
#107 BEFORE analyst DELETION  
 cis-1,4-Dichloro-2-butene  
 Concen: 5.25 ug/L  
 RT: 14.566 min Scan# 2391  
 Delta R.T. -0.007 min  
 Lab File: 5V713.D  
 Acq: 31 Jan 2010 4:34 pm



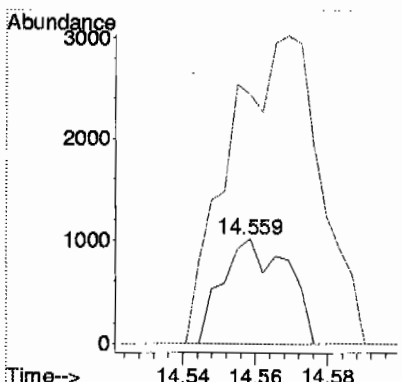
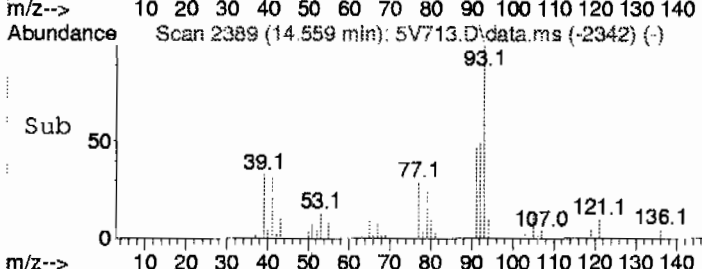
Tgt Ion: 53 Resp: 9145  
 Ion Ratio Lower Upper  
 53 100  
 88 0.0 50.2 110.2#  
 77 238.4 0.0 59.6#



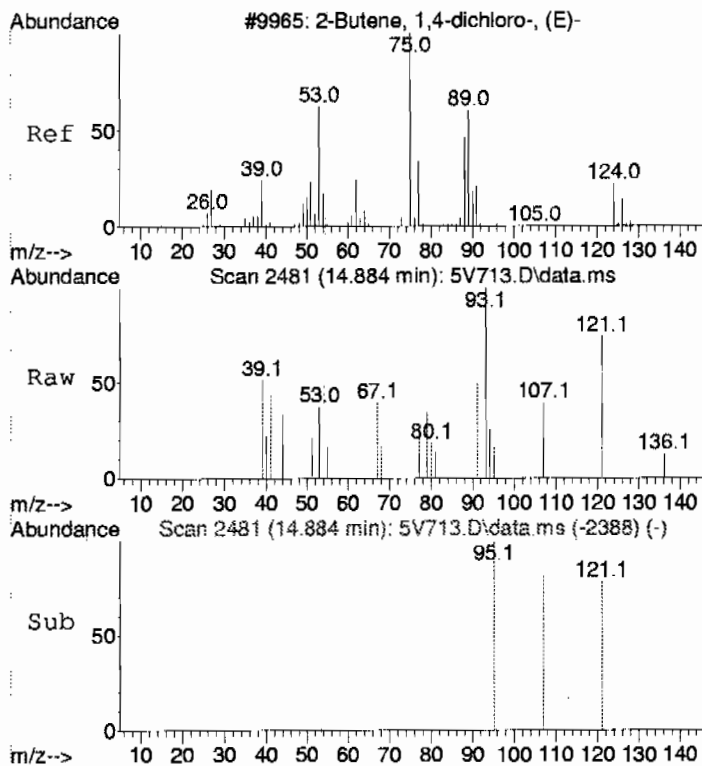
#108 BEFORE analyst DELETION  
 Cyclohexanone  
 Concen: 30.45 ug/L  
 RT: 14.559 min Scan# 2389  
 Delta R.T. -0.134 min  
 Lab File: 5V713.D  
 Acq: 31 Jan 2010 4:34 pm



Tgt Ion: 42 Resp: 1258  
 Ion Ratio Lower Upper  
 42 100  
 55 414.4 104.7 164.7#  
 98 0.0 21.5 81.5#

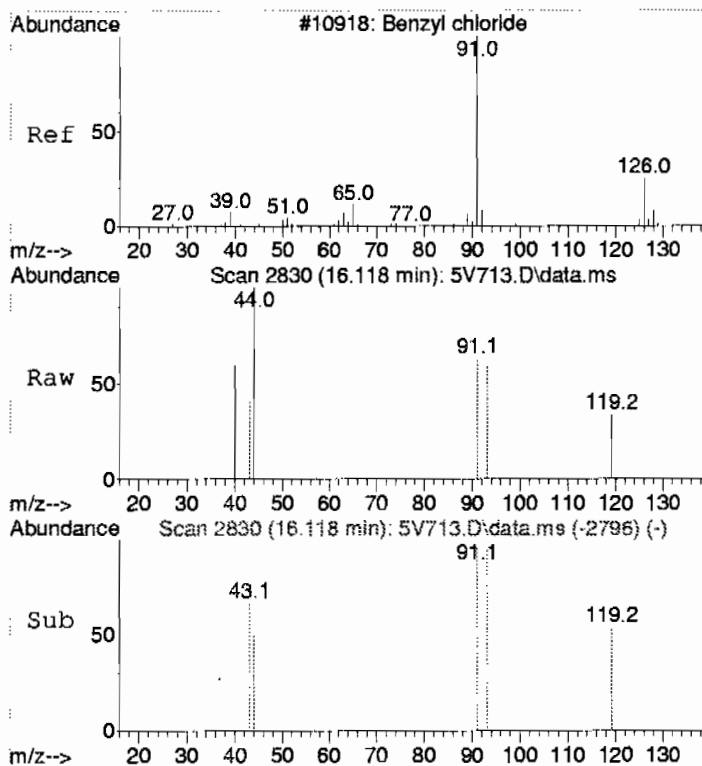
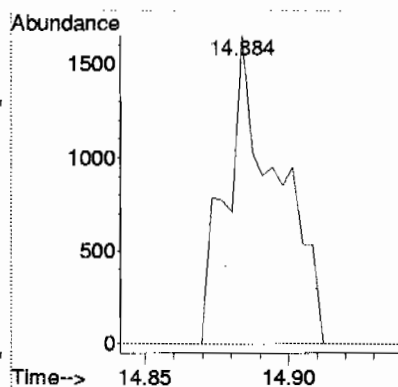






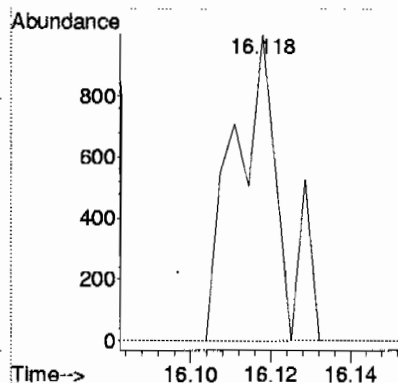
#109 BEFORE analyst DELETION  
trans-1,4-Dichloro-2-butene  
Concen: 1.23 ug/L  
RT: 14.884 min Scan# 2481  
Delta R.T. 0.028 min  
Lab File: 5V713.D  
Acq: 31 Jan 2010 4:34 pm

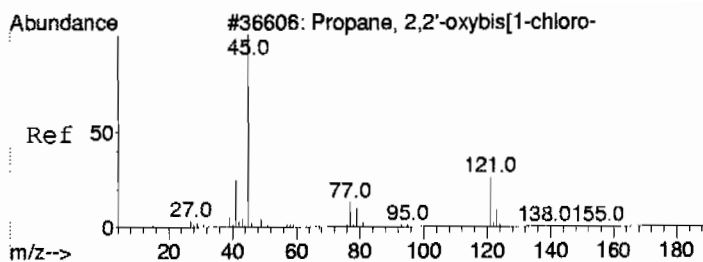
| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 53      | 100   |       |        |
| 88      | 0.0   | 7.6   | 67.6#  |
| 75      | 0.0   | 86.0  | 146.0# |



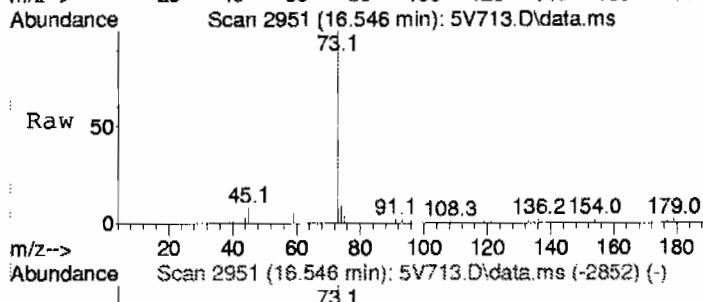
#111 BEFORE analyst DELETION  
Benzyl chloride  
Concen: 4.55 ug/L  
RT: 16.118 min Scan# 2830  
Delta R.T. 0.018 min  
Lab File: 5V713.D  
Acq: 31 Jan 2010 4:34 pm

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 126     | 0.0   | 0.0   | 51.6  |
| 65      | 0.0   | 0.0   | 41.9  |

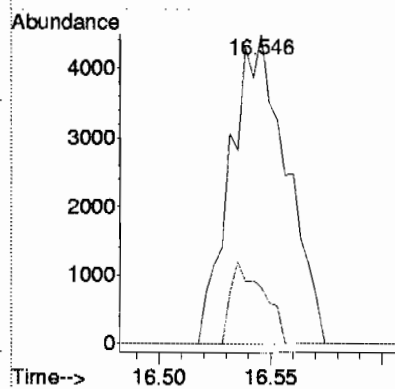
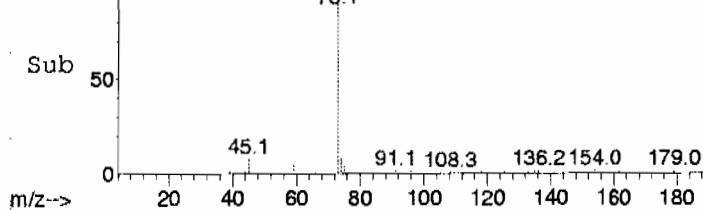




#112 BEFORE analyst DELETION  
 bis(2-Chloroisopropyl) ether  
 Concen: 2.55 ug/L  
 RT: 16.546 min Scan# 2951  
 Delta R.T. 0.049 min  
 Lab File: 5V713.D  
 Acq: 31 Jan 2010 4:34 pm



Tgt Ion: 45 Resp: 7812  
 Ion Ratio Lower Upper  
 45 100  
 121 15.4 0.0 49.2



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V713.D  
Acq On : 31 Jan 2010 4:34 pm  
Operator : DXK1  
Sample : |245114006|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

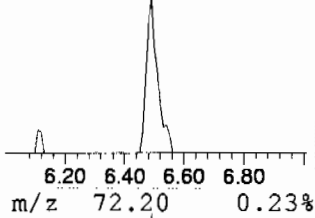
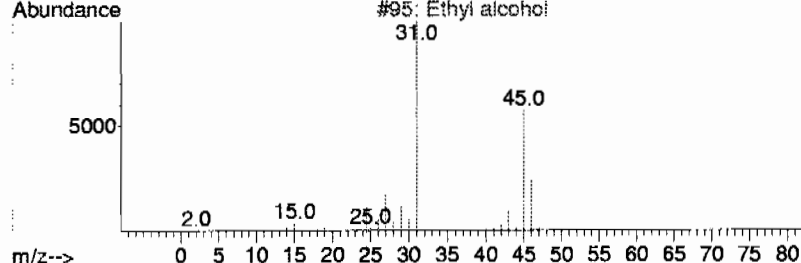
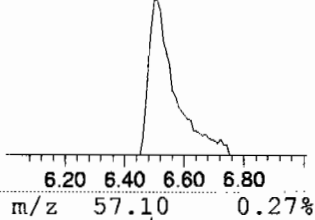
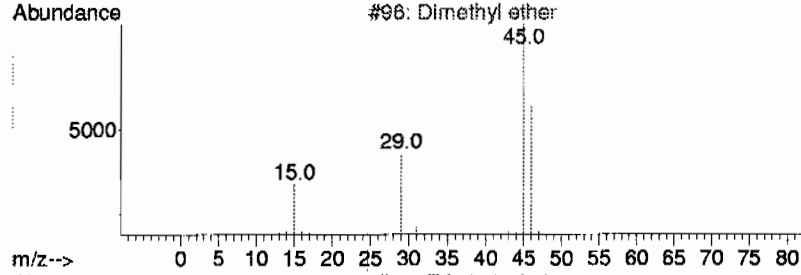
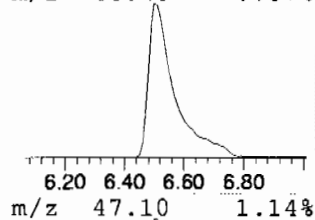
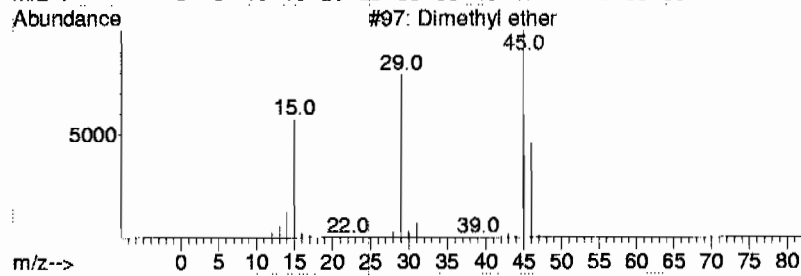
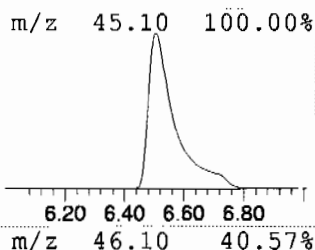
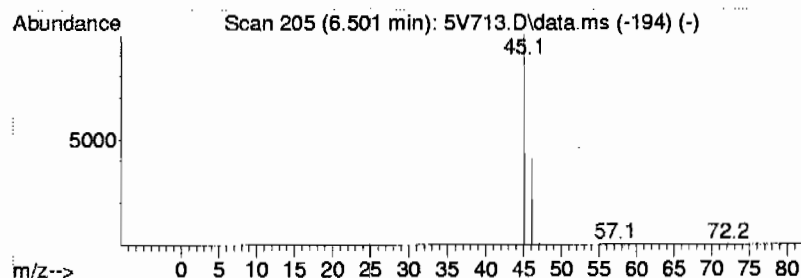
SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

\*\*\*\*\*  
Peak Number 1 unknown Concentration Rank 1

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.   |
|-------|------------|---------|------------------|--------|
| 6.501 | 68.90 ug/L | 4765520 | Fluorobenzene    | 10.375 |

| Hit# | of | Tentative ID   | MW | MolForm | CAS#        | Qual |
|------|----|----------------|----|---------|-------------|------|
| 1    | 5  | Dimethyl ether | 46 | C2H6O   | 000115-10-6 | 9    |
| 2    |    | Dimethyl ether | 46 | C2H6O   | 000115-10-6 | 9    |
| 3    |    | Ethyl alcohol  | 46 | C2H6O   | 000064-17-5 | 7    |
| 4    |    | Ethyl alcohol  | 46 | C2H6O   | 000064-17-5 | 7    |
| 5    |    | Ethyl alcohol  | 46 | C2H6O   | 000064-17-5 | 4    |



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V713.D  
Acq On : 31 Jan 2010 4:34 pm  
Operator : DXK1  
Sample : |245114006|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 13 Sample Multiplier: 1

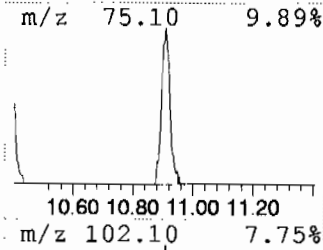
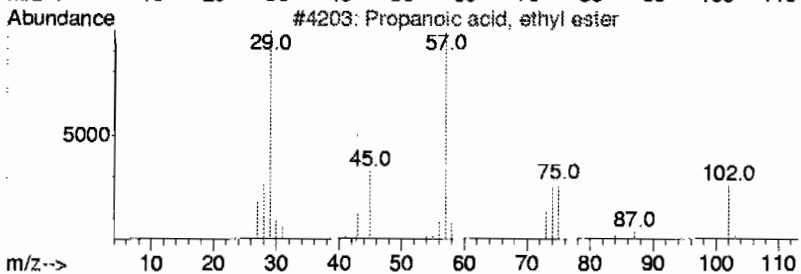
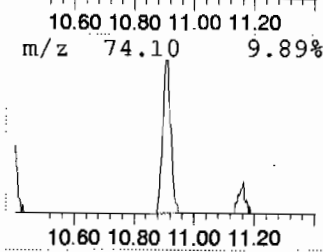
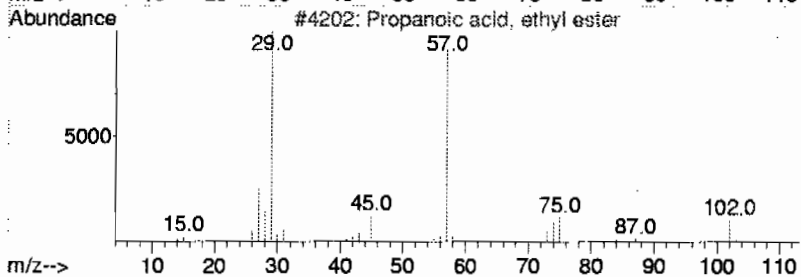
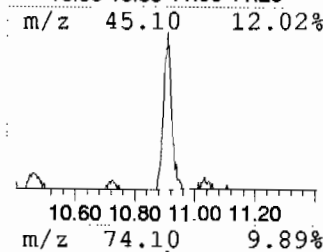
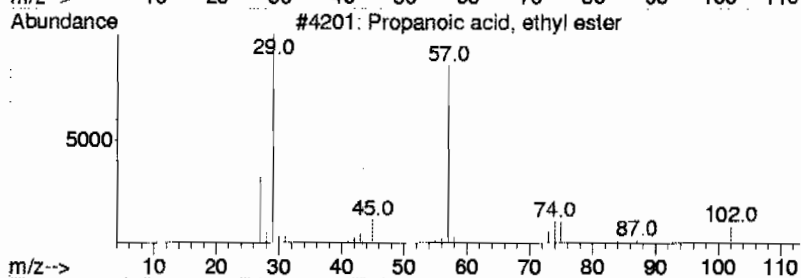
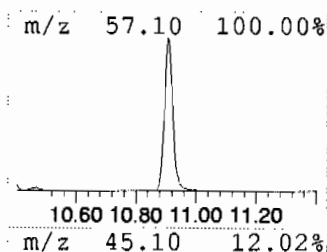
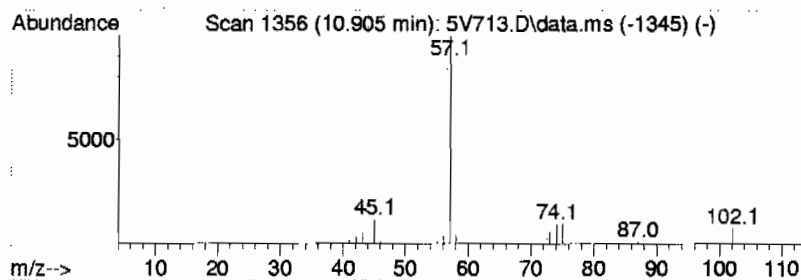
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

\*\*\*\*\*  
Peak Number 2 Propanoic acid, ethyl ester Concentration Rank 3

| R.T.      | EstConc                             | Area   | Relative to ISTD | R.T.        |      |
|-----------|-------------------------------------|--------|------------------|-------------|------|
| 10.905    | 5.04 ug/L                           | 348697 | B Fluorobenzene  | 10.375      |      |
| Hit# of 5 | Tentative ID                        | MW     | MolForm          | CAS#        | Qual |
| 1         | Propanoic acid, ethyl ester         | 102    | C5H10O2          | 000105-37-3 | 91   |
| 2         | Propanoic acid, ethyl ester         | 102    | C5H10O2          | 000105-37-3 | 83   |
| 3         | Propanoic acid, ethyl ester         | 102    | C5H10O2          | 000105-37-3 | 64   |
| 4         | Propanoic acid, ethyl ester         | 102    | C5H10O2          | 000105-37-3 | 42   |
| 5         | Propanoic acid, 2-methylpropyl e... | 130    | C7H14O2          | 000540-42-1 | 9    |



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V713.D  
Acq On : 31 Jan 2010 4:34 pm  
Operator : DXK1  
Sample : |245114006|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 13 Sample Multiplier: 1

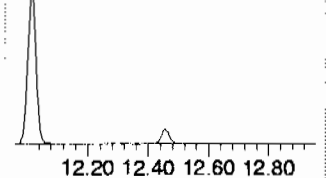
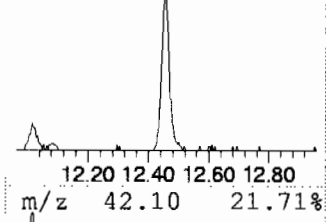
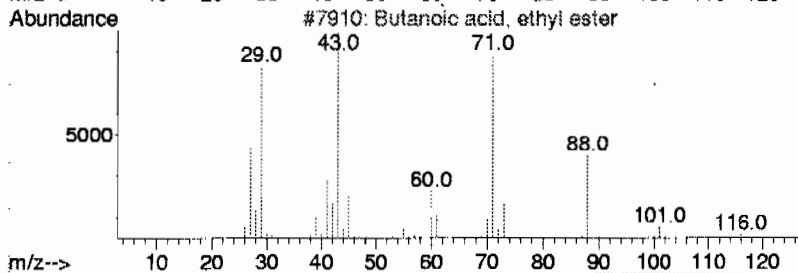
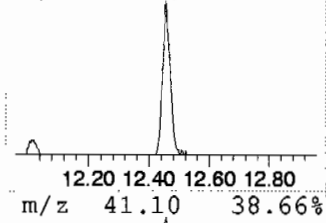
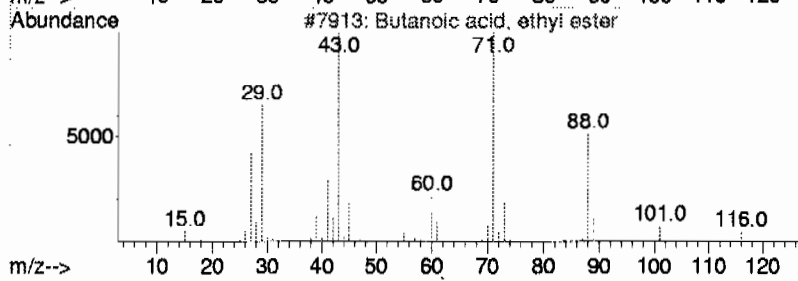
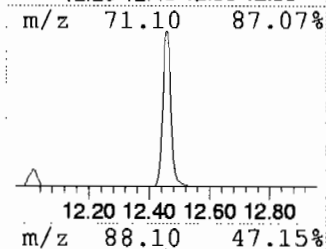
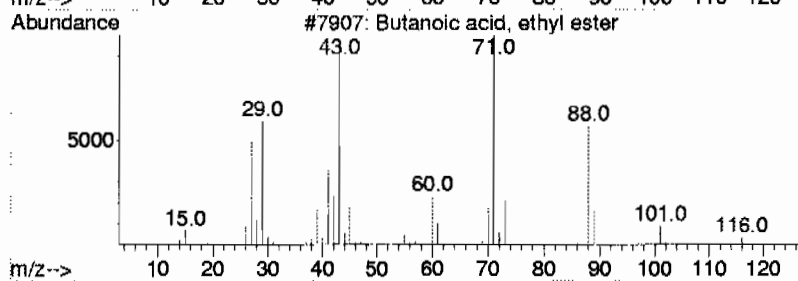
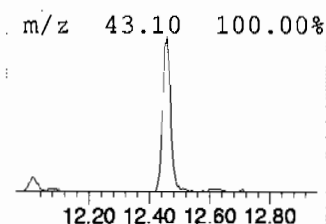
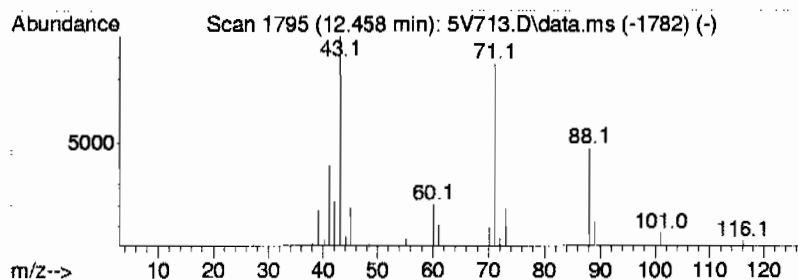
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

\*\*\*\*\*  
Peak Number 3 Butanoic acid, ethyl ester Concentration Rank 2

| R.T.      | EstConc                     | Area   | Relative to ISTD | R.T.        |      |
|-----------|-----------------------------|--------|------------------|-------------|------|
| 12.458    | 6.06 ug/L                   | 424769 | Chlorobenzene-d5 | 13.547      |      |
| Hit# of 5 | Tentative ID                | MW     | MolForm          | CAS#        | Qual |
| 1         | Butanoic acid, ethyl ester  | 116    | C6H12O2          | 000105-54-4 | 91   |
| 2         | Butanoic acid, ethyl ester  | 116    | C6H12O2          | 000105-54-4 | 90   |
| 3         | Butanoic acid, ethyl ester  | 116    | C6H12O2          | 000105-54-4 | 90   |
| 4         | Butanoic acid, ethyl ester  | 116    | C6H12O2          | 000105-54-4 | 87   |
| 5         | Butanoic acid, propyl ester | 130    | C7H14O2          | 000105-66-8 | 53   |



Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V713.D  
Acq On : 31 Jan 2010 4:34 pm  
Operator : DXK1  
Sample : |245114006|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL  
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

| TIC Top Hit name    | RT     | EstConc | Units | Response | ---Internal Standard--- |        |         |      |
|---------------------|--------|---------|-------|----------|-------------------------|--------|---------|------|
|                     |        |         |       |          | #                       | RT     | Resp    | Conc |
| unknown             | 6.501  | 68.9    | ug/L  | 4765520  | 1                       | 10.375 | 3458170 | 50.0 |
| Propanoic acid, ... | 10.905 | 5.0     | ug/L  | 348697   | 2                       | 10.375 | 3458170 | 50.0 |
| Butanoic acid, ...  | 12.458 | 6.1     | ug/L  | 424769   | 3                       | 13.547 | 3504910 | 50.0 |

# Standards

EPA 524 2/Low level SW846 8260B and Regular level 8260B and EPA 624  
Calibration Standard Concentration Levels

|                                | Level 1 | Level 1a | Level 2 | Level 3 | Level 4 # | Level 5 | Level 6 | Level 7 ! | Level 7a |
|--------------------------------|---------|----------|---------|---------|-----------|---------|---------|-----------|----------|
| Fluorobenzene (IS)             |         |          |         |         |           |         |         |           |          |
| 1,2-Dichloroethane-d4(surr)    |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| Dichlorodifluoromethane        |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| Chloromethane                  |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| Vinyl chloride                 |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| Bromomethane                   |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| Chloroethane                   |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| Trichlorofluoromethane         |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| 1,1-Dichloroethene             |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| Acetone                        | 1       | 2.5      | 5       | 10      | 25        | 50      | 100     | 250       | 500      |
| Iodomethane                    | 1       | 2.5      | 5       | 10      | 25        | 50      | 100     | 250       | 500      |
| Carbon disulfide               | 1       | 2.5      | 5       | 10      | 25        | 50      | 100     | 250       | 500      |
| Methylene chloride             |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| trans-1,2-Dichloroethene       |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| 1,1-Dichloroethane             |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| Ethyl ether                    |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| Vinyl acetate                  | 1       | 2.5      | 5       | 10      | 25        | 50      | 100     | 250       | 500      |
| cis-1,2-Dichloroethene         |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| 1,2-Dichloroethene (total)     |         | 1        | 2       | 4       | 10        | 20      | 40      | 100       | 200      |
| Cyclohexene                    |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| 2-Chloroethylvinyl ether       |         |          | 5       | 10      | 25        | 50      | 100     | 250       | 500      |
| 2,2-Dichloropropane            |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| 2-Butanone                     | 1       | 2.5      | 5       | 10      | 25        | 50      | 100     | 250       | 500      |
| Bromochloromethane             |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| Chloroform                     |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| 1,1,1-Trichloroethane          |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| 1,1-Dichloropropene            |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| Carbon tetrachloride           |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| Benzene                        |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| 1,2-Dichloroethane             |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| Trichloroethene                |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| 1,2-Dichloropropane            |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| Dibromomethane                 |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| Bromodichloromethane           |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| cis-1,3-Dichloropropene        |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| tert-Butylmethylether          |         | 0.5      | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| Ethyl Ether                    |         |          | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| Acetonitrile                   |         |          | 25      | 50      | 125       | 250     | 500     | 1250      | 2500     |
| Methyl acetate                 |         |          | 5       | 10      | 25        | 50      | 100     | 250       | 500      |
| Cyclohexane                    |         |          | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| Methylcyclohexane              |         |          | 1       | 2       | 5         | 10      | 20      | 50        | 100      |
| n-Butyl alcohol                |         |          | 50      | 100     | 250       | 500     | 1000    | 2500      | 5000     |
| 2-Nitropropane                 |         |          | 5       | 10      | 25        | 50      | 100     | 250       | 500      |
| Ethyl acetate                  |         |          | 5       | 10      | 25        | 50      | 100     | 250       | 500      |
| Acrolein                       |         |          | 5       | 10      | 25        | 50      | 100     | 250       | 500      |
| Trichlorotrifluoroethane       |         |          | 5       | 10      | 25        | 50      | 100     | 250       | 500      |
| Allyl chloride                 |         |          | 5       | 10      | 25        | 50      | 100     | 250       | 500      |
| Acrylonitrile                  |         |          | 5       | 10      | 25        | 50      | 100     | 250       | 500      |
| 1,4-Dioxane                    |         |          | 50      | 100     | 250       | 500     | 1000    | 2500      | 5000     |
| Isobutyl alcohol               |         |          | 50      | 100     | 250       | 500     | 1000    | 2500      | 5000     |
| Methacrylonitrile              |         |          | 5       | 10      | 25        | 50      | 100     | 250       | 500      |
| Propionitrile                  |         |          | 5       | 10      | 25        | 50      | 100     | 250       | 500      |
| Methyl methacrylate            |         |          | 5       | 10      | 25        | 50      | 100     | 250       | 500      |
| Chlorotrifluoroethylene        |         |          | 5       | 10      | 25        | 50      | 100     | 250       | 500      |
| 2-Chloro-1,1,1-trifluoroethane |         |          | 5       | 10      | 25        | 50      | 100     | 250       | 500      |



|                                     |   |     |    |     |     |     |      |      |      |
|-------------------------------------|---|-----|----|-----|-----|-----|------|------|------|
| tert-Butyl alcohol                  |   |     | 50 | 100 | 250 | 500 | 1000 | 2500 | 5000 |
| Isopropyl ether                     |   |     | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| Ethyl tert-butyl ether              |   |     | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| Isopropyl alcohol                   |   |     | 50 | 100 | 250 | 500 | 1000 | 2500 | 5000 |
| Methyl tert-amyl ether              |   |     | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| 1-Chlorohexane                      |   |     | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| 2-Chloro-1,3-butadiene(chloroprene) |   |     | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| Chlorobenzene-d5 (IS)               |   |     |    |     |     |     |      |      |      |
| Toluene-d8 (surr)                   |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| 4-Methyl-2-pentanone                | 1 | 2.5 | 5  | 10  | 25  | 50  | 100  | 250  | 500  |
| Toluene                             |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| trans-1,3-Dichloropropene           |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| 1,1,2-Trichloroethane               |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| Tetrachloroethene                   |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| 1,3-Dichloropropane                 |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| 2-Hexanone                          | 1 | 2.5 | 5  | 10  | 25  | 50  | 20   | 250  | 500  |
| Dibromochloromethane                |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| 1,2-Dibromoethane                   |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| Chlorobenzene                       |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| 1,1,1,2-Tetrachloroethane           |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| Ethylbenzene                        |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| m,p-Xylene                          |   | 1   | 2  | 4   | 10  | 20  | 20   | 100  | 200  |
| o-Xylene                            |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| Xylenes (total)                     |   | 1.5 | 3  | 6   | 15  | 30  | 60   | 150  | 300  |
| Stryene                             |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| Cyclohexanone                       |   |     | 50 | 100 | 250 | 500 | 1000 | 2500 | 5000 |
| Ethyl methacrylate                  |   |     | 5  | 10  | 25  | 50  | 100  | 250  | 500  |
| 1,4-Dichlorobenzene-d4 (IS)         |   |     |    |     |     |     |      |      |      |
| Bromofluorobenzene (surr)           |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| Bromoform                           |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| Isopropylbenzene                    |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| 1,1,2,2-Tetrachloroethane           |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| Bromobenzene                        |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| 1,2,3-Trichloropropane              |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| n-Propylbenzene                     |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| 2-Chlorotoluene                     |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| 1,3,5-Trimethylbenzene              |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| 4-Chlorotoluene                     |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| 1,2,4-Trimethylbenzene              |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| sec-Butylbenzene                    |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| 1,3-Dichlorobenzene                 |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| tert-Butylbenzene                   |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| Isopropyltoluene                    |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| 1,4-Dichlorobenzene                 |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| n-Butylbenzene                      |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| 1,2-Dichlorobenzene                 |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| 1,2-Dibromo-3-chloropropa           |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| 1,2,4-Trichlorobenzene              |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| Hexachlorobutadiene                 |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| Naphthalene                         |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| 1,2,3-Trichlorobenzene              |   | 0.5 | 1  | 2   | 5   | 10  | 20   | 50   | 100  |
| cis-1,4-Dichloro-2-butene           |   |     | 5  | 10  | 25  | 50  | 100  | 250  | 500  |
| trans-1,4-Dichloro-2-butene         |   |     | 5  | 10  | 25  | 50  | 100  | 250  | 500  |
| Tetrahydrofuran                     |   |     | 5  | 10  | 25  | 50  | 100  | 250  | 500  |
| Pentachloroethane                   |   |     | 5  | 10  | 25  | 50  | 100  | 250  | 500  |
| Benzyl chloride                     |   |     | 5  | 10  | 25  | 50  | 100  | 250  | 500  |
| bis(2-Chloro-isopropyl)ether        |   |     | 5  | 10  | 25  | 50  | 100  | 250  | 500  |

| Method                 | PQL      | Concentration range |
|------------------------|----------|---------------------|
| EPA 524.2              | Level 1a | Levels 1a -> 7a     |
| SW 846 8260B low level | Level 1a | Levels 1-> 7a       |
| EPA 624                | Level 2  | Levels 2-> 7a       |
| SW846 8260B            | Level 2  | Levels 2-> 7a       |

#: Indicates calibration verification concentration level used for low level analysis

!: Indicates calibration verification concentration level used for regular level analysis



## Calibration History Report VOA5

GEL Laboratories, LLC

Method File : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Last Update : Mon Jan 11 08:56:29 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

Cal Lvl:8 Amt:-1 Last Updated with: C:\msdchem\1\DATA\010810V5\5S515.D

| Injection Date     | Mix | Calibration File                   |
|--------------------|-----|------------------------------------|
| 8 Jan 2010 5:06 pm | A   | C:\msdchem\1\DATA\010810V5\5S515.D |

Cal Lvl:1 Amt:1 Last Updated with: C:\msdchem\1\DATA\010810V5\5S518.D

| Injection Date     | Mix | Calibration File                   |
|--------------------|-----|------------------------------------|
| 8 Jan 2010 1:40 pm | A   | C:\msdchem\1\DATA\010810V5\5S506.D |
| 8 Jan 2010 6:24 pm | B   | C:\msdchem\1\DATA\010810V5\5S518.D |

Cal Lvl:2 Amt:2 Last Updated with: C:\msdchem\1\DATA\010810V5\5S519.D

| Injection Date     | Mix | Calibration File                   |
|--------------------|-----|------------------------------------|
| 8 Jan 2010 2:05 pm | A   | C:\msdchem\1\DATA\010810V5\5S507.D |
| 8 Jan 2010 6:50 pm | B   | C:\msdchem\1\DATA\010810V5\5S519.D |

Cal Lvl:3 Amt:5 Last Updated with: C:\msdchem\1\DATA\010810V5\5S520.D

| Injection Date     | Mix | Calibration File                   |
|--------------------|-----|------------------------------------|
| 8 Jan 2010 2:31 pm | A   | C:\msdchem\1\DATA\010810V5\5S508.D |
| 8 Jan 2010 7:16 pm | B   | C:\msdchem\1\DATA\010810V5\5S520.D |

Cal Lvl:4 Amt:10 Last Updated with: C:\msdchem\1\DATA\010810V5\5S521.D

| Injection Date     | Mix | Calibration File                   |
|--------------------|-----|------------------------------------|
| 8 Jan 2010 2:57 pm | A   | C:\msdchem\1\DATA\010810V5\5S509.D |
| 8 Jan 2010 7:42 pm | B   | C:\msdchem\1\DATA\010810V5\5S521.D |

Cal Lvl:5 Amt:20 Last Updated with: C:\msdchem\1\DATA\010810V5\5S522.D

| Injection Date     | Mix | Calibration File                   |
|--------------------|-----|------------------------------------|
| 8 Jan 2010 3:23 pm | A   | C:\msdchem\1\DATA\010810V5\5S511.D |
| 8 Jan 2010 8:07 pm | B   | C:\msdchem\1\DATA\010810V5\5S522.D |

Cal Lvl:6 Amt:50 Last Updated with: C:\msdchem\1\DATA\010810V5\5S523.D

| Injection Date     | Mix | Calibration File                   |
|--------------------|-----|------------------------------------|
| 8 Jan 2010 3:49 pm | A   | C:\msdchem\1\DATA\010810V5\5S512.D |
| 8 Jan 2010 8:33 pm | B   | C:\msdchem\1\DATA\010810V5\5S523.D |

Cal Lvl:7 Amt:100 Last Updated with: C:\msdchem\1\DATA\010810V5\5S524.D

| Injection Date     | Mix | Calibration File                   |
|--------------------|-----|------------------------------------|
| 8 Jan 2010 4:14 pm | A   | C:\msdchem\1\DATA\010810V5\5S513.D |
| 8 Jan 2010 8:59 pm | B   | C:\msdchem\1\DATA\010810V5\5S524.D |

/VOA5-8260-010810.M Mon Feb 08 13:51:36 2010

/VOA5-8260-010810.M Mon Feb 08 13:50:26 2010

Page: 1

Method File : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Last Update : Mon Jan 11 08:56:29 2010  
Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}$ ,  $x = \text{response ratio}$ .  $y = b + m1(x) + m2(xE2)$

| b       | Compound                | 8         | 1         | 2         | 3         | 4         | 5         | Avg    | Curve | Exp | %RSD/r^2 |
|---------|-------------------------|-----------|-----------|-----------|-----------|-----------|-----------|--------|-------|-----|----------|
|         |                         | 6         | 7         |           |           |           |           |        |       |     |          |
| 2)MA    | Dichlorodifluoromethane | 177492    | 2340      | 7607      | 20085     | 35752     | 72311     |        | LINR  |     | 0.9989   |
| -0.0004 | 0.1082                  | 0.00      | 379470    |           |           |           |           |        |       |     |          |
| 3)MPA   | Chloromethane           | 0.2282941 | 0.2654872 | 0.2457297 | 0.2589139 | 0.2546362 | 0.2387123 | 0.2459 | AVRG  |     | 5.8641   |
|         |                         |           | 0.2298656 |           |           |           |           |        |       |     |          |
| 4)MCA   | Vinyl chloride          | 0.2036642 | 0.2274156 | 0.2215468 | 0.2278750 | 0.2310622 | 0.2194092 | 0.2195 | AVRG  |     | 4.9583   |
|         |                         |           | 0.2057360 |           |           |           |           |        |       |     |          |
| 5)MA    | Bromomethane            | 0.1525237 | 0.1452190 | 0.1530936 | 0.1644957 | 0.1597628 | 0.1581118 | 0.1560 | AVRG  |     | 4.0115   |
|         |                         |           | 0.1587163 |           |           |           |           |        |       |     |          |
| 6)MA    | Chloroethane            | 0.1441700 | 0.1405792 | 0.1363793 | 0.1574374 | 0.1558609 | 0.1504196 | 0.1479 | AVRG  |     | 5.2903   |
|         |                         |           | 0.1504267 |           |           |           |           |        |       |     |          |
| 7)MA    | Trichlorofluoromethane  | 0.2095063 | 0.1978556 | 0.2170444 | 0.2190664 | 0.2325234 | 0.2204643 | 0.2161 | AVRG  |     | 4.9080   |
|         |                         |           | 0.2160745 |           |           |           |           |        |       |     |          |
| 8)MA    | Ethyl ether             | 0.1825733 | 0.1809861 | 0.1764935 | 0.1811904 | 0.1841504 | 0.1813892 | 0.1830 | AVRG  |     | 2.9381   |
|         |                         |           | 0.1939374 |           |           |           |           |        |       |     |          |
| 9)MA    | Acetone                 | 0.1787143 | 0.2192482 | 0.1878532 | 0.1807430 | 0.1947687 | 0.1688123 | 0.1874 | AVRG  |     | 8.6124   |
|         |                         |           | 0.1819607 |           |           |           |           |        |       |     |          |
| 10)MCA  | 1,1-Dichloroethylene    | 0.2538833 | 0.2249881 | 0.1857993 | 0.2192244 | 0.2438270 | 0.2335377 | 0.2331 | AVRG  |     | 11.6886  |
|         |                         |           | 0.2706837 |           |           |           |           |        |       |     |          |
| 11)MA   | Iodomethane             | 0.2793988 | 0.2961596 | 0.2647750 | 0.2744143 | 0.2888108 | 0.2575681 | 0.2791 | AVRG  |     | 5.2022   |
|         |                         |           | 0.2928487 |           |           |           |           |        |       |     |          |
| 12)MA   | Acetonitrile            | 0.0301808 | 0.0351303 | 0.0286696 | 0.0308680 | 0.0328442 | 0.0291327 | 0.0310 | AVRG  |     | 7.3657   |
|         |                         |           | 0.0299262 |           |           |           |           |        |       |     |          |
| 13)MA   | Methyl acetate          | 0.1852170 | 0.2087885 | 0.1879014 | 0.1883663 | 0.1874438 | 0.1693328 | 0.1875 | AVRG  |     | 6.1371   |
|         |                         |           | 0.1852844 |           |           |           |           |        |       |     |          |
| 14)MA   | Carbon disulfide        | 0.5470618 | 0.5696852 | 0.5228732 | 0.5337503 | 0.5744706 | 0.4865620 | 0.5450 | AVRG  |     | 6.1650   |
|         |                         |           | 0.5804955 |           |           |           |           |        |       |     |          |
| 15)MA   | Methylene chloride      | 0.1978243 | 0.2067856 | 0.2541471 | 0.2197046 | 0.2103646 | 0.1907477 | 0.2133 | AVRG  |     | 10.5032  |
|         |                         |           |           |           |           |           |           |        |       |     |          |
| 16)MA   | tert-Butyl methyl ether | 0.4147694 | 0.4302491 | 0.4062469 | 0.4030751 | 0.4290703 | 0.3823335 | 0.4128 | AVRG  |     | 4.1549   |
|         |                         |           | 0.4240451 |           |           |           |           |        |       |     |          |

Method File : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Last Update : Mon Jan 11 08:56:29 2010  
Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}$ ,  $x = \text{response ratio}$ .  $y = b + m1(x) + m2(xE2)$

| b       |                            | Compound |    | 8         | 1         | 2         | 3         | 4         | 5         | Avg    | Curve | Exp | %RSD/r^2 |
|---------|----------------------------|----------|----|-----------|-----------|-----------|-----------|-----------|-----------|--------|-------|-----|----------|
|         |                            | m1       | m2 | 6         | 7         |           |           |           |           |        |       |     |          |
| 17) MA  | trans-1,2-Dichloroethylene |          |    | 0.2626134 | 0.2759295 | 0.2438023 | 0.2465729 | 0.2686014 | 0.2521579 | 0.2587 | AVRG  |     | 4.5392   |
| 18) MA  | Vinyl acetate              |          |    | 0.4670416 | 0.4684276 | 0.4242290 | 0.4452909 | 0.5161669 | 0.5048961 | 0.4619 | AVRG  |     | 8.6253   |
| 19) MPA | 1,1-Dichloroethane         |          |    | 0.3297755 | 0.3399312 | 0.3116833 | 0.3262931 | 0.3414296 | 0.3151054 | 0.3281 | AVRG  |     | 3.4784   |
| 20) MA  | 2-Butanone                 |          |    | 0.2125314 | 0.2237327 | 0.2033930 | 0.2061188 | 0.2201018 | 0.2025915 | 0.2147 | AVRG  |     | 5.5512   |
| 21) MA  | cis-1,2-Dichloroethylene   |          |    | 0.2913185 | 0.3014225 | 0.2858891 | 0.2941675 | 0.3012226 | 0.2799548 | 0.2936 | AVRG  |     | 2.8636   |
| 22) MA  | 2,2-Dichloropropane        |          |    | 0.1646744 | 0.1724728 | 0.1458507 | 0.1622082 | 0.1674530 | 0.1579975 | 0.1646 | AVRG  |     | 6.8598   |
| 23) MA  | Bromochloromethane         |          |    | 0.0991148 | 0.1013362 | 0.0908593 | 0.0981653 | 0.0988674 | 0.0935860 | 0.0988 | AVRG  |     | 5.9717   |
| 24) MCA | Chloroform                 |          |    | 0.2976335 | 0.3110908 | 0.2817633 | 0.3043789 | 0.3072980 | 0.2901339 | 0.3007 | AVRG  |     | 3.8083   |
| 25) MA  | 1,1,1-Trichloroethane      |          |    | 0.2142529 | 0.2221108 | 0.1996676 | 0.2034838 | 0.2172198 | 0.2065190 | 0.2099 | AVRG  |     | 3.8718   |
| 26) MA  | Cyclohexane                |          |    | 0.3034751 | 0.3140283 | 0.2865065 | 0.3023758 | 0.3169315 | 0.2873290 | 0.3048 | AVRG  |     | 4.6410   |
| 27) MA  | 1,1-Dichloropropene        |          |    | 0.2340935 | 0.2406632 | 0.2171800 | 0.2219731 | 0.2369135 | 0.2198693 | 0.2300 | AVRG  |     | 4.3147   |
| 28) MA  | Carbon tetrachloride       |          |    | 0.1924722 | 0.2034554 | 0.1664499 | 0.1780246 | 0.1906617 | 0.1810536 | 0.1846 | AVRG  |     | 6.4775   |
| 29) SA  | 1,2-Dichloroethane-d4      |          |    | 0.2266622 | 0.2285876 | 0.2306435 | 0.2362458 | 0.2395776 | 0.2290443 | 0.2324 | AVRG  |     | 2.0833   |
| 30) MA  | 1,2-Dichloroethane         |          |    | 0.2398935 | 0.2460069 | 0.2397819 | 0.2439252 | 0.2519777 | 0.2365536 | 0.2448 | AVRG  |     | 2.7861   |
| 31) MA  | Benzene                    |          |    | 0.7636980 | 0.7894428 | 0.7578336 | 0.7724384 | 0.7867736 | 0.7358136 | 0.7763 | AVRG  |     | 3.7759   |

For Linear Calibration:  $y = \text{concentration ratio}$ ,  $x = \text{response ratio}$ ,  $y = b + m1(x) + m2(xE2)$

| b      | Compound<br>ml   m2                        | 8<br>6          | 1<br>7           | 2         | 3         | 4         | 5         | Avg    | Curve | Exp | %RSD/r^2 |
|--------|--|-----------------|------------------|-----------|-----------|-----------|-----------|--------|-------|-----|----------|
| 32)MA  | Cyclohexene                                | 0.3725051       | 0.3660897        | 0.3249493 | 0.3547349 | 0.3676622 | 0.3467316 | 0.3600 | AVRG  |     | 5.6023   |
| 33)MA  | n-Butyl alcohol<br>-0.0146   0.0075   0.00 | 8127<br>1262472 | 15859<br>2574494 | 33404     | 85918     | 214645    | 447479    |        | LINR  | #   | 0.9996   |
| 34)MA  | Trichloroethylene                          | 0.1825334       | 0.1813548        | 0.1734519 | 0.1779993 | 0.1800827 | 0.1761458 | 0.1800 | AVRG  |     | 2.6406   |
| 35)MCA | 1,2-Dichloropropane                        | 0.2049485       | 0.2039397        | 0.1900155 | 0.1965266 | 0.2052808 | 0.1983974 | 0.2011 | AVRG  |     | 3.2215   |
| 36)MA  | Methylcyclohexane                          | 0.3245596       | 0.3357307        | 0.2943667 | 0.3099144 | 0.3241581 | 0.3033099 | 0.3172 | AVRG  |     | 4.7181   |
| 37)MA  | Dibromomethane                             | 0.1066846       | 0.1023847        | 0.1014450 | 0.1054385 | 0.1085408 | 0.1048568 | 0.1056 | AVRG  |     | 2.9507   |
| 38)MA  | Bromodichloromethane                       | 0.2257271       | 0.2064593        | 0.1904522 | 0.2119007 | 0.2192030 | 0.2185651 | 0.2162 | AVRG  |     | 7.3194   |
| 39)MA  | 2-Chloroethylvinyl ether                   | 0.1152453       | 0.0952927        | 0.0962952 | 0.1317871 | 0.1121050 | 0.1122357 | 0.1115 | AVRG  |     | 11.3384  |
| 40)MA  | cis-1,3-Dichloropropylene                  | 0.3006928       | 0.2594646        | 0.2591614 | 0.2711790 | 0.2829472 | 0.2844347 | 0.2816 | AVRG  |     | 7.2297   |
| 42)MA  | 4-Methyl-2-pentanone                       | 0.1405361       | 0.1262814        | 0.1178461 | 0.1259550 | 0.1397557 | 0.1336108 | 0.1323 | AVRG  |     | 6.9588   |
| 43)SA  | Toluene-d8                                 | 1.3598352       | 1.3603023        | 1.3537887 | 1.3868622 | 1.3856492 | 1.3578207 | 1.3636 | AVRG  |     | 1.2293   |
| 44)MCA | Toluene                                    | 1.1741949       | 1.3054266        | 1.1978198 | 1.1643270 | 1.2142143 | 1.1450555 | 1.1974 | AVRG  |     | 4.3936   |
| 45)MA  | trans-1,3-Dichloropropyl                   | 0.3865274       | 0.3368120        | 0.3151689 | 0.3390693 | 0.3580129 | 0.3620809 | 0.3566 | AVRG  |     | 8.1564   |
| 46)MA  | 1,1,2-Trichloroethane                      | 0.2017597       | 0.2103373        | 0.1833741 | 0.1927111 | 0.2046970 | 0.1979341 | 0.1993 | AVRG  |     | 4.5027   |
| 47)MA  | 2-Hexanone                                 | 0.4198327       | 0.3647691        | 0.3467987 | 0.3717753 | 0.4147972 | 0.3953495 | 0.3918 | AVRG  |     | 8.0006   |

Method File : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Last Update : Mon Jan 11 08:56:29 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}$ ,  $x = \text{response ratio}$ .  $y = b + m1(x) + m2(xE2)$

| b       | Compound                  | 8         | 1                      | 2         | 3         | 4         | 5         | Avg    | Curve | Exp | %RSD/r <sup>2</sup> |
|---------|---------------------------|-----------|------------------------|-----------|-----------|-----------|-----------|--------|-------|-----|---------------------|
|         | m1   m2                   | 6         | 7                      |           |           |           |           |        |       |     |                     |
| 48) MA  | 1,3-Dichloropropane       | 0.4218932 | 0.4231346<br>0.4151334 | 0.4209349 | 0.4241582 | 0.4324170 | 0.4158145 | 0.4219 | AVRG  |     | 1.3717              |
| 49) MA  | Tetrachloroethylene       | 0.2199141 | 0.2418791<br>0.2237514 | 0.2161599 | 0.2217201 | 0.2248894 | 0.2152654 | 0.2234 | AVRG  |     | 3.9933              |
| 50) MA  | Dibromochloromethane      | 0.2599069 | 0.2133245<br>0.2718974 | 0.2099026 | 0.2344721 | 0.2411463 | 0.2428912 | 0.2391 | AVRG  |     | 9.4544              |
| 51) MA  | 1,2-Dibromoethane         | 0.2353970 | 0.1992230<br>0.2402204 | 0.2100546 | 0.2231873 | 0.2258006 | 0.2301785 | 0.2234 | AVRG  |     | 6.4372              |
| 52) MPA | Chlorobenzene             | 0.7423830 | 0.8241285<br>0.7534998 | 0.7538328 | 0.7504302 | 0.7587789 | 0.7366442 | 0.7600 | AVRG  |     | 3.8520              |
| 53) MA  | 1,1,1,2-Tetrachloroethane | 0.2554985 | 0.2434166<br>0.2628426 | 0.2194623 | 0.2456029 | 0.2467502 | 0.2457009 | 0.2456 | AVRG  |     | 5.4740              |
| 54) MCA | Ethylbenzene              | 1.2908296 | 1.2902707<br>1.2937762 | 1.2111166 | 1.2257685 | 1.2796337 | 1.2443953 | 1.2623 | AVRG  |     | 2.7372              |
| 55) MA  | m,p-Xylenes               | 0.5194769 | 0.5255796<br>0.5179842 | 0.4836819 | 0.4994973 | 0.5099817 | 0.5007144 | 0.5081 | AVRG  |     | 2.8530              |
| 56) MA  | o-Xylene                  | 0.5083785 | 0.4600359<br>0.5083754 | 0.4480934 | 0.4807452 | 0.5118658 | 0.4931835 | 0.4872 | AVRG  |     | 5.1989              |
| 57) MA  | Styrene                   | 0.8569223 | 0.6782367<br>0.8648429 | 0.6513041 | 0.7253519 | 0.7824841 | 0.7946321 | 0.7648 | AVRG  |     | 10.8907             |
| 59) MPA | Bromoform                 | 0.3047952 | 0.2663349<br>0.3269764 | 0.2508676 | 0.2489458 | 0.2761669 | 0.2884635 | 0.2804 | AVRG  |     | 10.2000             |
| 60) MA  | Isopropylbenzene          | 2.3296240 | 2.2568196<br>2.3253400 | 2.1697409 | 2.2368178 | 2.2934068 | 2.2577786 | 2.2671 | AVRG  |     | 2.4547              |
| 61) SA  | Bromofluorobenzene        | 0.9409832 | 0.9624044<br>0.9419742 | 0.9624167 | 0.9700651 | 0.9526554 | 0.9482525 | 0.9541 | AVRG  |     | 1.1705              |
| 62) MPA | 1,1,2,2-Tetrachloroethane | 0.5808242 | 0.5842296<br>0.5934897 | 0.5484485 | 0.5767767 | 0.5885986 | 0.5748650 | 0.5782 | AVRG  |     | 2.5296              |
| 63) MA  | 1,2,3-Trichloropropane    | 0.1553798 | 0.1480405<br>0.1573292 | 0.1542340 | 0.1583400 | 0.1586045 | 0.1580088 | 0.1557 | AVRG  |     | 2.4075              |

Response Factor Report VOA5  
GEL Laboratories, LLC

Method File : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Last Update : Mon Jan 11 08:56:29 2010  
Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}$ ,  $x = \text{response ratio}$ .  $y = b + m1(x) + m2(xE2)$

| b     |                          | Compound |    | 8         | 1         | 2         | 3         | 4         | 5         | Avg    | Curve | Exp | %RSD/r^2 |
|-------|--------------------------|----------|----|-----------|-----------|-----------|-----------|-----------|-----------|--------|-------|-----|----------|
|       |                          | m1       | m2 | 6         | 7         |           |           |           |           |        |       |     |          |
| 64)MA | Bromobenzene             |          |    | 0.5803109 | 0.6388071 | 0.5793797 | 0.5982328 | 0.5895839 | 0.5770215 | 0.5915 | AVRG  |     | 3.7629   |
| 65)MA | n-Propylbenzene          |          |    | 2.7777303 | 2.7268071 | 2.6797891 | 2.6570670 | 2.7521726 | 2.6965183 | 2.7200 | AVRG  |     | 1.6065   |
| 66)MA | 1,3,5-Trimethylbenzene   |          |    | 1.9348697 | 1.7912293 | 1.7241292 | 1.8352801 | 1.9130821 | 1.8775470 | 1.8565 | AVRG  |     | 4.1686   |
| 67)MA | 2-Chlorotoluene          |          |    | 0.5740853 | 0.5580186 | 0.5584916 | 0.5820415 | 0.5834570 | 0.5611863 | 0.5684 | AVRG  |     | 1.9672   |
| 68)MA | 4-Chlorotoluene          |          |    | 1.6837817 | 1.7615695 | 1.6538694 | 1.6858989 | 1.6878349 | 1.6483747 | 1.6879 | AVRG  |     | 2.1905   |
| 69)MA | tert-Butylbenzene        |          |    | 0.4429995 | 0.4485186 | 0.4105029 | 0.4318144 | 0.4436306 | 0.4351547 | 0.4370 | AVRG  |     | 2.9954   |
| 70)MA | 1,2,4-Trimethylbenzene   |          |    | 2.0008575 | 1.8623612 | 1.7167445 | 1.8955056 | 1.9283332 | 1.9421310 | 1.9069 | AVRG  |     | 5.1502   |
| 71)MA | sec-Butylbenzene         |          |    | 2.5810901 | 2.5187573 | 2.3496736 | 2.4396235 | 2.5602922 | 2.4735990 | 2.4975 | AVRG  |     | 3.3091   |
| 72)MA | 4-Isopropyltoluene       |          |    | 2.0923104 | 1.8333911 | 1.7781849 | 1.9233657 | 2.0326068 | 1.9938863 | 1.9630 | AVRG  |     | 6.2567   |
| 73)MA | 1,3-Dichlorobenzene      |          |    | 1.1333956 | 1.2398497 | 1.1244523 | 1.1301985 | 1.1388626 | 1.1247180 | 1.1478 | AVRG  |     | 3.5863   |
| 74)MA | 1,4-Dichlorobenzene      |          |    | 1.1511797 | 1.3518500 | 1.2143764 | 1.1759416 | 1.1650179 | 1.1392703 | 1.1933 | AVRG  |     | 6.1981   |
| 75)MA | n-Butylbenzene           |          |    | 2.0197327 | 1.8208891 | 1.7306699 | 1.8037779 | 1.9241934 | 1.9259811 | 1.8927 | AVRG  |     | 5.8929   |
| 76)MA | 1,2-Dichlorobenzene      |          |    | 1.0810824 | 1.1275045 | 1.0945760 | 1.0845073 | 1.0864857 | 1.0714280 | 1.0919 | AVRG  |     | 1.6420   |
| 77)MA | 1,2-Dibromo-3-chloroprop |          |    | 0.1137244 | 0.0998433 | 0.0977730 | 0.0957497 | 0.1039176 | 0.1045495 | 0.1056 | AVRG  |     | 9.3588   |
| 78)MA | 1,2,4-Trichlorobenzene   |          |    | 0.7851531 | 0.7339083 | 0.6848749 | 0.7435403 | 0.7590099 | 0.7684634 | 0.7548 | AVRG  |     | 5.2713   |



Method File : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Last Update : Mon Jan 11 08:56:29 2010  
Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}$ ,  $x = \text{response ratio}$ ,  $y = b + m1(x) + m2(xE2)$

| b      |                          | Compound |    | 8         | 1         | 2         | 3         | 4         | 5         | Avg    | Curve | Exp | %RSD/r <sup>2</sup> |
|--------|--------------------------|----------|----|-----------|-----------|-----------|-----------|-----------|-----------|--------|-------|-----|---------------------|
|        |                          | m1       | m2 | 6         | 7         |           |           |           |           |        |       |     |                     |
| 79) MA | Hexachlorobutadiene      |          |    | 0.4404484 | 0.4361762 | 0.4066207 | 0.4075274 | 0.4174422 | 0.4204530 | 0.4229 | AVRG  |     | 3.2021              |
| 80) MA | Naphthalene              |          |    | 1.8510303 | 1.8946562 | 1.4595894 | 1.5204817 | 1.6967024 | 1.7378801 | 1.6616 | AVRG  |     | 10.8310             |
| 81) MA | 1,2,3-Trichlorobenzene   |          |    | 0.6828319 | 0.6989836 | 0.5916593 | 0.6161675 | 0.6658061 | 0.6722564 | 0.6496 | AVRG  |     | 6.1827              |
| 83) B  | Chlorotrifluoroethylene  |          |    | 0.1017979 | 0.1105826 | 0.1001070 | 0.0885625 | 0.0873287 | 0.1134004 | 0.0976 | AVRG  |     | 12.5248             |
| 84) B  | 2-Chloro-1,1,1-trifluoro |          |    | 0.2111319 | 0.2074648 | 0.2074643 | 0.1982370 | 0.1941973 | 0.2006302 | 0.2016 | AVRG  |     | 3.6070              |
| 85) B  | Acrolein                 |          |    | 0.0233536 | 0.0255589 | 0.0276138 | 0.0288597 | 0.0255727 | 0.0244949 | 0.0267 | AVRG  |     | 10.1226             |
| 86) B  | Trichlorotrifluoroethane |          |    | 0.0403944 | 0.0429467 | 0.0390746 | 0.0371082 | 0.0414136 | 0.0402636 | 0.0382 | AVRG  |     | 14.6620             |
| 87) B  | Isopropyl Alcohol        |          |    | 0.0157291 | 0.0177188 | 0.0120625 | 0.0145641 | 0.0147163 | 0.0161722 | 0.0149 | AVRG  |     | 12.6372             |
| 88) B  | Allyl chloride           |          |    | 0.3195784 | 0.3335062 | 0.3137850 | 0.3138401 | 0.3125867 | 0.3098713 | 0.3168 | AVRG  |     | 2.5016              |
| 89) B  | tert-Butyl Alcohol       |          |    | 0.0210624 | 0.0234482 | 0.0178554 | 0.0193253 | 0.0197551 | 0.0218027 | 0.0203 | AVRG  |     | 9.5262              |
| 90) B  | Acrylonitrile            |          |    | 0.0766984 | 0.0812049 | 0.0679702 | 0.0766522 | 0.0775402 | 0.0788102 | 0.0755 | AVRG  |     | 6.4265              |
| 91) B  | Isopropyl ether          |          |    | 0.7977431 | 0.8488001 | 0.7438972 | 0.7512602 | 0.7463190 | 0.7692851 | 0.7617 | AVRG  |     | 7.0159              |
| 92) B  | 2-Chloro-1,3-butadiene   |          |    | 0.2610890 | 0.2767700 | 0.2269519 | 0.2454530 | 0.2463628 | 0.2446208 | 0.2450 | AVRG  |     | 8.4662              |
| 93) B  | Ethyl tert-butyl ether   |          |    | 0.5466319 | 0.5935835 | 0.4636149 | 0.5000680 | 0.5136506 | 0.5368159 | 0.5237 | AVRG  |     | 7.7939              |
| 94) B  | Ethyl acetate            |          |    | 0.2264389 | 0.2367210 | 0.2499637 | 0.2257773 | 0.2269925 | 0.2322419 | 0.2299 | AVRG  |     | 5.1932              |

Response Factor Report VOA5  
GEL Laboratories, LLC

Method File : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Last Update : Mon Jan 11 08:56:29 2010  
Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}$ ,  $x = \text{response ratio}$ .  $y = b + m1(x) + m2(xE2)$

| b     | Compound                 | 8<br>6    | 1<br>7    | 2         | 3         | 4         | 5         | Avg    | Curve | Exp | %RSD/r^2 |
|-------|--------------------------|-----------|-----------|-----------|-----------|-----------|-----------|--------|-------|-----|----------|
| 95)B  | Propionitrile            | 0.0301574 | 0.0240500 | 0.0220309 | 0.0286188 | 0.0302604 | 0.0310657 | 0.0283 | AVRG  |     | 13.1762  |
| 96)B  | Methacrylonitrile        | 0.1411254 | 0.1282213 | 0.1266668 | 0.1387552 | 0.1415413 | 0.1436904 | 0.1382 | AVRG  |     | 5.6232   |
| 97)B  | Tetrahydrofuran          | 0.0714558 | 0.0727661 | 0.0687995 | 0.0727258 | 0.0718850 | 0.0748852 | 0.0724 | AVRG  |     | 2.7528   |
| 98)B  | Isobutyl alcohol         | 0.0089052 | 0.0077854 | 0.0070949 | 0.0081366 | 0.0084172 | 0.0091191 | 0.0084 | AVRG  | #   | 9.9791   |
| 99)B  | Methyl tert-amyl ether   | 0.4657519 | 0.4007763 | 0.4164557 | 0.4248282 | 0.4389278 | 0.4585908 | 0.4440 | AVRG  |     | 7.7940   |
| 100)B | Methyl methacrylate      | 0.1363513 | 0.1125668 | 0.1115240 | 0.1261373 | 0.1311181 | 0.1352273 | 0.1274 | AVRG  |     | 8.8482   |
| 101)B | 1,4-Dioxane              | 0.0018760 | 0.0014925 | 0.0017683 | 0.0018487 | 0.0018537 | 0.0020104 | 0.0018 | AVRG  | #   | 9.9916   |
| 102)B | 2-Nitropropane           | 534767    | 7542      | 14139     | 42649     | 92496     | 202250    |        | LINR  |     | 0.9988   |
| 104)B | Ethyl methacrylate       | 0.3616494 | 0.2933895 | 0.2947180 | 0.3349716 | 0.3535748 | 0.3654809 | 0.3365 | AVRG  |     | 9.0798   |
| 106)B | 1-Chlorohexane           | 0.5239404 | 0.4625887 | 0.4687767 | 0.4979576 | 0.4978088 | 0.5039134 | 0.4972 | AVRG  |     | 4.8959   |
| 107)B | cis-1,4-Dichloro-2-buten | 0.2082263 | 0.1647392 | 0.1582413 | 0.1832733 | 0.1939345 | 0.2002780 | 0.1894 | AVRG  |     | 11.5915  |
| 108)B | Cyclohexanone            | 872875    | 9493      | 19548     | 63614     | 140600    | 333688    |        | LINR  |     | 0.9992   |
| 109)B | trans-1,4-Dichloro-2-but | 0.1942590 | 0.1573282 | 0.1631469 | 0.1774183 | 0.1846363 | 0.1928108 | 0.1815 | AVRG  |     | 9.0599   |
| 110)B | Pentachloroethane        | 0.2128169 | 0.1850355 | 0.1733272 | 0.2086050 | 0.2100927 | 0.1958114 | 0.1990 | AVRG  |     | 7.5032   |
| 111)B | Benzyl chloride          | 3059465   | 41965     | 83071     | 252023    | 541021    | 1139942   |        | LINR  |     | 0.9999   |

# Response Factor Report VOA5

GEL Laboratories, LLC

Method File : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Last Update : Mon Jan 11 08:56:29 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}$ ,  $x = \text{response ratio}$ .  $y = b + m1(x) + m2(xE2)$

| b    | Compound                 | 8         | 1         | 2         | 3         | 4         | 5      | Avg  | Curve | Exp | %RSD/r^2 |
|------|--------------------------|-----------|-----------|-----------|-----------|-----------|--------|------|-------|-----|----------|
|      | m1                       | 6         | 7         |           |           |           |        |      |       |     |          |
| 12)B | bis(2-Chloroisopropyl)et | 0.2951284 | 0.2694040 | 0.3704000 | 0.3433998 | 0.3581821 | 0.3332 | AVRG |       |     | 11.0104  |
|      |                          | 0.3456380 | 0.3502019 |           |           |           |        |      |       |     |          |

1709 = Out of Range

## Continuing Calibration Summary

Client SDG: 10-1324

Instrument ID: VOA5.I

Injection Date 08-JAN-10 21:50

Data File: 010810V5\55526.D

Init. Cal. Date(s) 08-JAN-10 13:40 - 08-JAN-10 20:59

Lab Sample ID W5VM100108-18 Quant Type ISTD

Method:VOA5-8260-010810.M

| Compound                       | AVERF / Amount | RF CCV  | Nominal CCV | Min RF | RF Q | %D / %Drift | Max | Drift Q | Curve Type |
|--------------------------------|----------------|---------|-------------|--------|------|-------------|-----|---------|------------|
| S 1,2-Dichloroethane-d4        | 0.2324         | 0.2279  |             | .01    |      | -1.93632    | 30  |         | Averaged   |
| S Toluene-d8                   | 1.3636         | 1.29954 |             | .01    |      | -4.69786    | 30  |         | Averaged   |
| S Bromofluorobenzene           | 0.9541         | 0.9624  |             | .01    |      | 0.86993     | 30  |         | Averaged   |
| Chlorotrifluoroethylene        | 0.0976         | 0.08552 |             | .01    |      | -12.37705   | 30  |         | Averaged   |
| 2-Chloro-1,1,1-trifluoroethane | 0.2016         | 0.20198 |             | .01    |      | 0.18849     | 30  |         | Averaged   |
| Acrolein                       | 0.0267         | 0.0188  |             | .01    |      | -29.58801   | 30  |         | Averaged   |
| Trichlorotrifluoroethane       | 0.0382         | 0.03576 |             | .01    |      | -6.38743    | 30  |         | Averaged   |
| Isopropyl Alcohol              | 0.0149         | 0.01676 |             | .01    |      | 12.48322    | 40  |         | Averaged   |
| Allyl chloride                 | 0.3168         | 0.27462 |             | .01    |      | -13.31439   | 30  |         | Averaged   |
| tert-Butyl Alcohol             | 0.0203         | 0.02189 |             | .01    |      | 7.83251     | 40  |         | Averaged   |
| Acrylonitrile                  | 0.0755         | 0.06991 |             | .01    |      | -7.40397    | 30  |         | Averaged   |
| Isopropyl ether                | 0.7617         | 0.78583 |             | .01    |      | 3.16791     | 30  |         | Averaged   |
| 2-Chloro-1,3-butadiene         | 0.245          | 0.21519 |             | .01    |      | -12.16735   | 30  |         | Averaged   |
| Ethyl tert-butyl ether         | 0.5237         | 0.54161 |             | .01    |      | 3.4199      | 30  |         | Averaged   |
| Ethyl acetate                  | 0.2299         | 0.1938  |             | .01    |      | -15.70248   | 40  |         | Averaged   |
| Propionitrile                  | 0.0283         | 0.0264  |             | .01    |      | -6.71378    | 30  |         | Averaged   |
| Methacrylonitrile              | 0.1382         | 0.12508 |             | .01    |      | -9.49349    | 30  |         | Averaged   |
| Tetrahydrofuran                | 0.0724         | 0.0647  |             | .01    |      | -10.63536   | 30  |         | Averaged   |
| Isobutyl alcohol               | 0.0084         | 0.00764 |             | .01    |      | -9.04762    | 40  |         | Averaged   |
| Methyl tert-amyl ether         | 0.444          | 0.46578 |             | .01    |      | 4.90541     | 30  |         | Averaged   |
| Methyl methacrylate            | 0.1274         | 0.11973 |             | .01    |      | -6.02041    | 30  |         | Averaged   |
| 1,4-Dioxane                    | 0.0018         | 0.00167 |             | .01    |      | -7.22222    | 40  |         | Averaged   |
| 2-Nitropropane                 | 250            | 209.47  | 250         |        |      | -16.212     | 30  |         | Linear     |
| Ethyl methacrylate             | 0.3365         | 0.3209  |             | .01    |      | -4.63596    | 30  |         | Averaged   |
| 1-Chlorohexane                 | 0.4972         | 0.50574 |             | .01    |      | 1.71762     | 30  |         | Averaged   |
| cis-1,4-Dichloro-2-butene      | 0.1894         | 0.18841 |             | .01    |      | -0.5227     | 30  |         | Averaged   |
| Cyclohexanone                  | 1250           | 430.53  | 1250        |        |      | -65.5576    | 40  | *       | Linear     |
| trans-1,4-Dichloro-2-butene    | 0.1815         | 0.17818 |             | .01    |      | -1.8292     | 30  |         | Averaged   |
| Pentachloroethane              | 0.199          | 0.17851 |             | .01    |      | -10.29648   | 30  |         | Averaged   |
| Benzyl chloride                | 250            | 195.52  | 250         |        |      | -21.792     | 30  |         | Linear     |
| bis(2-Chloroisopropyl)ether    | 0.3332         | 0.30719 |             | .01    |      | -7.80612    | 30  |         | Averaged   |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\010810V5\  
Data File : 5S526.D  
Acq On : 8 Jan 2010 9:50 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100108-18|ICV|1|VOA|1|  
Misc : ICV 5mL N/A MIX[B]  
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 11 09:00:37 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-------|-------|----------|
| Internal Standards            |        |      |          |       |       |          |
| 1) Fluorobenzene              | 10.375 | 96   | 1702056  | 50.00 | ug/L  | 0.00     |
| 41) Chlorobenzene-d5          | 13.547 | 117  | 1195743  | 50.00 | ug/L  | 0.00     |
| 58) 1,4-Dichlorobenzene-d4    | 15.959 | 152  | 626055   | 50.00 | ug/L  | 0.00     |
| 82) B Fluorobenzene           | 10.375 | 96   | 1702056  | 50.00 | ug/L  | 0.00     |
| 103) B Chlorobenzene-d5       | 13.547 | 117  | 1195743  | 50.00 | ug/L  | 0.00     |
| 105) B 1,4-Dichlorobenzene-d4 | 15.959 | 152  | 626055   | 50.00 | ug/L  | 0.00     |
| System Monitoring Compounds   |        |      |          |       |       |          |
| 29) 1,2-Dichloroethane-d4     | 10.021 | 65   | 387895   | 49.03 | ug/L  | 0.00     |
| 43) Toluene-d8                | 12.016 | 98   | 1553916  | 47.65 | ug/L  | 0.00     |
| 61) Bromofluorobenzene        | 14.739 | 95   | 602518   | 50.43 | ug/L  | 0.00     |
| Target Compounds              |        |      |          |       |       |          |
|                               |        |      |          |       |       | Qvalue   |
| 2) Dichlorodifluoromethane    | 4.598  |      | 0m       | N.D.  | d     |          |
| 3) Chloromethane              | 5.253  |      | 0m       | N.D.  | d     |          |
| 4) Vinyl chloride             | 5.404  |      | 0m       | N.D.  | d     |          |
| 5) Bromomethane               | 0.000  |      | 0        | N.D.  |       |          |
| 6) Chloroethane               | 0.000  |      | 0        | N.D.  |       |          |
| 7) Trichlorofluoromethane     | 0.000  |      | 0        | N.D.  |       |          |
| 8) Ethyl ether                | 0.000  |      | 0        | N.D.  |       |          |
| 9) Acetone                    | 7.100  |      | 0m       | N.D.  | d     |          |
| 10) 1,1-Dichloroethylene      | 0.000  |      | 0        | N.D.  |       |          |
| 11) Iodomethane               | 7.366  |      | 0m       | N.D.  | d     |          |
| 12) Acetonitrile              | 7.433  |      | 0m       | N.D.  | d     |          |
| 13) Methyl acetate            | 7.493  |      | 0m       | N.D.  | d     |          |
| 14) Carbon disulfide          | 7.549  |      | 0m       | N.D.  | d     |          |
| 15) Methylene chloride        | 7.684  |      | 0m       | N.D.  | d     |          |
| 16) tert-Butyl methyl ether   | 7.981  |      | 0m       | N.D.  | d     |          |
| 17) trans-1,2-Dichloroethy... | 0.000  |      | 0        | N.D.  |       |          |
| 18) Vinyl acetate             | 8.480  |      | 0m       | N.D.  | d     |          |
| 19) 1,1-Dichloroethane        | 8.614  |      | 0m       | N.D.  | d     |          |
| 20) 2-Butanone                | 9.088  |      | 0m       | N.D.  | d     |          |
| 21) cis-1,2-Dichloroethylene  | 9.091  |      | 0m       | N.D.  | d     |          |
| 22) 2,2-Dichloropropane       | 0.000  |      | 0        | N.D.  |       |          |
| 23) Bromochloromethane        | 0.000  |      | 0        | N.D.  |       |          |
| 24) Chloroform                | 9.452  |      | 0m       | N.D.  | d     |          |
| 25) 1,1,1-Trichloroethane     | 0.000  |      | 0        | N.D.  |       |          |
| 26) Cyclohexane               | 9.866  |      | 0m       | N.D.  | d     |          |
| 27) 1,1-Dichloropropene       | 9.763  |      | 0m       | N.D.  | d     |          |
| 28) Carbon tetrachloride      | 0.000  |      | 0        | N.D.  |       |          |
| 30) 1,2-Dichloroethane        | 10.103 |      | 0m       | N.D.  | d     |          |
| 31) Benzene                   | 10.127 |      | 0m       | N.D.  | d     |          |
| 32) Cyclohexene               | 0.000  |      | 0        | N.D.  |       |          |
| 33) n-Butyl alcohol           | 10.467 |      | 0m       | N.D.  | d     |          |
| 34) Trichloroethylene         | 10.764 |      | 0m       | N.D.  | d     |          |
| 35) 1,2-Dichloropropane       | 0.000  |      | 0        | N.D.  |       |          |
| 36) Methylcyclohexane         | 11.019 |      | 0m       | N.D.  | d     |          |
| 37) Dibromomethane            | 0.000  |      | 0        | N.D.  |       |          |
| 38) Bromodichloromethane      | 0.000  |      | 0        | N.D.  |       |          |
| 39) 2-Chloroethylvinyl ether  | 11.461 |      | 0m       | N.D.  | d     |          |
| 40) cis-1,3-Dichloropropylene | 0.000  |      | 0        | N.D.  |       |          |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\010810V5\  
Data File : 5S526.D  
Acq On : 8 Jan 2010 9:50 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100108-18|ICV|1|VOA|1|  
Misc : ICV 5mL N/A MIX[B]  
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 11 09:00:37 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 42) 4-Methyl-2-pentanone      | 11.793 |      | 0m       | N.D.    | d      |          |
| 44) Toluene                   | 12.094 |      | 0m       | N.D.    | d      |          |
| 45) trans-1,3-Dichloroprop... | 12.239 |      | 0m       | N.D.    | d      |          |
| 46) 1,1,2-Trichloroethane     | 12.688 |      | 0m       | N.D.    | d      |          |
| 47) 2-Hexanone                | 12.631 |      | 0m       | N.D.    | d      |          |
| 48) 1,3-Dichloropropane       | 12.702 |      | 0m       | N.D.    | d      |          |
| 49) Tetrachloroethylene       | 12.688 |      | 0m       | N.D.    | d      |          |
| 50) Dibromochloromethane      | 12.691 |      | 0m       | N.D.    | d      |          |
| 51) 1,2-Dibromoethane         | 0.000  |      | 0        | N.D.    |        |          |
| 52) Chlorobenzene             | 13.579 |      | 0m       | N.D.    | d      |          |
| 53) 1,1,1,2-Tetrachloroethane | 0.000  |      | 0        | N.D.    |        |          |
| 54) Ethylbenzene              | 13.636 |      | 0m       | N.D.    | d      |          |
| 55) m,p-Xylenes               | 13.756 |      | 0m       | N.D.    | d      |          |
| 56) o-Xylene                  | 14.187 |      | 0m       | N.D.    | d      |          |
| 57) Styrene                   | 14.191 |      | 0m       | N.D.    | d      |          |
| 59) Bromoform                 | 0.000  |      | 0        | N.D.    |        |          |
| 60) Isopropylbenzene          | 14.534 |      | 0m       | N.D.    | d      |          |
| 62) 1,1,2,2-Tetrachloroethane | 14.856 |      | 0m       | N.D.    | d      |          |
| 63) 1,2,3-Trichloropropane    | 0.000  |      | 0        | N.D.    |        |          |
| 64) Bromobenzene              | 0.000  |      | 0        | N.D.    |        |          |
| 65) n-Propylbenzene           | 14.962 |      | 0m       | N.D.    | d      |          |
| 66) 1,3,5-Trimethylbenzene    | 15.114 |      | 0m       | N.D.    | d      |          |
| 67) 2-Chlorotoluene           | 15.121 |      | 0m       | N.D.    | d      |          |
| 68) 4-Chlorotoluene           | 15.220 |      | 0m       | N.D.    | d      |          |
| 69) tert-Butylbenzene         | 15.559 |      | 0m       | N.D.    | d      |          |
| 70) 1,2,4-Trimethylbenzene    | 15.528 |      | 0m       | N.D.    | d      |          |
| 71) sec-Butylbenzene          | 15.704 |      | 0m       | N.D.    | d      |          |
| 72) 4-Isopropyltoluene        | 15.825 |      | 0m       | N.D.    | d      |          |
| 73) 1,3-Dichlorobenzene       | 15.909 |      | 0m       | N.D.    | d      |          |
| 74) 1,4-Dichlorobenzene       | 15.991 |      | 0m       | N.D.    | d      |          |
| 75) n-Butylbenzene            | 16.277 |      | 0m       | N.D.    | d      |          |
| 76) 1,2-Dichlorobenzene       | 16.422 |      | 0m       | N.D.    | d      |          |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  |      | 0        | N.D.    |        |          |
| 78) 1,2,4-Trichlorobenzene    | 18.371 |      | 0m       | N.D.    | d      |          |
| 79) Hexachlorobutadiene       | 0.000  |      | 0        | N.D.    |        |          |
| 80) Naphthalene               | 18.762 |      | 0m       | N.D.    | d      |          |
| 81) 1,2,3-Trichlorobenzene    | 19.116 |      | 0m       | N.D.    | d      |          |
| 83) Chlorotrifluoroethylene   | 4.608  | 116  | 436664   | 131.46  | ug/L   | 99       |
| 84) 2-Chloro-1,1,1-trifluo... | 5.414  | 118  | 1031356  | 150.28  | ug/L   | 99       |
| 85) Acrolein                  | 6.914  | 56   | 159996   | 176.34  | ug/L # | 66       |
| 86) Trichlorotrifluoroethane  | 7.079  | 85   | 304328   | 234.04  | ug/L   | 99       |
| 87) Isopropyl Alcohol         | 7.175  | 45   | 1426525  | 2815.31 | ug/L   | 99       |
| 88) Allyl chloride            | 7.546  | 41   | 2337054  | 216.73  | ug/L   | 98       |
| 89) tert-Butyl Alcohol        | 7.673  | 59   | 1862673  | 2697.57 | ug/L   | 97       |
| 90) Acrylonitrile             | 7.924  | 53   | 594927   | 231.47  | ug/L   | 98       |
| 91) Isopropyl ether           | 8.483  | 45   | 1337518  | 51.58   | ug/L   | 98       |
| 92) 2-Chloro-1,3-butadiene    | 8.614  | 53   | 366267   | 43.92   | ug/L   | 94       |
| 93) Ethyl tert-butyl ether    | 8.886  | 59   | 921854   | 51.71   | ug/L   | 97       |
| 94) Ethyl acetate             | 9.088  | 43   | 1649323  | 210.79  | ug/L   | 98       |
| 95) Propionitrile             | 9.151  | 54   | 224684   | 233.63  | ug/L   | 100      |
| 96) Methacrylonitrile         | 9.332  | 41   | 1064443  | 226.33  | ug/L   | 100      |
| 97) Tetrahydrofuran           | 9.463  | 42   | 550589   | 223.43  | ug/L   | 97       |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\010810V5\  
Data File : 5S526.D  
Acq On : 8 Jan 2010 9:50 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100108-18|ICV|1|VOA|1|  
Misc : ICV 5mL N/A MIX[B]  
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 11 09:00:37 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.   | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|--------|------|----------|---------|-------|----------|
| 98) Isobutyl alcohol           | 9.770  | 41   | 650537   | 2266.88 | ug/L  | 96       |
| 99) Methyl tert-amyl ether     | 10.138 | 73   | 792780   | 52.45   | ug/L  | 95       |
| 100) Methyl methacrylate       | 10.969 | 69   | 1018925  | 234.92  | ug/L  | 97       |
| 101) 1,4-Dioxane               | 11.086 | 88   | 142218   | 2265.80 | ug/L  | 93       |
| 102) 2-Nitropropane            | 11.447 | 43   | 471321   | 209.47  | ug/L  | 96       |
| 104) Ethyl methacrylate        | 12.235 | 69   | 1918566  | 238.41  | ug/L  | 99       |
| 106) 1-Chlorohexane            | 13.438 | 55   | 316620   | 50.86   | ug/L  | 94       |
| 107) cis-1,4-Dichloro-2-butene | 14.573 | 53   | 589769   | 248.64  | ug/L  | 92       |
| 108) Cyclohexanone             | 14.689 | 42   | 292637   | 430.53  | ug/L  | 98       |
| 109) trans-1,4-Dichloro-2-b... | 14.856 | 53   | 557739   | 245.38  | ug/L  | 97       |
| 110) Pentachloroethane         | 15.563 | 167  | 558797   | 224.28  | ug/L  | 100      |
| 111) Benzyl chloride           | 16.100 | 91   | 2432609  | 195.52  | ug/L  | 100      |
| 112) bis(2-Chloroisopropyl)... | 16.496 | 45   | 961585   | 230.49  | ug/L  | 96       |

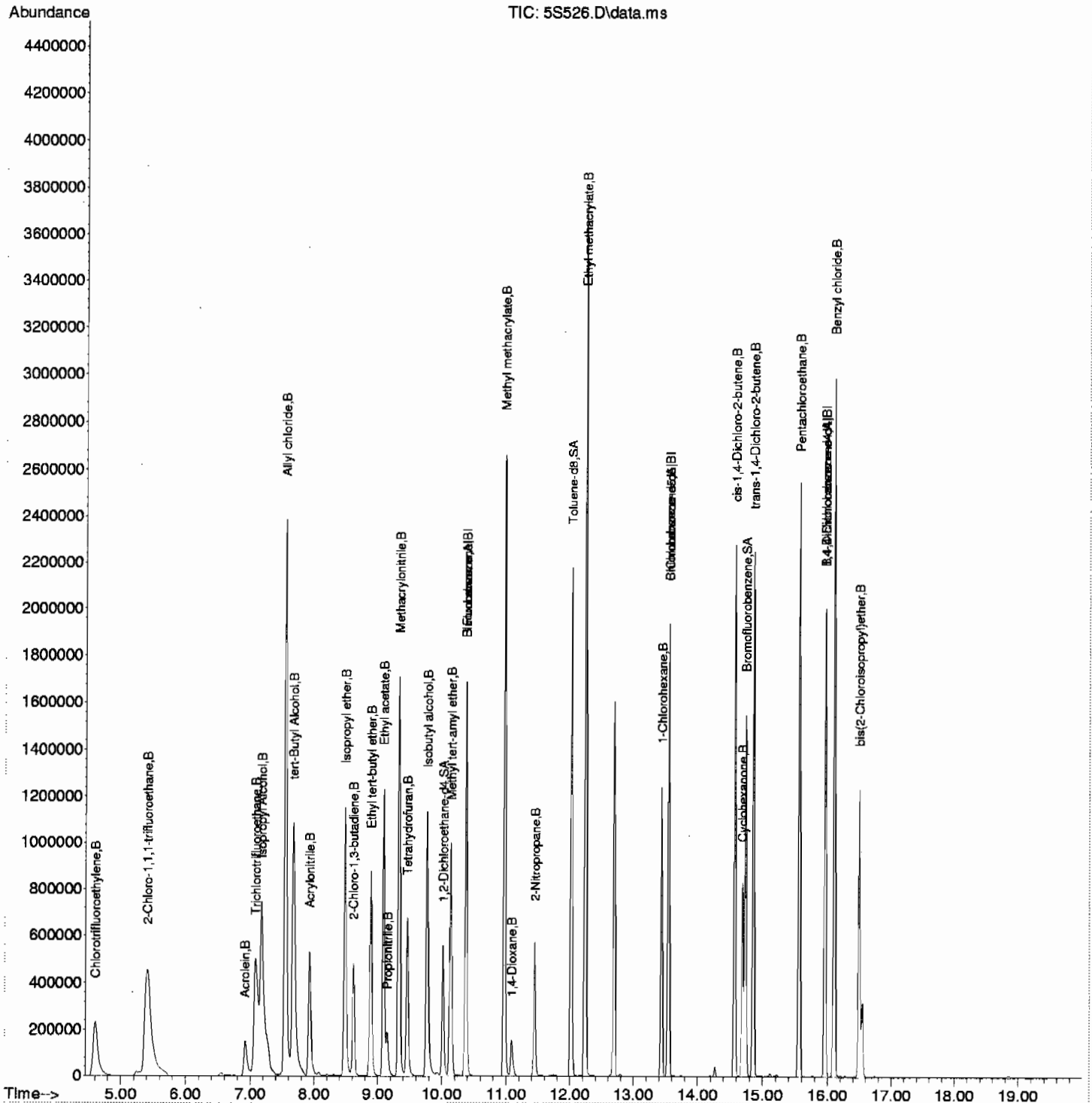
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\010810V5\  
Data File : 5S526.D  
Acq On : 8 Jan 2010 9:50 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100108-18|ICV|1|VOA|1|  
Misc : ICV 5mL N/A MIX[B]  
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 11 09:00:37 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :





## Continuing Calibration Summary

Client SDG: 10-1324

Instrument ID: VOA5.I

Injection Date 11-JAN-10 10:39

Data File: 011110V55T103.D

Init. Cal. Date(s) 08-JAN-10 13:40 - 08-JAN-10 20:59

Lab Sample ID W5VM100111-01

Quant Type ISTD

Method:VOA5-8260-010810.M

| Compound                   | AVERF / Amount | RF CCV  | Nominal CCV | Min RF | RF Q | %D / %Drift | Max | Drift Q | Curve Type |      |
|----------------------------|----------------|---------|-------------|--------|------|-------------|-----|---------|------------|------|
| S 1,2-Dichloroethane-d4    | 0.2324         | 0.22184 |             | .01    |      | -4.54389    | 30  |         | Averaged   |      |
| S Toluene-d8               | 1.3636         | 1.31648 |             | .01    |      | -3.45556    | 30  |         | Averaged   |      |
| S Bromofluorobenzene       | 0.9541         | 0.93976 |             | .01    |      | -1.50299    | 30  |         | Averaged   |      |
| Dichlorodifluoromethane    | 50             | 35.61   | 50          |        |      | -28.78      | 30  |         | Linear     |      |
| Chloromethane              | 0.2459         | 0.18973 |             | .1     |      | -22.84262   | 30  |         | Averaged   | spcc |
| Vinyl chloride             | 0.2195         | 0.18639 |             | .01    |      | -15.08428   | 20  |         | Averaged   | ccc  |
| Bromomethane               | 0.156          | 0.14412 |             | .01    |      | -7.61538    | 30  |         | Averaged   |      |
| Chloroethane               | 0.1479         | 0.13592 |             | .01    |      | -8.10007    | 30  |         | Averaged   |      |
| Trichlorofluoromethane     | 0.2161         | 0.20021 |             | .01    |      | -7.35308    | 30  |         | Averaged   |      |
| Ethyl ether                | 0.183          | 0.16789 |             | .01    |      | -8.25683    | 30  |         | Averaged   |      |
| Acetone                    | 0.1874         | 0.14518 |             | .01    |      | -22.52935   | 40  |         | Averaged   |      |
| 1,1-Dichloroethylene       | 0.2331         | 0.24127 |             | .01    |      | 3.50493     | 20  |         | Averaged   | ccc  |
| Iodomethane                | 0.2791         | 0.26132 |             | .01    |      | -6.37048    | 30  |         | Averaged   |      |
| Acetonitrile               | 0.031          | 0.02908 |             | .01    |      | -6.19355    | 30  |         | Averaged   |      |
| Methyl acetate             | 0.1875         | 0.16961 |             | .01    |      | -9.54133    | 40  |         | Averaged   |      |
| Carbon disulfide           | 0.545          | 0.54934 |             | .01    |      | 0.79633     | 30  |         | Averaged   |      |
| Methylene chloride         | 0.2133         | 0.18937 |             | .01    |      | -11.21894   | 30  |         | Averaged   |      |
| tert-Butyl methyl ether    | 0.4128         | 0.36891 |             | .01    |      | -10.63227   | 30  |         | Averaged   |      |
| trans-1,2-Dichloroethylene | 0.2587         | 0.25892 |             | .01    |      | 0.08504     | 30  |         | Averaged   |      |
| Vinyl acetate              | 0.4619         | 0.49912 |             | .01    |      | 8.05802     | 40  |         | Averaged   |      |
| 1,1-Dichloroethane         | 0.3281         | 0.32541 |             | .1     |      | -0.81987    | 30  |         | Averaged   | spcc |
| 2-Butanone                 | 0.2147         | 0.1737  |             | .01    |      | -19.09641   | 40  |         | Averaged   |      |
| cis-1,2-Dichloroethylene   | 0.2936         | 0.28593 |             | .01    |      | -2.6124     | 30  |         | Averaged   |      |
| 2,2-Dichloropropane        | 0.1646         | 0.16845 |             | .01    |      | 2.339       | 30  |         | Averaged   |      |
| Bromochloromethane         | 0.0988         | 0.09279 |             | .01    |      | -6.083      | 30  |         | Averaged   |      |
| Chloroform                 | 0.3007         | 0.2974  |             | .01    |      | -1.09744    | 20  |         | Averaged   | ccc  |
| 1,1,1-Trichloroethane      | 0.2099         | 0.21783 |             | .01    |      | 3.77799     | 30  |         | Averaged   |      |
| Cyclohexane                | 0.3048         | 0.31022 |             | .01    |      | 1.77822     | 30  |         | Averaged   |      |
| 1,1-Dichloropropene        | 0.23           | 0.23919 |             | .01    |      | 3.99565     | 30  |         | Averaged   |      |
| Carbon tetrachloride       | 0.1846         | 0.20083 |             | .01    |      | 8.79198     | 30  |         | Averaged   |      |
| 1,2-Dichloroethane         | 0.2448         | 0.23022 |             | .01    |      | -5.95588    | 30  |         | Averaged   |      |
| Benzene                    | 0.7763         | 0.76366 |             | .01    |      | -1.62824    | 30  |         | Averaged   |      |
| Cyclohexene                | 0.36           | 0.37357 |             | .01    |      | 3.76944     | 30  |         | Averaged   |      |
| n-Butyl alcohol            | 5000           | 4983.33 | 5000        |        |      | -0.3334     | 40  |         | Linear     |      |
| Trichloroethylene          | 0.18           | 0.18334 |             | .01    |      | 1.85556     | 30  |         | Averaged   |      |
| 1,2-Dichloropropane        | 0.2011         | 0.19867 |             | .01    |      | -1.20835    | 20  |         | Averaged   | ccc  |
| Methylcyclohexane          | 0.3172         | 0.33005 |             | .01    |      | 4.05107     | 30  |         | Averaged   |      |

## Continuing Calibration Summary

Instrument ID: VOA5.I

Injection Date 11-JAN-10 10:39

Data File: 011110V5\5T103.D

Init. Cal. Date(s) 08-JAN-10 13:40

08-JAN-10 20:59

Lab Sample ID W5VM100111-01

Quant Type ISTD

Method:VOA5-8260-010810.M

| Compound                    | AVERF / Amount | RF CCV  | Nominal CCV | Min RF | RF Q | %D / %Drift | Max | Drift Q | Curve Type |      |
|-----------------------------|----------------|---------|-------------|--------|------|-------------|-----|---------|------------|------|
| Dibromomethane              | 0.1056         | 0.10165 |             | .01    |      | -3.74053    | 30  |         | Averaged   |      |
| Bromodichloromethane        | 0.2162         | 0.22324 |             | .01    |      | 3.25624     | 30  |         | Averaged   |      |
| 2-Chloroethylvinyl ether    | 0.1115         | 0.09491 |             | .01    |      | -14.87892   | 30  |         | Averaged   |      |
| cis-1,3-Dichloropropylene   | 0.2816         | 0.28697 |             | .01    |      | 1.90696     | 30  |         | Averaged   |      |
| 4-Methyl-2-pentanone        | 0.1323         | 0.12908 |             | .01    |      | -2.43386    | 40  |         | Averaged   |      |
| Toluene                     | 1.1974         | 1.16776 |             | .01    |      | -2.47536    | 20  |         | Averaged   | ccc  |
| trans-1,3-Dichloropropylene | 0.3566         | 0.36886 |             | .01    |      | 3.43803     | 30  |         | Averaged   |      |
| 1,1,2-Trichloroethane       | 0.1993         | 0.18945 |             | .01    |      | -4.9423     | 30  |         | Averaged   |      |
| 2-Hexanone                  | 0.3918         | 0.33739 |             | .01    |      | -13.88719   | 40  |         | Averaged   |      |
| 1,3-Dichloropropane         | 0.4219         | 0.39766 |             | .01    |      | -5.74544    | 30  |         | Averaged   |      |
| Tetrachloroethylene         | 0.2234         | 0.22609 |             | .01    |      | 1.20412     | 30  |         | Averaged   |      |
| Dibromochloromethane        | 0.2391         | 0.24741 |             | .01    |      | 3.47553     | 30  |         | Averaged   |      |
| 1,2-Dibromoethane           | 0.2234         | 0.22443 |             | .01    |      | 0.46106     | 30  |         | Averaged   |      |
| Chlorobenzene               | 0.76           | 0.73604 |             | .3     |      | -3.15263    | 30  |         | Averaged   | spcc |
| 1,1,1,2-Tetrachloroethane   | 0.2456         | 0.25103 |             | .01    |      | 2.21091     | 30  |         | Averaged   |      |
| Ethylbenzene                | 1.2623         | 1.28309 |             | .01    |      | 1.64699     | 20  |         | Averaged   | ccc  |
| m,p-Xylenes                 | 0.5081         | 0.51866 |             | .01    |      | 2.07833     | 30  |         | Averaged   |      |
| o-Xylene                    | 0.4872         | 0.50403 |             | .01    |      | 3.45443     | 30  |         | Averaged   |      |
| Styrene                     | 0.7648         | 0.82729 |             | .01    |      | 8.17076     | 30  |         | Averaged   |      |
| Bromoform                   | 0.2804         | 0.29851 |             | .1     |      | 6.45863     | 30  |         | Averaged   | spcc |
| Isopropylbenzene            | 2.2671         | 2.35729 |             | .01    |      | 3.97821     | 30  |         | Averaged   |      |
| 1,1,2,2-Tetrachloroethane   | 0.5782         | 0.56257 |             | .3     |      | -2.70322    | 30  |         | Averaged   | spcc |
| 1,2,3-Trichloropropane      | 0.1557         | 0.15346 |             | .01    |      | -1.43866    | 30  |         | Averaged   |      |
| Bromobenzene                | 0.5915         | 0.56692 |             | .01    |      | -4.15554    | 30  |         | Averaged   |      |
| n-Propylbenzene             | 2.72           | 2.78647 |             | .01    |      | 2.44375     | 30  |         | Averaged   |      |
| 1,3,5-Trimethylbenzene      | 1.8565         | 1.93377 |             | .01    |      | 4.16213     | 30  |         | Averaged   |      |
| 2-Chlorotoluene             | 0.5684         | 0.57046 |             | .01    |      | 0.36242     | 30  |         | Averaged   |      |
| 4-Chlorotoluene             | 1.6879         | 1.68139 |             | .01    |      | -0.38569    | 30  |         | Averaged   |      |
| tert-Butylbenzene           | 0.437          | 0.44726 |             | .01    |      | 2.34783     | 30  |         | Averaged   |      |
| 1,2,4-Trimethylbenzene      | 1.9069         | 1.98973 |             | .01    |      | 4.3437      | 30  |         | Averaged   |      |
| sec-Butylbenzene            | 2.4975         | 2.59908 |             | .01    |      | 4.06727     | 30  |         | Averaged   |      |
| 4-Isopropyltoluene          | 1.963          | 2.08912 |             | .01    |      | 6.42486     | 30  |         | Averaged   |      |
| 1,3-Dichlorobenzene         | 1.1478         | 1.12497 |             | .01    |      | -1.98902    | 30  |         | Averaged   |      |
| 1,4-Dichlorobenzene         | 1.1933         | 1.14148 |             | .01    |      | -4.34258    | 30  |         | Averaged   |      |
| n-Butylbenzene              | 1.8927         | 2.02771 |             | .01    |      | 7.1332      | 30  |         | Averaged   |      |
| 1,2-Dichlorobenzene         | 1.0919         | 1.0614  |             | .01    |      | -2.7933     | 30  |         | Averaged   |      |
| 1,2-Dibromo-3-chloropropane | 0.1056         | 0.11508 |             | .01    |      | 8.97727     | 30  |         | Averaged   |      |

## Continuing Calibration Summary

Instrument ID: VOA5.I

Injection Date 11-JAN-10 10:39

Data File: 011110V55T103.D

Init. Cal. Date(s) 08-JAN-10 13:40 08-JAN-10 20:59

Lab Sample ID W5VM100111-01 Quant Type ISTD

Method:VOA5-8260-010810.M

| Compound               | AVERF /<br>Amount | RF<br>CCV | Nominal<br>CCV | Min RF | RF<br>Q | %D /<br>%Drift | Max | Drift<br>Q | Curve<br>Type |
|------------------------|-------------------|-----------|----------------|--------|---------|----------------|-----|------------|---------------|
| 1,2,4-Trichlorobenzene | 0.7548            | 0.76956   |                | .01    |         | 1.95548        | 30  |            | Averaged      |
| Hexachlorobutadiene    | 0.4229            | 0.43388   |                | .01    |         | 2.59636        | 30  |            | Averaged      |
| Naphthalene            | 1.6616            | 1.76172   |                | .01    |         | 6.02552        | 30  |            | Averaged      |
| 1,2,3-Trichlorobenzene | 0.6496            | 0.68253   |                | .01    |         | 5.06927        | 30  |            | Averaged      |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\011110V5\  
Data File : 5T103.D  
Acq On : 11 Jan 2010 10:39 am  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100111-01|ICV|1|VOA|1|VOA8260BL|  
Misc : ICV 5mL N/A MIX[A]  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 11 13:27:41 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | QIon | Response | Conc    | Units | Dev(Min) |
|-------------------------------|--------|------|----------|---------|-------|----------|
| Internal Standards            |        |      |          |         |       |          |
| 1) Fluorobenzene              | 10.375 | 96   | 1767464  | 50.00   | ug/L  | 0.00     |
| 41) Chlorobenzene-d5          | 13.547 | 117  | 1245156  | 50.00   | ug/L  | 0.00     |
| 58) 1,4-Dichlorobenzene-d4    | 15.959 | 152  | 665347   | 50.00   | ug/L  | 0.00     |
| 82) B Fluorobenzene           | 10.375 | 96   | 1767464  | 50.00   | ug/L  | 0.00     |
| 103) B Chlorobenzene-d5       | 13.547 | 117  | 1245156  | 50.00   | ug/L  | 0.00     |
| 105) B 1,4-Dichlorobenzene-d4 | 15.959 | 152  | 665347   | 50.00   | ug/L  | 0.00     |
| System Monitoring Compounds   |        |      |          |         |       |          |
| 29) 1,2-Dichloroethane-d4     | 10.021 | 65   | 392093   | 47.73   | ug/L  | 0.00     |
| 43) Toluene-d8                | 12.016 | 98   | 1639227  | 48.27   | ug/L  | 0.00     |
| 61) Bromofluorobenzene        | 14.739 | 95   | 625267   | 49.25   | ug/L  | 0.00     |
| Target Compounds              |        |      |          |         |       |          |
|                               |        |      |          |         |       | Qvalue   |
| 2) Dichlorodifluoromethane    | 4.689  | 85   | 135452   | 35.61   | ug/L  | 99       |
| 3) Chloromethane              | 5.051  | 50   | 335339   | 38.57   | ug/L  | 98       |
| 4) Vinyl chloride             | 5.283  | 62   | 329435   | 42.45   | ug/L  | 100      |
| 5) Bromomethane               | 5.877  | 94   | 254721   | 46.19   | ug/L  | 100      |
| 6) Chloroethane               | 6.018  | 64   | 240225   | 45.95   | ug/L  | 98       |
| 7) Trichlorofluoromethane     | 6.391  | 101  | 353866   | 46.33   | ug/L  | 100      |
| 8) Ethyl ether                | 6.733  | 59   | 296737   | 45.88   | ug/L  | 97       |
| 9) Acetone                    | 7.097  | 43   | 1282957  | 193.63  | ug/L  | 100      |
| 10) 1,1-Dichloroethylene      | 7.122  | 61   | 426428   | 51.74   | ug/L  | 96       |
| 11) Iodomethane               | 7.369  | 142  | 2309321  | 234.04  | ug/L  | 98       |
| 12) Acetonitrile              | 7.447  | 41   | 1284899  | 1173.88 | ug/L  | 100      |
| 13) Methyl acetate            | 7.493  | 43   | 1498896  | 226.17  | ug/L  | 99       |
| 14) Carbon disulfide          | 7.507  | 76   | 4854701  | 252.00  | ug/L  | 99       |
| 15) Methylene chloride        | 7.691  | 84   | 334701   | 44.40   | ug/L  | 95       |
| 16) tert-Butyl methyl ether   | 7.981  | 73   | 652032   | 44.68   | ug/L  | 97       |
| 17) trans-1,2-Dichloroethy... | 8.030  | 61   | 457626   | 50.05   | ug/L  | 96       |
| 18) Vinyl acetate             | 8.455  | 43   | 4410847  | 270.13  | ug/L  | 98       |
| 19) 1,1-Dichloroethane        | 8.508  | 63   | 575146   | 49.59   | ug/L  | 99       |
| 20) 2-Butanone                | 9.077  | 43   | 1535049  | 202.26  | ug/L  | 98       |
| 21) cis-1,2-Dichloroethylene  | 9.144  | 61   | 505367   | 48.70   | ug/L  | 94       |
| 22) 2,2-Dichloropropane       | 9.169  | 77   | 297726   | 51.16   | ug/L  | 93       |
| 23) Bromochloromethane        | 9.417  | 128  | 164001   | 46.98   | ug/L  | 93       |
| 24) Chloroform                | 9.448  | 83   | 525646   | 49.45   | ug/L  | 100      |
| 25) 1,1,1-Trichloroethane     | 9.731  | 97   | 385011   | 51.90   | ug/L  | 97       |
| 26) Cyclohexane               | 9.827  | 56   | 548301   | 50.89   | ug/L  | 95       |
| 27) 1,1-Dichloropropene       | 9.887  | 75   | 422762   | 52.01   | ug/L  | 98       |
| 28) Carbon tetrachloride      | 9.926  | 117  | 354955   | 54.39   | ug/L  | 99       |
| 30) 1,2-Dichloroethane        | 10.103 | 62   | 406905   | 47.03   | ug/L  | 99       |
| 31) Benzene                   | 10.127 | 78   | 1349740  | 49.18   | ug/L  | 99       |
| 32) Cyclohexene               | 10.244 | 67   | 660265   | 51.88   | ug/L  | 96       |
| 33) n-Butyl alcohol           | 10.456 | 56   | 1287647  | 4983.33 | ug/L  | 100      |
| 34) Trichloroethylene         | 10.768 | 95   | 324040   | 50.94   | ug/L  | 99       |
| 35) 1,2-Dichloropropane       | 11.004 | 63   | 351133   | 49.38   | ug/L  | 100      |
| 36) Methylcyclohexane         | 11.019 | 83   | 583356   | 52.02   | ug/L  | 96       |
| 37) Dibromomethane            | 11.142 | 93   | 179670   | 48.12   | ug/L  | 99       |
| 38) Bromodichloromethane      | 11.252 | 83   | 394572   | 51.63   | ug/L  | 100      |
| 39) 2-Chloroethylvinyl ether  | 11.468 | 63   | 838708   | 212.73  | ug/L  | 98       |
| 40) cis-1,3-Dichloropropylene | 11.701 | 75   | 507210   | 50.95   | ug/L  | 97       |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\011110V5\  
Data File : 5T103.D  
Acq On : 11 Jan 2010 10:39 am  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100111-01|ICV|1|VOA|1|VOA8260BL|  
Misc : ICV 5mL N/A MIX[A]  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 11 13:27:41 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | QIon | Response | Conc   | Units | Dev (Min) |
|-------------------------------|--------|------|----------|--------|-------|-----------|
| 42) 4-Methyl-2-pentanone      | 11.782 | 58   | 803647   | 243.90 | ug/L  | 99        |
| 44) Toluene                   | 12.090 | 91   | 1454040  | 48.76  | ug/L  | 99        |
| 45) trans-1,3-Dichloroprop... | 12.239 | 75   | 459287   | 51.73  | ug/L  | 97        |
| 46) 1,1,2-Trichloroethane     | 12.461 | 83   | 235899   | 47.52  | ug/L  | 98        |
| 47) 2-Hexanone                | 12.631 | 43   | 2100507  | 215.27 | ug/L  | 99        |
| 48) 1,3-Dichloropropane       | 12.652 | 76   | 495153   | 47.12  | ug/L  | 84        |
| 49) Tetrachloroethylene       | 12.691 | 164  | 281518   | 50.61  | ug/L  | 100       |
| 50) Dibromochloromethane      | 12.925 | 129  | 308063   | 51.74  | ug/L  | 99        |
| 51) 1,2-Dibromoethane         | 13.094 | 107  | 279447   | 50.22  | ug/L  | 99        |
| 52) Chlorobenzene             | 13.579 | 112  | 916483   | 48.43  | ug/L  | 98        |
| 53) 1,1,1,2-Tetrachloroethane | 13.632 | 131  | 312570   | 51.10  | ug/L  | 98        |
| 54) Ethylbenzene              | 13.636 | 91   | 1597647  | 50.83  | ug/L  | 99        |
| 55) m,p-Xylenes               | 13.745 | 106  | 1291617  | 102.07 | ug/L  | 99        |
| 56) o-Xylene                  | 14.180 | 106  | 627594   | 51.72  | ug/L  | 100       |
| 57) Styrene                   | 14.180 | 104  | 1030110  | 54.08  | ug/L  | 100       |
| 59) Bromoform                 | 14.445 | 173  | 198613   | 53.24  | ug/L  | 99        |
| 60) Isopropylbenzene          | 14.537 | 105  | 1568416  | 51.99  | ug/L  | 100       |
| 62) 1,1,2,2-Tetrachloroethane | 14.810 | 83   | 374301   | 48.65  | ug/L  | 100       |
| 63) 1,2,3-Trichloropropane    | 14.898 | 110  | 102105   | 49.28  | ug/L  | 90        |
| 64) Bromobenzene              | 14.951 | 156  | 377196   | 47.92  | ug/L  | 99        |
| 65) n-Propylbenzene           | 14.962 | 91   | 1853968  | 51.22  | ug/L  | 99        |
| 66) 1,3,5-Trimethylbenzene    | 15.114 | 105  | 1286629  | 52.08  | ug/L  | 100       |
| 67) 2-Chlorotoluene           | 15.117 | 126  | 379552   | 50.18  | ug/L  | 99        |
| 68) 4-Chlorotoluene           | 15.216 | 91   | 1118707  | 49.81  | ug/L  | 100       |
| 69) tert-Butylbenzene         | 15.485 | 134  | 297583   | 51.18  | ug/L  | 98        |
| 70) 1,2,4-Trimethylbenzene    | 15.527 | 105  | 1323858  | 52.17  | ug/L  | 99        |
| 71) sec-Butylbenzene          | 15.711 | 105  | 1729291  | 52.03  | ug/L  | 100       |
| 72) 4-Isopropyltoluene        | 15.832 | 119  | 1389993  | 53.21  | ug/L  | 99        |
| 73) 1,3-Dichlorobenzene       | 15.902 | 146  | 748494   | 49.00  | ug/L  | 99        |
| 74) 1,4-Dichlorobenzene       | 15.987 | 146  | 759482   | 47.83  | ug/L  | 100       |
| 75) n-Butylbenzene            | 16.277 | 91   | 1349133  | 53.57  | ug/L  | 99        |
| 76) 1,2-Dichlorobenzene       | 16.419 | 146  | 706200   | 48.60  | ug/L  | 99        |
| 77) 1,2-Dibromo-3-chloropr... | 17.293 | 157  | 76570    | 54.49  | ug/L  | 97        |
| 78) 1,2,4-Trichlorobenzene    | 18.371 | 180  | 512027   | 50.98  | ug/L  | 100       |
| 79) Hexachlorobutadiene       | 18.548 | 225  | 288678   | 51.29  | ug/L  | 98        |
| 80) Naphthalene               | 18.762 | 128  | 1172155  | 53.01  | ug/L  | 100       |
| 81) 1,2,3-Trichlorobenzene    | 19.109 | 180  | 454118   | 52.53  | ug/L  | 99        |
| 83) Chlorotrifluoroethylene   | 0.000  |      | 0        | N.D.   |       |           |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  |      | 0        | N.D.   |       |           |
| 85) Acrolein                  | 0.000  |      | 0        | N.D.   |       |           |
| 86) Trichlorotrifluoroethane  | 0.000  |      | 0        | N.D.   |       |           |
| 87) Isopropyl Alcohol         | 7.168  |      | 0m       | N.D.   | d     |           |
| 88) Allyl chloride            | 7.447  |      | 0m       | N.D.   | d     |           |
| 89) tert-Butyl Alcohol        | 7.698  |      | 0m       | N.D.   | d     |           |
| 90) Acrylonitrile             | 7.988  |      | 0m       | N.D.   | d     |           |
| 91) Isopropyl ether           | 8.451  |      | 0m       | N.D.   | d     |           |
| 92) 2-Chloro-1,3-butadiene    | 8.610  |      | 0m       | N.D.   | d     |           |
| 93) Ethyl tert-butyl ether    | 0.000  |      | 0        | N.D.   |       |           |
| 94) Ethyl acetate             | 9.077  |      | 0m       | N.D.   | d     |           |
| 95) Propionitrile             | 9.077  |      | 0m       | N.D.   | d     |           |
| 96) Methacrylonitrile         | 9.169  |      | 0m       | N.D.   | d     |           |
| 97) Tetrahydrofuran           | 9.466  |      | 0m       | N.D.   | d     |           |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\011110V5\  
Data File : 5T103.D  
Acq On : 11 Jan 2010 10:39 am  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100111-01|ICV|1|VOA|1|VOA8260BL|  
Misc : ICV 5mL N/A MIX[A]  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 11 13:27:41 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T. QIon | Response | Conc | Units | Dev(Min) |
|--------------------------------|-----------|----------|------|-------|----------|
| 98) Isobutyl alcohol           | 9.562     | 0m       | N.D. | d     |          |
| 99) Methyl tert-amyl ether     | 10.124    | 0m       | N.D. | d     |          |
| 100) Methyl methacrylate       | 11.012    | 0m       | N.D. | d     |          |
| 101) 1,4-Dioxane               | 11.132    | 0m       | N.D. | d     |          |
| 102) 2-Nitropropane            | 11.192    | 0m       | N.D. | d     |          |
| 104) Ethyl methacrylate        | 12.235    | 0m       | N.D. | d     |          |
| 106) 1-Chlorohexane            | 0.000     | 0        | N.D. |       |          |
| 107) cis-1,4-Dichloro-2-butene | 14.541    | 0m       | N.D. | d     |          |
| 108) Cyclohexanone             | 14.700    | 0m       | N.D. | d     |          |
| 109) trans-1,4-Dichloro-2-b... | 14.849    | 0m       | N.D. | d     |          |
| 110) Pentachloroethane         | 15.563    | 0m       | N.D. | d     |          |
| 111) Benzyl chloride           | 16.100    | 0m       | N.D. | d     |          |
| 112) bis(2-Chloroisopropyl)... | 16.500    | 0m       | N.D. | d     |          |

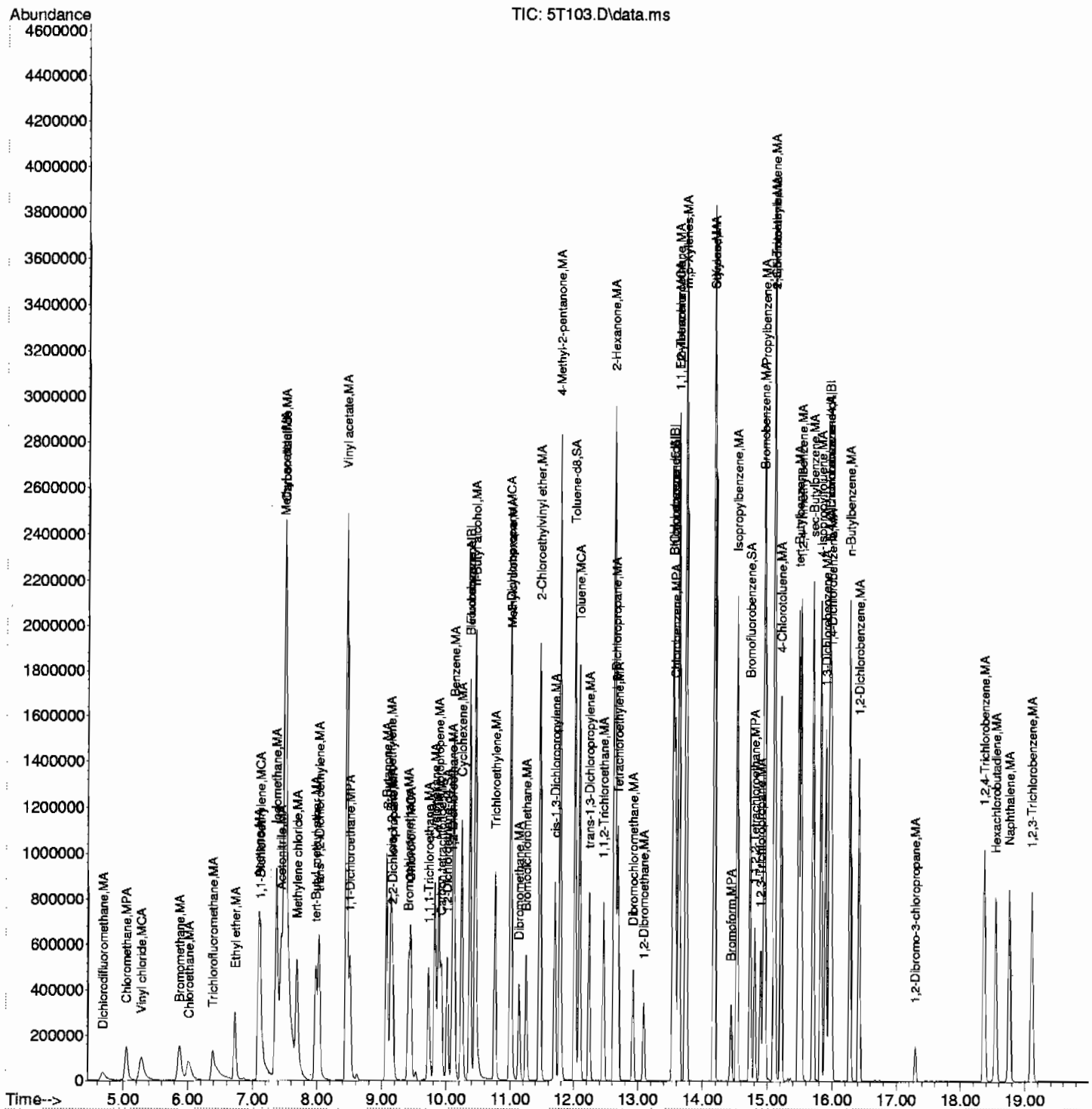
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\011110V5\  
Data File : 5T103.D  
Acq On : 11 Jan 2010 10:39 am  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100111-01|ICV|1|VOA|1|VOA8260BL|  
Misc : ICV 5mL N/A MIX[A]  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 11 13:27:41 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :



## Continuing Calibration Summary

Client SDG: 10-1324

Instrument ID: VOA5.I

Injection Date: 28-JAN-10 10:10

Data File: 012810V5\5V403.D

Init. Cal. Date(s) 08-JAN-10 13:40 - 08-JAN-10 20:59

Lab Sample ID W5VM100128-02 Quant Type ISTD

Method:VOA5-8260-010810.M

| Compound                   | AVERF / Amount | RF CCV  | Nominal CCV | Min RF | RF Q | %D / %Drift | Max | Drift Q | Curve Type |      |
|----------------------------|----------------|---------|-------------|--------|------|-------------|-----|---------|------------|------|
| S 1,2-Dichloroethane-d4    | 0.2324         | 0.23934 |             | .01    |      | 2.98623     | 30  |         | Averaged   |      |
| S Toluene-d8               | 1.3636         | 1.37643 |             | .01    |      | 0.94089     | 30  |         | Averaged   |      |
| S Bromofluorobenzene       | 0.9541         | 0.98907 |             | .01    |      | 3.66523     | 30  |         | Averaged   |      |
| Dichlorodifluoromethane    | 50             | 44.69   | 50          |        |      | -10.62      | 30  |         | Linear     |      |
| Chloromethane              | 0.2459         | 0.26816 |             | .1     |      | 9.05246     | 30  |         | Averaged   | spcc |
| Vinyl chloride             | 0.2195         | 0.25298 |             | .01    |      | 15.25285    | 20  |         | Averaged   | ccc  |
| Bromomethane               | 0.156          | 0.15586 |             | .01    |      | -0.08974    | 30  |         | Averaged   |      |
| Chloroethane               | 0.1479         | 0.14899 |             | .01    |      | 0.73698     | 30  |         | Averaged   |      |
| Trichlorofluoromethane     | 0.2161         | 0.22358 |             | .01    |      | 3.46136     | 30  |         | Averaged   |      |
| Ethyl ether                | 0.183          | 0.1783  |             | .01    |      | -2.56831    | 30  |         | Averaged   |      |
| Acetone                    | 0.1874         | 0.19555 |             | .01    |      | 4.34899     | 40  |         | Averaged   |      |
| 1,1-Dichloroethylene       | 0.2331         | 0.27881 |             | .01    |      | 19.60961    | 20  |         | Averaged   | ccc  |
| Iodomethane                | 0.2791         | 0.23626 |             | .01    |      | -15.34934   | 30  |         | Averaged   |      |
| Acetonitrile               | 0.031          | 0.03141 |             | .01    |      | 1.32258     | 30  |         | Averaged   |      |
| Methyl acetate             | 0.1875         | 0.18782 |             | .01    |      | 0.17067     | 40  |         | Averaged   |      |
| Carbon disulfide           | 0.545          | 0.59472 |             | .01    |      | 9.12294     | 30  |         | Averaged   |      |
| Methylene chloride         | 0.2133         | 0.18722 |             | .01    |      | -12.22691   | 30  |         | Averaged   |      |
| tert-Butyl methyl ether    | 0.4128         | 0.36826 |             | .01    |      | -10.78973   | 30  |         | Averaged   |      |
| trans-1,2-Dichloroethylene | 0.2587         | 0.2805  |             | .01    |      | 8.42675     | 30  |         | Averaged   |      |
| Vinyl acetate              | 0.4619         | 0.53785 |             | .01    |      | 16.44295    | 40  |         | Averaged   |      |
| 1,1-Dichloroethane         | 0.3281         | 0.34459 |             | .1     |      | 5.02591     | 30  |         | Averaged   | spcc |
| 2-Butanone                 | 0.2147         | 0.23217 |             | .01    |      | 8.13694     | 40  |         | Averaged   |      |
| cis-1,2-Dichloroethylene   | 0.2936         | 0.30737 |             | .01    |      | 4.69005     | 30  |         | Averaged   |      |
| 2,2-Dichloropropane        | 0.1646         | 0.16553 |             | .01    |      | 0.56501     | 30  |         | Averaged   |      |
| Bromochloromethane         | 0.0988         | 0.08075 |             | .01    |      | -18.26923   | 30  |         | Averaged   |      |
| Chloroform                 | 0.3007         | 0.3019  |             | .01    |      | 0.39907     | 20  |         | Averaged   | ccc  |
| 1,1,1-Trichloroethane      | 0.2099         | 0.2131  |             | .01    |      | 1.52454     | 30  |         | Averaged   |      |
| Cyclohexane                | 0.3048         | 0.33555 |             | .01    |      | 10.08858    | 30  |         | Averaged   |      |
| 1,1-Dichloropropene        | 0.23           | 0.25041 |             | .01    |      | 8.87391     | 30  |         | Averaged   |      |
| Carbon tetrachloride       | 0.1846         | 0.19136 |             | .01    |      | 3.66197     | 30  |         | Averaged   |      |
| 1,2-Dichloroethane         | 0.2448         | 0.25153 |             | .01    |      | 2.74918     | 30  |         | Averaged   |      |
| Benzene                    | 0.7763         | 0.76732 |             | .01    |      | -1.15677    | 30  |         | Averaged   |      |
| Cyclohexene                | 0.36           | 0.38872 |             | .01    |      | 7.97778     | 30  |         | Averaged   |      |
| n-Butyl alcohol            | 5000           | 5443.33 | 5000        |        |      | 8.8666      | 40  |         | Linear     |      |
| Trichloroethylene          | 0.18           | 0.18213 |             | .01    |      | 1.18333     | 30  |         | Averaged   |      |
| 1,2-Dichloropropane        | 0.2011         | 0.21234 |             | .01    |      | 5.58926     | 20  |         | Averaged   | ccc  |
| Methylcyclohexane          | 0.3172         | 0.32016 |             | .01    |      | 0.93317     | 30  |         | Averaged   |      |



## Continuing Calibration Summary

Instrument ID: VOA5.I

Injection Date 28-JAN-10 10:10

Data File: 012810V55V403.D

Init. Cal. Date(s) 08-JAN-10 13:40 08-JAN-10 20:59

Lab Sample ID W5VM100128-02

Quant Type ISTD

Method:VOA5-8260-010810.M

| Compound                    | AVERF / Amount | RF CCV  | Nominal CCV | Min RF | RF Q | %D / %Drift | Max | Drift Q | Curve Type |      |
|-----------------------------|----------------|---------|-------------|--------|------|-------------|-----|---------|------------|------|
| Dibromomethane              | 0.1056         | 0.09868 |             | .01    |      | -6.55303    | 30  |         | Averaged   |      |
| Bromodichloromethane        | 0.2162         | 0.22206 |             | .01    |      | 2.71045     | 30  |         | Averaged   |      |
| 2-Chloroethylvinyl ether    | 0.1115         | 0.10898 |             | .01    |      | -2.26009    | 30  |         | Averaged   |      |
| cis-1,3-Dichloropropylene   | 0.2816         | 0.28676 |             | .01    |      | 1.83239     | 30  |         | Averaged   |      |
| 4-Methyl-2-pentanone        | 0.1323         | 0.15268 |             | .01    |      | 15.40438    | 40  |         | Averaged   |      |
| Toluene                     | 1.1974         | 1.24124 |             | .01    |      | 3.66127     | 20  |         | Averaged   | ccc  |
| trans-1,3-Dichloropropylene | 0.3566         | 0.39632 |             | .01    |      | 11.13853    | 30  |         | Averaged   |      |
| 1,1,2-Trichloroethane       | 0.1993         | 0.19763 |             | .01    |      | -0.83793    | 30  |         | Averaged   |      |
| 2-Hexanone                  | 0.3918         | 0.48089 |             | .01    |      | 22.73864    | 40  |         | Averaged   |      |
| 1,3-Dichloropropane         | 0.4219         | 0.43647 |             | .01    |      | 3.45342     | 30  |         | Averaged   |      |
| Tetrachloroethylene         | 0.2234         | 0.20573 |             | .01    |      | -7.90958    | 30  |         | Averaged   |      |
| Dibromochloromethane        | 0.2391         | 0.22951 |             | .01    |      | -4.01087    | 30  |         | Averaged   |      |
| 1,2-Dibromoethane           | 0.2234         | 0.21594 |             | .01    |      | -3.3393     | 30  |         | Averaged   |      |
| Chlorobenzene               | 0.76           | 0.72326 |             | .3     |      | -4.83421    | 30  |         | Averaged   | spcc |
| 1,1,1,2-Tetrachloroethane   | 0.2456         | 0.24475 |             | .01    |      | -0.34609    | 30  |         | Averaged   |      |
| Ethylbenzene                | 1.2623         | 1.37878 |             | .01    |      | 9.2276      | 20  |         | Averaged   | ccc  |
| m,p-Xylenes                 | 0.5081         | 0.52956 |             | .01    |      | 4.22358     | 30  |         | Averaged   |      |
| o-Xylene                    | 0.4872         | 0.50905 |             | .01    |      | 4.48481     | 30  |         | Averaged   |      |
| Styrene                     | 0.7648         | 0.83487 |             | .01    |      | 9.16187     | 30  |         | Averaged   |      |
| Bromoform                   | 0.2804         | 0.2717  |             | .1     |      | -3.10271    | 30  |         | Averaged   | spcc |
| Isopropylbenzene            | 2.2671         | 2.58117 |             | .01    |      | 13.85338    | 30  |         | Averaged   |      |
| 1,1,2,2-Tetrachloroethane   | 0.5782         | 0.617   |             | .3     |      | 6.71048     | 30  |         | Averaged   | spcc |
| 1,2,3-Trichloropropane      | 0.1557         | 0.15629 |             | .01    |      | 0.37893     | 30  |         | Averaged   |      |
| Bromobenzene                | 0.5915         | 0.55058 |             | .01    |      | -6.91801    | 30  |         | Averaged   |      |
| n-Propylbenzene             | 2.72           | 3.25557 |             | .01    |      | 19.69007    | 30  |         | Averaged   |      |
| 1,3,5-Trimethylbenzene      | 1.8565         | 2.179   |             | .01    |      | 17.3714     | 30  |         | Averaged   |      |
| 2-Chlorotoluene             | 0.5684         | 0.60858 |             | .01    |      | 7.06897     | 30  |         | Averaged   |      |
| 4-Chlorotoluene             | 1.6879         | 1.86874 |             | .01    |      | 10.7139     | 30  |         | Averaged   |      |
| tert-Butylbenzene           | 0.437          | 0.45313 |             | .01    |      | 3.69108     | 30  |         | Averaged   |      |
| 1,2,4-Trimethylbenzene      | 1.9069         | 2.12453 |             | .01    |      | 11.41276    | 30  |         | Averaged   |      |
| sec-Butylbenzene            | 2.4975         | 2.83055 |             | .01    |      | 13.33534    | 30  |         | Averaged   |      |
| 4-Isopropyltoluene          | 1.963          | 2.18442 |             | .01    |      | 11.27967    | 30  |         | Averaged   |      |
| 1,3-Dichlorobenzene         | 1.1478         | 1.08719 |             | .01    |      | -5.28054    | 30  |         | Averaged   |      |
| 1,4-Dichlorobenzene         | 1.1933         | 1.10428 |             | .01    |      | -7.45998    | 30  |         | Averaged   |      |
| n-Butylbenzene              | 1.8927         | 2.28762 |             | .01    |      | 20.86543    | 30  |         | Averaged   |      |
| 1,2-Dichlorobenzene         | 1.0919         | 1.01361 |             | .01    |      | -7.17007    | 30  |         | Averaged   |      |
| 1,2-Dibromo-3-chloropropane | 0.1056         | 0.10224 |             | .01    |      | -3.18182    | 30  |         | Averaged   |      |

## Continuing Calibration Summary

Instrument ID: VOA5.I

Injection Date 28-JAN-10 10:10

Data File: 012810V5V403.D

Init. Cal. Date(s) 08-JAN-10 13:40 08-JAN-10 20:59

Lab Sample ID W5VM100128-02 Quant Type ISTD

Method:VOA5-8260-010810.M

| Compound               | AVERF /<br>Amount | RF<br>CCV | Nominal<br>CCV | Min RF | RF<br>Q | %D /<br>%Drift | Max | Drift<br>Q | Curve<br>Type |
|------------------------|-------------------|-----------|----------------|--------|---------|----------------|-----|------------|---------------|
| 1,2,4-Trichlorobenzene | 0.7548            | 0.69456   |                | .01    |         | -7.98092       | 30  |            | Averaged      |
| Hexachlorobutadiene    | 0.4229            | 0.39081   |                | .01    |         | -7.58808       | 30  |            | Averaged      |
| Naphthalene            | 1.6616            | 1.74562   |                | .01    |         | 5.05657        | 30  |            | Averaged      |
| 1,2,3-Trichlorobenzene | 0.6496            | 0.63395   |                | .01    |         | -2.40917       | 30  |            | Averaged      |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V403.D  
Acq On : 28 Jan 2010 10:10 am  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100128-02|CCV|1|VOA|1|VOA8260BS|  
Misc : CCV 5g N/A SOIL MIX[A]  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 28 13:01:00 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc    | Units |           |
|-------------------------------|--------|--------|--------|------|----------|---------|-------|-----------|
| Internal Standards            |        |        |        |      |          |         |       | Dev (Min) |
| 1) Fluorobenzene              | 10.375 | 10.375 | 1.000  | 96   | 1993245  | 50.00   | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547 | 13.547 | 1.000  | 117  | 1312881  | 50.00   | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.959 | 15.962 | 1.000  | 152  | 649435   | 50.00   | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.375 | 10.375 | 1.000  | 96   | 1993245  | 50.00   | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547 | 13.547 | 1.000  | 117  | 1312881  | 50.00   | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.959 | 15.962 | 1.000  | 152  | 649435   | 50.00   | ug/L  | 0.00      |
| System Monitoring Compounds   |        |        |        |      |          |         |       | Dev (Min) |
| 29) 1,2-Dichloroethane-d4     | 10.021 | 10.021 | 0.966  | 65   | 477056   | 51.50   | ug/L  | 0.00      |
| 43) Toluene-d8                | 12.016 | 12.016 | 0.887  | 98   | 1807084  | 50.47   | ug/L  | 0.00      |
| 61) Bromofluorobenzene        | 14.735 | 14.739 | 0.923  | 95   | 642336   | 51.83   | ug/L  | 0.00      |
| Target Compounds              |        |        |        |      |          |         |       | QValue    |
| 2) Dichlorodifluoromethane    | 4.689  | 4.689  | 0.452  | 85   | 191927   | 44.69   | ug/L  | 100       |
| 3) Chloromethane              | 5.061  | 5.051  | 0.488  | 50   | 534501   | 54.51   | ug/L  | 100       |
| 4) Vinyl chloride             | 5.263  | 5.283  | 0.507  | 62   | 504255   | 57.62   | ug/L  | 99        |
| 5) Bromomethane               | 5.877  | 5.877  | 0.566  | 94   | 310661   | 49.96   | ug/L  | 99        |
| 6) Chloroethane               | 6.008  | 6.018  | 0.579  | 64   | 296966   | 50.37   | ug/L  | 99        |
| 7) Trichlorofluoromethane     | 6.390  | 6.391  | 0.616  | 101  | 445646   | 51.74   | ug/L  | 99        |
| 8) Ethyl ether                | 6.733  | 6.733  | 0.649  | 59   | 355403   | 48.73   | ug/L  | 100       |
| 9) Acetone                    | 7.100  | 7.100  | 0.684  | 43   | 1948943  | 260.82  | ug/L  | 97        |
| 10) 1,1-Dichloroethylene      | 7.125  | 7.125  | 0.687  | 61   | 555738   | 59.80   | ug/L  | 97        |
| 11) Iodomethane               | 7.369  | 7.373  | 0.710  | 142  | 2354584  | 211.59  | ug/L  | 93        |
| 12) Acetonitrile              | 7.450  | 7.450  | 0.718  | 41   | 1565180  | 1267.97 | ug/L  | 98        |
| 13) Methyl acetate            | 7.493  | 7.493  | 0.722  | 43   | 1871862  | 250.46  | ug/L  | 99        |
| 14) Carbon disulfide          | 7.507  | 7.511  | 0.724  | 76   | 5927162  | 272.82  | ug/L  | 99        |
| 15) Methylene chloride        | 7.687  | 7.691  | 0.741  | 84   | 373166   | 43.89   | ug/L  | 95        |
| 16) tert-Butyl methyl ether   | 7.981  | 7.984  | 0.769  | 73   | 734029   | 44.60   | ug/L  | 99        |
| 17) trans-1,2-Dichloroethy... | 8.034  | 8.030  | 0.774  | 61   | 559104   | 54.22   | ug/L  | 95        |
| 18) Vinyl acetate             | 8.455  | 8.458  | 0.815  | 43   | 5360355  | 291.09  | ug/L  | 99        |
| 19) 1,1-Dichloroethane        | 8.508  | 8.511  | 0.820  | 63   | 686859   | 52.51   | ug/L  | 100       |
| 20) 2-Butanone                | 9.077  | 9.077  | 0.875  | 43   | 2313885  | 270.35  | ug/L  | 98        |
| 21) cis-1,2-Dichloroethylene  | 9.148  | 9.144  | 0.882  | 61   | 612660   | 52.35   | ug/L  | 96        |
| 22) 2,2-Dichloropropane       | 9.166  | 9.173  | 0.883  | 77   | 329949   | 50.27   | ug/L  | 97        |
| 23) Bromochloromethane        | 9.417  | 9.417  | 0.908  | 128  | 160950   | 40.88   | ug/L  | # 82      |
| 24) Chloroform                | 9.452  | 9.452  | 0.911  | 83   | 601758   | 50.20   | ug/L  | 99        |
| 25) 1,1,1-Trichloroethane     | 9.731  | 9.735  | 0.938  | 97   | 424768   | 50.77   | ug/L  | 98        |
| 26) Cyclohexane               | 9.830  | 9.830  | 0.948  | 56   | 668828   | 55.05   | ug/L  | 93        |
| 27) 1,1-Dichloropropene       | 9.887  | 9.887  | 0.953  | 75   | 499136   | 54.45   | ug/L  | 93        |
| 28) Carbon tetrachloride      | 9.929  | 9.929  | 0.957  | 117  | 381433   | 51.82   | ug/L  | 98        |
| 30) 1,2-Dichloroethane        | 10.103 | 10.103 | 0.974  | 62   | 501351   | 51.38   | ug/L  | 100       |
| 31) Benzene                   | 10.127 | 10.127 | 0.976  | 78   | 1529457  | 49.42   | ug/L  | 99        |
| 32) Cyclohexene               | 10.244 | 10.248 | 0.987  | 67   | 774818   | 53.99   | ug/L  | 100       |
| 33) n-Butyl alcohol           | 10.456 | 10.460 | 1.008  | 56   | 1588858  | 5443.33 | ug/L  | 97        |
| 34) Trichloroethylene         | 10.764 | 10.768 | 1.037  | 95   | 363029   | 50.61   | ug/L  | 94        |
| 35) 1,2-Dichloropropane       | 11.004 | 11.004 | 1.061  | 63   | 423255   | 52.79   | ug/L  | 100       |
| 36) Methylcyclohexane         | 11.019 | 11.019 | 1.062  | 83   | 638148   | 50.46   | ug/L  | 98        |
| 37) Dibromomethane            | 11.142 | 11.146 | 1.074  | 93   | 196685   | 46.71   | ug/L  | 88        |
| 38) Bromodichloromethane      | 11.256 | 11.256 | 1.085  | 83   | 442612   | 51.35   | ug/L  | 99        |
| 39) 2-Chloroethylvinyl ether  | 11.468 | 11.468 | 1.105  | 63   | 1086112  | 244.28  | ug/L  | 98        |
| 40) cis-1,3-Dichloropropylene | 11.701 | 11.705 | 1.128  | 75   | 571574   | 50.91   | ug/L  | 96        |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V403.D  
Acq On : 28 Jan 2010 10:10 am  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100128-02|CCV|1|VOA|1|VOA8260BS|  
Misc : CCV 5g N/A SOIL MIX[A]  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 28 13:01:00 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc   | Units  |     |
|-------------------------------|--------|--------|--------|------|----------|--------|--------|-----|
| 42) 4-Methyl-2-pentanone      | 11.782 | 11.786 | 0.870  | 58   | 1002243  | 288.48 | ug/L   | 95  |
| 44) Toluene                   | 12.090 | 12.090 | 0.892  | 91   | 1629605  | 51.83  | ug/L   | 99  |
| 45) trans-1,3-Dichloroprop... | 12.239 | 12.239 | 0.903  | 75   | 520325   | 55.58  | ug/L   | 96  |
| 46) 1,1,2-Trichloroethane     | 12.461 | 12.465 | 0.920  | 83   | 259469   | 49.57  | ug/L   | 98  |
| 47) 2-Hexanone                | 12.631 | 12.631 | 0.932  | 43   | 3156762  | 306.84 | ug/L   | 97  |
| 48) 1,3-Dichloropropane       | 12.652 | 12.656 | 0.934  | 76   | 573028   | 51.72  | ug/L   | 97  |
| 49) Tetrachloroethylene       | 12.691 | 12.691 | 0.937  | 164  | 270095   | 46.05  | ug/L   | 94  |
| 50) Dibromochloromethane      | 12.928 | 12.928 | 0.954  | 129  | 301322   | 48.00  | ug/L   | 99  |
| 51) 1,2-Dibromoethane         | 13.094 | 13.094 | 0.967  | 107  | 283497   | 48.32  | ug/L   | 99  |
| 52) Chlorobenzene             | 13.579 | 13.579 | 1.002  | 112  | 949554   | 47.59  | ug/L   | 96  |
| 53) 1,1,1,2-Tetrachloroethane | 13.632 | 13.636 | 1.006  | 131  | 321328   | 49.82  | ug/L   | 97  |
| 54) Ethylbenzene              | 13.639 | 13.639 | 1.007  | 91   | 1810168  | 54.62  | ug/L   | 98  |
| 55) m,p-Xylenes               | 13.745 | 13.749 | 1.015  | 106  | 1390508  | 104.22 | ug/L   | 93  |
| 56) o-Xylene                  | 14.180 | 14.184 | 1.047  | 106  | 668324   | 52.24  | ug/L   | 92  |
| 57) Styrene                   | 14.184 | 14.184 | 1.047  | 104  | 1096088  | 54.58  | ug/L   | 93  |
| 59) Bromoform                 | 14.445 | 14.445 | 0.905  | 173  | 176452   | 48.45  | ug/L   | 98  |
| 60) Isopropylbenzene          | 14.537 | 14.537 | 0.911  | 105  | 1676300  | 56.93  | ug/L   | 98  |
| 62) 1,1,2,2-Tetrachloroethane | 14.810 | 14.810 | 0.928  | 83   | 400699   | 53.36  | ug/L   | 99  |
| 63) 1,2,3-Trichloropropane    | 14.898 | 14.898 | 0.934  | 110  | 101499   | 50.19  | ug/L   | 95  |
| 64) Bromobenzene              | 14.951 | 14.951 | 0.937  | 156  | 357569   | 46.54  | ug/L # | 85  |
| 65) n-Propylbenzene           | 14.962 | 14.965 | 0.938  | 91   | 2114279  | 59.84  | ug/L   | 97  |
| 66) 1,3,5-Trimethylbenzene    | 15.114 | 15.114 | 0.947  | 105  | 1415122  | 58.69  | ug/L   | 96  |
| 67) 2-Chlorotoluene           | 15.117 | 15.117 | 0.947  | 126  | 395230   | 53.53  | ug/L # | 84  |
| 68) 4-Chlorotoluene           | 15.216 | 15.216 | 0.953  | 91   | 1213622  | 55.36  | ug/L   | 95  |
| 69) tert-Butylbenzene         | 15.489 | 15.489 | 0.971  | 134  | 294276   | 51.85  | ug/L # | 88  |
| 70) 1,2,4-Trimethylbenzene    | 15.527 | 15.527 | 0.973  | 105  | 1379745  | 55.71  | ug/L   | 96  |
| 71) sec-Butylbenzene          | 15.711 | 15.711 | 0.984  | 105  | 1838258  | 56.67  | ug/L   | 97  |
| 72) 4-Isopropyltoluene        | 15.832 | 15.832 | 0.992  | 119  | 1418638  | 55.64  | ug/L   | 96  |
| 73) 1,3-Dichlorobenzene       | 15.902 | 15.902 | 0.996  | 146  | 706056   | 47.36  | ug/L   | 98  |
| 74) 1,4-Dichlorobenzene       | 15.987 | 15.991 | 1.002  | 146  | 717156   | 46.27  | ug/L   | 98  |
| 75) n-Butylbenzene            | 16.277 | 16.277 | 1.020  | 91   | 1485661  | 60.43  | ug/L   | 97  |
| 76) 1,2-Dichlorobenzene       | 16.419 | 16.422 | 1.029  | 146  | 658271   | 46.41  | ug/L   | 98  |
| 77) 1,2-Dibromo-3-chloropr... | 17.293 | 17.293 | 1.084  | 157  | 66395    | 48.41  | ug/L   | 90  |
| 78) 1,2,4-Trichlorobenzene    | 18.371 | 18.371 | 1.151  | 180  | 451070   | 46.01  | ug/L   | 100 |
| 79) Hexachlorobutadiene       | 18.548 | 18.548 | 1.162  | 225  | 253803   | 46.20  | ug/L   | 98  |
| 80) Naphthalene               | 18.762 | 18.762 | 1.176  | 128  | 1133665  | 52.53  | ug/L   | 100 |
| 81) 1,2,3-Trichlorobenzene    | 19.109 | 19.116 | 1.197  | 180  | 411707   | 48.79  | ug/L   | 99  |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D.   |        |     |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D.   |        |     |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D.   |        |     |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D.   |        |     |
| 87) Isopropyl Alcohol         | 7.171  | 7.175  | 0.691  |      | 0m       | N.D.   | d      |     |
| 88) Allyl chloride            | 7.450  | 7.546  | 0.718  |      | 0m       | N.D.   | d      |     |
| 89) tert-Butyl Alcohol        | 7.705  | 7.673  | 0.743  |      | 0m       | N.D.   | d      |     |
| 90) Acrylonitrile             | 7.974  | 7.928  | 0.769  |      | 0m       | N.D.   | d      |     |
| 91) Isopropyl ether           | 8.458  | 8.483  | 0.815  |      | 0m       | N.D.   | d      |     |
| 92) 2-Chloro-1,3-butadiene    | 8.614  | 8.617  | 0.830  |      | 0m       | N.D.   | d      |     |
| 93) Ethyl tert-butyl ether    | 8.893  | 8.890  | 0.857  |      | 0m       | N.D.   | d      |     |
| 94) Ethyl acetate             | 9.077  | 9.088  | 0.875  |      | 0m       | N.D.   | d      |     |
| 95) Propionitrile             | 9.077  | 9.148  | 0.875  |      | 0m       | N.D.   | d      |     |
| 96) Methacrylonitrile         | 9.166  | 9.332  | 0.883  |      | 0m       | N.D.   | d      |     |
| 97) Tetrahydrofuran           | 9.459  | 9.466  | 0.912  |      | 0m       | N.D.   | d      |     |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V403.D  
Acq On : 28 Jan 2010 10:10 am  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100128-02|CCV|1|VOA|1|VOA8260BS|  
Misc : CCV 5g N/A SOIL MIX[A]  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 28 13:01:00 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|--------|--------|--------|------|----------|------|-------|
| 98) Isobutyl alcohol           | 9.657  | 9.770  | 0.931  |      | 0m       | N.D. | d     |
| 99) Methyl tert-amyl ether     | 10.124 | 10.138 | 0.976  |      | 0m       | N.D. | d     |
| 100) Methyl methacrylate       | 11.015 | 10.969 | 1.062  |      | 0m       | N.D. | d     |
| 101) 1,4-Dioxane               | 11.132 | 11.089 | 1.073  |      | 0m       | N.D. | d     |
| 102) 2-Nitropropane            | 11.556 | 11.443 | 1.114  |      | 0m       | N.D. | d     |
| 104) Ethyl methacrylate        | 12.235 | 12.235 | 0.903  |      | 0m       | N.D. | d     |
| 106) 1-Chlorohexane            | 0.000  | 13.438 | 0.000  |      | 0        | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 14.537 | 14.573 | 0.911  |      | 0m       | N.D. | d     |
| 108) Cyclohexanone             | 14.537 | 14.693 | 0.911  |      | 0m       | N.D. | d     |
| 109) trans-1,4-Dichloro-2-b... | 14.856 | 14.856 | 0.931  |      | 0m       | N.D. | d     |
| 110) Pentachloroethane         | 15.559 | 15.559 | 0.975  |      | 0m       | N.D. | d     |
| 111) Benzyl chloride           | 16.093 | 16.100 | 1.008  |      | 0m       | N.D. | d     |
| 112) bis(2-Chloroisopropyl)... | 16.500 | 16.497 | 1.034  |      | 0m       | N.D. | d     |

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted



## Continuing Calibration Summary

Client SDG: 10-1324

Instrument ID: VOA5.I

Injection Date: 28-JAN-10 10:36

Data File: 012810V5\5V404.D

Init. Cal. Date(s) 08-JAN-10 13:40 - 08-JAN-10 20:59

Lab Sample ID W5VM100128-03 Quant Type ISTD

Method:VOA5-8260-010810.M

| Compound                    | AVERF / Amount | RF CCV  | Nominal CCV | Min RF | RF Q | %D / %Drift | Max | Drift Q | Curve Type |
|-----------------------------|----------------|---------|-------------|--------|------|-------------|-----|---------|------------|
| S 1,2-Dichloroethane-d4     | 0.2324         | 0.24273 |             | .01    |      | 4.44492     | 30  |         | Averaged   |
| S Toluene-d8                | 1.3636         | 1.3787  |             | .01    |      | 1.10736     | 30  |         | Averaged   |
| S Bromofluorobenzene        | 0.9541         | 1.04647 |             | .01    |      | 9.68138     | 30  |         | Averaged   |
| Acrolein                    | 0.0267         | 0.02321 |             | .01    |      | -13.07116   | 30  |         | Averaged   |
| Trichlorotrifluoroethane    | 0.0382         | 0.0528  |             | .01    |      | 38.2199     | 30  | *       | Averaged   |
| Allyl chloride              | 0.3168         | 0.37695 |             | .01    |      | 18.98674    | 30  |         | Averaged   |
| Acrylonitrile               | 0.0755         | 0.08029 |             | .01    |      | 6.34437     | 30  |         | Averaged   |
| 2-Chloro-1,3-butadiene      | 0.245          | 0.30747 |             | .01    |      | 25.49796    | 30  |         | Averaged   |
| Ethyl acetate               | 0.2299         | 0.23684 |             | .01    |      | 3.0187      | 40  |         | Averaged   |
| Propionitrile               | 0.0283         | 0.03143 |             | .01    |      | 11.06007    | 30  |         | Averaged   |
| Methacrylonitrile           | 0.1382         | 0.15406 |             | .01    |      | 11.47612    | 30  |         | Averaged   |
| Tetrahydrofuran             | 0.0724         | 0.07944 |             | .01    |      | 9.72376     | 30  |         | Averaged   |
| Isobutyl alcohol            | 0.0084         | 0.00987 |             | .01    |      | 17.5        | 40  |         | Averaged   |
| Methyl methacrylate         | 0.1274         | 0.14321 |             | .01    |      | 12.40973    | 30  |         | Averaged   |
| 1,4-Dioxane                 | 0.0018         | 0.00203 |             | .01    |      | 12.77778    | 40  |         | Averaged   |
| 2-Nitropropane              | 250            | 260.75  | 250         |        |      | 4.3         | 30  |         | Linear     |
| Ethyl methacrylate          | 0.3365         | 0.42581 |             | .01    |      | 26.54086    | 30  |         | Averaged   |
| cis-1,4-Dichloro-2-butene   | 0.1894         | 0.29053 |             | .01    |      | 53.39493    | 30  | *       | Averaged   |
| Cyclohexanone               | 1250           | 698.56  | 1250        |        |      | -44.1152    | 40  | *       | Linear     |
| trans-1,4-Dichloro-2-butene | 0.1815         | 0.27236 |             | .01    |      | 50.06061    | 30  | *       | Averaged   |
| Pentachloroethane           | 0.199          | 0.26838 |             | .01    |      | 34.86432    | 30  | *       | Averaged   |
| Benzyl chloride             | 250            | 305.55  | 250         |        |      | 22.22       | 30  |         | Linear     |
| bis(2-Chloroisopropyl)ether | 0.3332         | 0.40374 |             | .01    |      | 21.17047    | 30  |         | Averaged   |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V404.D  
Acq On : 28 Jan 2010 10:36 am  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100128-03|CCV|1|VOA|1|VOA8260Bs|  
Misc : CCV 5g N/A SOIL MIX[B]  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 28 12:51:24 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc  | Units |           |
|-------------------------------|--------|--------|--------|------|----------|-------|-------|-----------|
| Internal Standards            |        |        |        |      |          |       |       | Dev (Min) |
| 1) Fluorobenzene              | 10.375 | 10.375 | 1.000  | 96   | 2029338  | 50.00 | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547 | 13.547 | 1.000  | 117  | 1320347  | 50.00 | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.963 | 15.962 | 1.000  | 152  | 616980   | 50.00 | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.375 | 10.375 | 1.000  | 96   | 2029338  | 50.00 | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547 | 13.547 | 1.000  | 117  | 1320347  | 50.00 | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.963 | 15.962 | 1.000  | 152  | 616980   | 50.00 | ug/L  | 0.00      |
| System Monitoring Compounds   |        |        |        |      |          |       |       | Dev (Min) |
| 29) 1,2-Dichloroethane-d4     | 10.021 | 10.021 | 0.966  | 65   | 492583   | 52.23 | ug/L  | 0.00      |
| 43) Toluene-d8                | 12.016 | 12.016 | 0.887  | 98   | 1820365  | 50.55 | ug/L  | 0.00      |
| 61) Bromofluorobenzene        | 14.735 | 14.739 | 0.923  | 95   | 645652   | 54.84 | ug/L  | 0.00      |
| Target Compounds              |        |        |        |      |          |       |       | QValue    |
| 2) Dichlorodifluoromethane    | 0.000  | 4.689  | 0.000  |      | 0        | N.D.  |       |           |
| 3) Chloromethane              | 5.061  | 5.051  | 0.488  |      | 0m       | N.D.  | d     |           |
| 4) Vinyl chloride             | 5.283  | 5.283  | 0.509  |      | 0m       | N.D.  | d     |           |
| 5) Bromomethane               | 0.000  | 5.877  | 0.000  |      | 0        | N.D.  |       |           |
| 6) Chloroethane               | 0.000  | 6.018  | 0.000  |      | 0        | N.D.  |       |           |
| 7) Trichlorofluoromethane     | 6.411  | 6.391  | 0.618  |      | 0m       | N.D.  | d     |           |
| 8) Ethyl ether                | 6.733  | 6.733  | 0.649  |      | 0m       | N.D.  | d     |           |
| 9) Acetone                    | 7.104  | 7.100  | 0.685  |      | 0m       | N.D.  | d     |           |
| 10) 1,1-Dichloroethylene      | 7.125  | 7.125  | 0.687  |      | 0m       | N.D.  | d     |           |
| 11) Iodomethane               | 7.362  | 7.373  | 0.710  |      | 0m       | N.D.  | d     |           |
| 12) Acetonitrile              | 7.454  | 7.450  | 0.718  |      | 0m       | N.D.  | d     |           |
| 13) Methyl acetate            | 7.493  | 7.493  | 0.722  |      | 0m       | N.D.  | d     |           |
| 14) Carbon disulfide          | 7.550  | 7.511  | 0.728  |      | 0m       | N.D.  | d     |           |
| 15) Methylene chloride        | 7.694  | 7.691  | 0.742  |      | 0m       | N.D.  | d     |           |
| 16) tert-Butyl methyl ether   | 7.988  | 7.984  | 0.770  |      | 0m       | N.D.  | d     |           |
| 17) trans-1,2-Dichloroethy... | 8.023  | 8.030  | 0.773  |      | 0m       | N.D.  | d     |           |
| 18) Vinyl acetate             | 8.458  | 8.458  | 0.815  |      | 0m       | N.D.  | d     |           |
| 19) 1,1-Dichloroethane        | 8.508  | 8.511  | 0.820  |      | 0m       | N.D.  | d     |           |
| 20) 2-Butanone                | 9.091  | 9.077  | 0.876  |      | 0m       | N.D.  | d     |           |
| 21) cis-1,2-Dichloroethylene  | 9.187  | 9.144  | 0.885  |      | 0m       | N.D.  | d     |           |
| 22) 2,2-Dichloropropane       | 9.173  | 9.173  | 0.884  |      | 0m       | N.D.  | d     |           |
| 23) Bromochloromethane        | 0.000  | 9.417  | 0.000  |      | 0        | N.D.  |       |           |
| 24) Chloroform                | 9.449  | 9.452  | 0.911  |      | 0m       | N.D.  | d     |           |
| 25) 1,1,1-Trichloroethane     | 9.724  | 9.735  | 0.937  |      | 0m       | N.D.  | d     |           |
| 26) Cyclohexane               | 9.770  | 9.830  | 0.942  |      | 0m       | N.D.  | d     |           |
| 27) 1,1-Dichloropropene       | 9.894  | 9.887  | 0.954  |      | 0m       | N.D.  | d     |           |
| 28) Carbon tetrachloride      | 9.926  | 9.929  | 0.957  |      | 0m       | N.D.  | d     |           |
| 30) 1,2-Dichloroethane        | 10.092 | 10.103 | 0.973  |      | 0m       | N.D.  | d     |           |
| 31) Benzene                   | 10.128 | 10.127 | 0.976  |      | 0m       | N.D.  | d     |           |
| 32) Cyclohexene               | 10.251 | 10.248 | 0.988  |      | 0m       | N.D.  | d     |           |
| 33) n-Butyl alcohol           | 10.463 | 10.460 | 1.009  |      | 0m       | N.D.  | d     |           |
| 34) Trichloroethylene         | 10.768 | 10.768 | 1.038  |      | 0m       | N.D.  | d     |           |
| 35) 1,2-Dichloropropane       | 11.005 | 11.004 | 1.061  |      | 0m       | N.D.  | d     |           |
| 36) Methylcyclohexane         | 11.019 | 11.019 | 1.062  |      | 0m       | N.D.  | d     |           |
| 37) Dibromomethane            | 11.146 | 11.146 | 1.074  |      | 0m       | N.D.  | d     |           |
| 38) Bromodichloromethane      | 11.249 | 11.256 | 1.084  |      | 0m       | N.D.  | d     |           |
| 39) 2-Chloroethylvinyl ether  | 11.468 | 11.468 | 1.105  |      | 0m       | N.D.  | d     |           |
| 40) cis-1,3-Dichloropropylene | 11.705 | 11.705 | 1.128  |      | 0m       | N.D.  | d     |           |



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V404.D  
Acq On : 28 Jan 2010 10:36 am  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100128-03|CCV|1|VOA|1|VOA8260Bs|  
Misc : CCV 5g N/A SOIL MIX[B]  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 28 12:51:24 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc        | Units |     |
|-------------------------------|--------|--------|--------|------|----------|-------------|-------|-----|
| 42) 4-Methyl-2-pentanone      | 11.786 | 11.786 | 0.870  |      | 0m       | N.D.        | d     |     |
| 44) Toluene                   | 12.090 | 12.090 | 0.892  |      | 0m       | N.D.        | d     |     |
| 45) trans-1,3-Dichloroprop... | 12.235 | 12.239 | 0.903  |      | 0m       | N.D.        | d     |     |
| 46) 1,1,2-Trichloroethane     | 12.465 | 12.465 | 0.920  |      | 0m       | N.D.        | d     |     |
| 47) 2-Hexanone                | 12.628 | 12.631 | 0.932  |      | 0m       | N.D.        | d     |     |
| 48) 1,3-Dichloropropane       | 12.660 | 12.656 | 0.934  |      | 0m       | N.D.        | d     |     |
| 49) Tetrachloroethylene       | 12.691 | 12.691 | 0.937  |      | 0m       | N.D.        | d     |     |
| 50) Dibromochloromethane      | 12.918 | 12.928 | 0.954  |      | 0m       | N.D.        | d     |     |
| 51) 1,2-Dibromoethane         | 13.102 | 13.094 | 0.967  |      | 0m       | N.D.        | d     |     |
| 52) Chlorobenzene             | 13.575 | 13.579 | 1.002  |      | 0m       | N.D.        | d     |     |
| 53) 1,1,1,2-Tetrachloroethane | 13.643 | 13.636 | 1.007  |      | 0m       | N.D.        | d     |     |
| 54) Ethylbenzene              | 13.639 | 13.639 | 1.007  |      | 0m       | N.D.        | d     |     |
| 55) m,p-Xylenes               | 13.749 | 13.749 | 1.015  |      | 0m       | N.D.        | d     |     |
| 56) o-Xylene                  | 14.184 | 14.184 | 1.047  |      | 0m       | N.D.        | d     |     |
| 57) Styrene                   | 14.180 | 14.184 | 1.047  |      | 0m       | N.D.        | d     |     |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D.        |       |     |
| 60) Isopropylbenzene          | 14.541 | 14.537 | 0.911  |      | 0m       | N.D.        | d     |     |
| 62) 1,1,2,2-Tetrachloroethane | 14.813 | 14.810 | 0.928  |      | 0m       | N.D.        | d     |     |
| 63) 1,2,3-Trichloropropane    | 0.000  | 14.898 | 0.000  |      | 0        | N.D.        |       |     |
| 64) Bromobenzene              | 14.951 | 14.951 | 0.937  |      | 0m       | N.D.        | d     |     |
| 65) n-Propylbenzene           | 14.962 | 14.965 | 0.937  |      | 0m       | N.D.        | d     |     |
| 66) 1,3,5-Trimethylbenzene    | 15.110 | 15.114 | 0.947  |      | 0m       | N.D.        | d     |     |
| 67) 2-Chlorotoluene           | 15.114 | 15.117 | 0.947  |      | 0m       | N.D.        | d     |     |
| 68) 4-Chlorotoluene           | 15.216 | 15.216 | 0.953  |      | 0m       | N.D.        | d     |     |
| 69) tert-Butylbenzene         | 15.485 | 15.489 | 0.970  |      | 0m       | N.D.        | d     |     |
| 70) 1,2,4-Trimethylbenzene    | 15.528 | 15.527 | 0.973  |      | 0m       | N.D.        | d     |     |
| 71) sec-Butylbenzene          | 15.711 | 15.711 | 0.984  |      | 0m       | N.D.        | d     |     |
| 72) 4-Isopropyltoluene        | 15.835 | 15.832 | 0.992  |      | 0m       | N.D.        | d     |     |
| 73) 1,3-Dichlorobenzene       | 15.909 | 15.902 | 0.997  |      | 0m       | N.D.        | d     |     |
| 74) 1,4-Dichlorobenzene       | 15.987 | 15.991 | 1.002  |      | 0m       | N.D.        | d     |     |
| 75) n-Butylbenzene            | 16.277 | 16.277 | 1.020  |      | 0m       | N.D.        | d     |     |
| 76) 1,2-Dichlorobenzene       | 16.415 | 16.422 | 1.028  |      | 0m       | N.D.        | d     |     |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D.        |       |     |
| 78) 1,2,4-Trichlorobenzene    | 18.371 | 18.371 | 1.151  |      | 0m       | N.D.        | d     |     |
| 79) Hexachlorobutadiene       | 18.555 | 18.548 | 1.162  |      | 0m       | N.D.        | d     |     |
| 80) Naphthalene               | 18.762 | 18.762 | 1.175  |      | 0m       | N.D.        | d     |     |
| 81) 1,2,3-Trichlorobenzene    | 19.109 | 19.116 | 1.197  |      | 0m       | N.D.        | d     |     |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D.        |       |     |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D.        |       |     |
| 85) Acrolein                  | 6.924  | 6.924  | 0.667  | 56   | 235555   | 217.75 ug/L |       | 91  |
| 86) Trichlorotrifluoroethane  | 7.076  | 7.079  | 0.682  | 85   | 535736   | 345.56 ug/L |       | 86  |
| 87) Isopropyl Alcohol         | 0.000  | 7.175  | 0.000  |      | 0m       | N.D.        | d     |     |
| 88) Allyl chloride            | 7.550  | 7.546  | 0.728  | 41   | 3824784  | 297.49 ug/L |       | 96  |
| 89) tert-Butyl Alcohol        | 7.666  | 7.673  | 0.739  | 59   | 123      | N.D.        |       |     |
| 90) Acrylonitrile             | 7.931  | 7.928  | 0.764  | 53   | 814710   | 265.85 ug/L |       | 99  |
| 91) Isopropyl ether           | 8.473  | 8.483  | 0.817  | 45   | 119      | N.D.        |       |     |
| 92) 2-Chloro-1,3-butadiene    | 8.621  | 8.617  | 0.831  | 53   | 623960   | 62.75 ug/L  |       | 98  |
| 93) Ethyl tert-butyl ether    | 9.095  | 8.890  | 0.877  | 59   | 1763     | N.D.        |       |     |
| 94) Ethyl acetate             | 9.091  | 9.088  | 0.876  | 43   | 2403094  | 257.59 ug/L |       | 99  |
| 95) Propionitrile             | 9.148  | 9.148  | 0.882  | 54   | 318948   | 278.16 ug/L |       | 99  |
| 96) Methacrylonitrile         | 9.332  | 9.332  | 0.899  | 41   | 1563175  | 278.77 ug/L |       | 98  |
| 97) Tetrahydrofuran           | 9.466  | 9.466  | 0.912  | 42   | 806005   | 274.33 ug/L |       | 100 |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V404.D  
Acq On : 28 Jan 2010 10:36 am  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100128-03|CCV|1|VOA|1|VOA8260Bs|  
Misc : CCV 5g N/A SOIL MIX[B]  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 28 12:51:24 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.   | Exp RT | Rel RT | QIon | Response | Conc    | Units |    |
|--------------------------------|--------|--------|--------|------|----------|---------|-------|----|
| 98) Isobutyl alcohol           | 9.767  | 9.770  | 0.941  | 41   | 1000982  | 2925.52 | ug/L  | 98 |
| 99) Methyl tert-amyl ether     | 0.000  | 10.138 | 0.000  |      | 0        | N.D.    |       |    |
| 100) Methyl methacrylate       | 10.969 | 10.969 | 1.057  | 69   | 1453144  | 281.00  | ug/L  | 95 |
| 101) 1,4-Dioxane               | 11.086 | 11.089 | 1.069  | 88   | 205660   | 2748.12 | ug/L  | 97 |
| 102) 2-Nitropropane            | 11.443 | 11.443 | 1.103  | 43   | 704938   | 260.75  | ug/L  | 98 |
| 104) Ethyl methacrylate        | 12.235 | 12.235 | 0.903  | 69   | 2811105  | 316.36  | ug/L  | 96 |
| 106) 1-Chlorohexane            | 0.000  | 13.438 | 0.000  |      | 0        | N.D.    |       |    |
| 107) cis-1,4-Dichloro-2-butene | 14.573 | 14.573 | 0.913  | 53   | 896261   | 383.41  | ug/L  | 97 |
| 108) Cyclohexanone             | 14.689 | 14.693 | 0.920  | 42   | 480474   | 698.56  | ug/L  | 93 |
| 109) trans-1,4-Dichloro-2-b... | 14.856 | 14.856 | 0.931  | 53   | 840197   | 375.09  | ug/L  | 95 |
| 110) Pentachloroethane         | 15.559 | 15.559 | 0.975  | 167  | 827937   | 337.20  | ug/L  | 93 |
| 111) Benzyl chloride           | 16.100 | 16.100 | 1.009  | 91   | 3778042  | 305.55  | ug/L  | 96 |
| 112) bis(2-Chloroisopropyl)... | 16.497 | 16.497 | 1.033  | 45   | 1245508  | 302.93  | ug/L  | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted



## Continuing Calibration Summary

Client SDG: 10-1324

Instrument ID: VOA5.I

Injection Date 31-JAN-10 12:15

Data File: 013110V5V703.D

Init. Cal. Date(s) 08-JAN-10 13:40 - 08-JAN-10 20:59

Lab Sample ID W5VM100131-02 Quant Type ISTD

Method:VOA5-8260-010810.M

| Compound                   | AVERF / Amount | RF CCV  | Nominal CCV | Min RF | RF Q | %D / %Drift | Max | Drift Q | Curve Type |      |
|----------------------------|----------------|---------|-------------|--------|------|-------------|-----|---------|------------|------|
| S 1,2-Dichloroethane-d4    | 0.2324         | 0.24615 |             | .01    |      | 5.91652     | 30  |         | Averaged   |      |
| S Toluene-d8               | 1.3636         | 1.34231 |             | .01    |      | -1.56131    | 30  |         | Averaged   |      |
| S Bromofluorobenzene       | 0.9541         | 0.99437 |             | .01    |      | 4.22073     | 30  |         | Averaged   |      |
| Dichlorodifluoromethane    | 50             | 39.02   | 50          |        |      | -21.96      | 30  |         | Linear     |      |
| Chloromethane              | 0.2459         | 0.25565 |             | .1     |      | 3.96503     | 30  |         | Averaged   | spcc |
| Vinyl chloride             | 0.2195         | 0.24104 |             | .01    |      | 9.81321     | 20  |         | Averaged   | ccc  |
| Bromomethane               | 0.156          | 0.15378 |             | .01    |      | -1.42308    | 30  |         | Averaged   |      |
| Chloroethane               | 0.1479         | 0.13852 |             | .01    |      | -6.34212    | 30  |         | Averaged   |      |
| Trichlorofluoromethane     | 0.2161         | 0.21733 |             | .01    |      | 0.56918     | 30  |         | Averaged   |      |
| Ethyl ether                | 0.183          | 0.18416 |             | .01    |      | 0.63388     | 30  |         | Averaged   |      |
| Acetone                    | 0.1874         | 0.17062 |             | .01    |      | -8.95411    | 40  |         | Averaged   |      |
| 1,1-Dichloroethylene       | 0.2331         | 0.27053 |             | .01    |      | 16.05749    | 20  |         | Averaged   | ccc  |
| Iodomethane                | 0.2791         | 0.23608 |             | .01    |      | -15.41383   | 30  |         | Averaged   |      |
| Acetonitrile               | 0.031          | 0.03389 |             | .01    |      | 9.32258     | 30  |         | Averaged   |      |
| Methyl acetate             | 0.1875         | 0.20357 |             | .01    |      | 8.57067     | 40  |         | Averaged   |      |
| Carbon disulfide           | 0.545          | 0.56311 |             | .01    |      | 3.32294     | 30  |         | Averaged   |      |
| Methylene chloride         | 0.2133         | 0.18853 |             | .01    |      | -11.61275   | 30  |         | Averaged   |      |
| tert-Butyl methyl ether    | 0.4128         | 0.36791 |             | .01    |      | -10.87452   | 30  |         | Averaged   |      |
| trans-1,2-Dichloroethylene | 0.2587         | 0.27381 |             | .01    |      | 5.84074     | 30  |         | Averaged   |      |
| Vinyl acetate              | 0.4619         | 0.5979  |             | .01    |      | 29.4436     | 40  |         | Averaged   |      |
| 1,1-Dichloroethane         | 0.3281         | 0.34006 |             | .1     |      | 3.64523     | 30  |         | Averaged   | spcc |
| 2-Butanone                 | 0.2147         | 0.20219 |             | .01    |      | -5.82673    | 40  |         | Averaged   |      |
| cis-1,2-Dichloroethylene   | 0.2936         | 0.30832 |             | .01    |      | 5.01362     | 30  |         | Averaged   |      |
| 2,2-Dichloropropane        | 0.1646         | 0.16273 |             | .01    |      | -1.13609    | 30  |         | Averaged   |      |
| Bromochloromethane         | 0.0988         | 0.08505 |             | .01    |      | -13.917     | 30  |         | Averaged   |      |
| Chloroform                 | 0.3007         | 0.30476 |             | .01    |      | 1.35018     | 20  |         | Averaged   | ccc  |
| 1,1,1-Trichloroethane      | 0.2099         | 0.20611 |             | .01    |      | -1.80562    | 30  |         | Averaged   |      |
| Cyclohexane                | 0.3048         | 0.31854 |             | .01    |      | 4.50787     | 30  |         | Averaged   |      |
| 1,1-Dichloropropene        | 0.23           | 0.24105 |             | .01    |      | 4.80435     | 30  |         | Averaged   |      |
| Carbon tetrachloride       | 0.1846         | 0.18341 |             | .01    |      | -0.64464    | 30  |         | Averaged   |      |
| 1,2-Dichloroethane         | 0.2448         | 0.27014 |             | .01    |      | 10.35131    | 30  |         | Averaged   |      |
| Benzene                    | 0.7763         | 0.75541 |             | .01    |      | -2.69097    | 30  |         | Averaged   |      |
| Cyclohexene                | 0.36           | 0.36357 |             | .01    |      | 0.99167     | 30  |         | Averaged   |      |
| n-Butyl alcohol            | 5000           | 5579.92 | 5000        |        |      | 11.5984     | 40  |         | Linear     |      |
| Trichloroethylene          | 0.18           | 0.17647 |             | .01    |      | -1.96111    | 30  |         | Averaged   |      |
| 1,2-Dichloropropane        | 0.2011         | 0.21423 |             | .01    |      | 6.52909     | 20  |         | Averaged   | ccc  |
| Methylcyclohexane          | 0.3172         | 0.30136 |             | .01    |      | -4.99369    | 30  |         | Averaged   |      |

## Continuing Calibration Summary

Instrument ID: VOA5.I

Injection Date 31-JAN-10 12:15

Data File: 013110V5\SV703.D

Init. Cal. Date(s) 08-JAN-10 13:40 08-JAN-10 20:59

Lab Sample ID W5VM100131-02 Quant Type ISTD

Method:VOA5-8260-010810.M

| Compound                    | AVERF / Amount | RF CCV  | Nominal CCV | Min RF | RF Q | %D / %Drift | Max | Drift Q | Curve Type |      |
|-----------------------------|----------------|---------|-------------|--------|------|-------------|-----|---------|------------|------|
| Dibromomethane              | 0.1056         | 0.10291 |             | .01    |      | -2.54735    | 30  |         | Averaged   |      |
| Bromodichloromethane        | 0.2162         | 0.22869 |             | .01    |      | 5.77706     | 30  |         | Averaged   |      |
| 2-Chloroethylvinyl ether    | 0.1115         | 0.11127 |             | .01    |      | -0.20628    | 30  |         | Averaged   |      |
| cis-1,3-Dichloropropylene   | 0.2816         | 0.28885 |             | .01    |      | 2.57457     | 30  |         | Averaged   |      |
| 4-Methyl-2-pentanone        | 0.1323         | 0.1525  |             | .01    |      | 15.26833    | 40  |         | Averaged   |      |
| Toluene                     | 1.1974         | 1.17377 |             | .01    |      | -1.97344    | 20  |         | Averaged   | ccc  |
| trans-1,3-Dichloropropylene | 0.3566         | 0.39136 |             | .01    |      | 9.74762     | 30  |         | Averaged   |      |
| 1,1,2-Trichloroethane       | 0.1993         | 0.1956  |             | .01    |      | -1.8565     | 30  |         | Averaged   |      |
| 2-Hexanone                  | 0.3918         | 0.41452 |             | .01    |      | 5.79888     | 40  |         | Averaged   |      |
| 1,3-Dichloropropane         | 0.4219         | 0.43785 |             | .01    |      | 3.78052     | 30  |         | Averaged   |      |
| Tetrachloroethylene         | 0.2234         | 0.19432 |             | .01    |      | -13.01701   | 30  |         | Averaged   |      |
| Dibromochloromethane        | 0.2391         | 0.22997 |             | .01    |      | -3.81849    | 30  |         | Averaged   |      |
| 1,2-Dibromoethane           | 0.2234         | 0.21432 |             | .01    |      | -4.06446    | 30  |         | Averaged   |      |
| Chlorobenzene               | 0.76           | 0.70524 |             | .3     |      | -7.20526    | 30  |         | Averaged   | spcc |
| 1,1,1,2-Tetrachloroethane   | 0.2456         | 0.24028 |             | .01    |      | -2.16612    | 30  |         | Averaged   |      |
| Ethylbenzene                | 1.2623         | 1.30902 |             | .01    |      | 3.70118     | 20  |         | Averaged   | ccc  |
| m,p-Xylenes                 | 0.5081         | 0.5053  |             | .01    |      | -0.55107    | 30  |         | Averaged   |      |
| o-Xylene                    | 0.4872         | 0.49416 |             | .01    |      | 1.42857     | 30  |         | Averaged   |      |
| Styrene                     | 0.7648         | 0.82193 |             | .01    |      | 7.46993     | 30  |         | Averaged   |      |
| Bromoform                   | 0.2804         | 0.26781 |             | .1     |      | -4.49001    | 30  |         | Averaged   | spcc |
| Isopropylbenzene            | 2.2671         | 2.37156 |             | .01    |      | 4.60765     | 30  |         | Averaged   |      |
| 1,1,2,2-Tetrachloroethane   | 0.5782         | 0.60176 |             | .3     |      | 4.07471     | 30  |         | Averaged   | spcc |
| 1,2,3-Trichloropropane      | 0.1557         | 0.15531 |             | .01    |      | -0.25048    | 30  |         | Averaged   |      |
| Bromobenzene                | 0.5915         | 0.53827 |             | .01    |      | -8.99915    | 30  |         | Averaged   |      |
| n-Propylbenzene             | 2.72           | 2.98815 |             | .01    |      | 9.85846     | 30  |         | Averaged   |      |
| 1,3,5-Trimethylbenzene      | 1.8565         | 2.03897 |             | .01    |      | 9.82871     | 30  |         | Averaged   |      |
| 2-Chlorotoluene             | 0.5684         | 0.58014 |             | .01    |      | 2.06545     | 30  |         | Averaged   |      |
| 4-Chlorotoluene             | 1.6879         | 1.74135 |             | .01    |      | 3.16666     | 30  |         | Averaged   |      |
| tert-Butylbenzene           | 0.437          | 0.41463 |             | .01    |      | -5.11899    | 30  |         | Averaged   |      |
| 1,2,4-Trimethylbenzene      | 1.9069         | 1.99735 |             | .01    |      | 4.7433      | 30  |         | Averaged   |      |
| sec-Butylbenzene            | 2.4975         | 2.56081 |             | .01    |      | 2.53493     | 30  |         | Averaged   |      |
| 4-Isopropyltoluene          | 1.963          | 1.99931 |             | .01    |      | 1.84972     | 30  |         | Averaged   |      |
| 1,3-Dichlorobenzene         | 1.1478         | 1.03436 |             | .01    |      | -9.88325    | 30  |         | Averaged   |      |
| 1,4-Dichlorobenzene         | 1.1933         | 1.06123 |             | .01    |      | -11.06763   | 30  |         | Averaged   |      |
| n-Butylbenzene              | 1.8927         | 2.06114 |             | .01    |      | 8.89946     | 30  |         | Averaged   |      |
| 1,2-Dichlorobenzene         | 1.0919         | 0.97477 |             | .01    |      | -10.72717   | 30  |         | Averaged   |      |
| 1,2-Dibromo-3-chloropropane | 0.1056         | 0.09943 |             | .01    |      | -5.8428     | 30  |         | Averaged   |      |

## Continuing Calibration Summary

Instrument ID: VOA5.I

Injection Date 31-JAN-10 12:15

Data File: 013110V5\5V703.D

Init. Cal. Date(s) 08-JAN-10 13:40 08-JAN-10 20:59

Lab Sample ID W5VM100131-02 Quant Type ISTD

Method:VOA5-8260-010810.M

| Compound               | AVERF /<br>Amount | RF<br>CCV | Nominal<br>CCV | Min RF | RF<br>Q | %D /<br>%Drift | Max | Drift<br>Q | Curve<br>Type |
|------------------------|-------------------|-----------|----------------|--------|---------|----------------|-----|------------|---------------|
| 1,2,4-Trichlorobenzene | 0.7548            | 0.68025   |                | .01    |         | -9.87679       | 30  |            | Averaged      |
| Hexachlorobutadiene    | 0.4229            | 0.36553   |                | .01    |         | -13.56585      | 30  |            | Averaged      |
| Naphthalene            | 1.6616            | 1.70807   |                | .01    |         | 2.7967         | 30  |            | Averaged      |
| 1,2,3-Trichlorobenzene | 0.6496            | 0.61844   |                | .01    |         | -4.7968        | 30  |            | Averaged      |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V703.D  
Acq On : 31 Jan 2010 12:15 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100131-02|CCV|1|VOA|1|VOA8260BS|  
Misc : CCV 5g N/A SOIL MIX[A]  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 08:47:52 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc    | Units |           |
|-------------------------------|--------|--------|--------|------|----------|---------|-------|-----------|
| Internal Standards            |        |        |        |      |          |         |       | Dev (Min) |
| 1) Fluorobenzene              | 10.375 | 10.375 | 1.000  | 96   | 1860482  | 50.00   | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547 | 13.547 | 1.000  | 117  | 1273384  | 50.00   | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.959 | 15.962 | 1.000  | 152  | 641523   | 50.00   | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.375 | 10.375 | 1.000  | 96   | 1860482  | 50.00   | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547 | 13.547 | 1.000  | 117  | 1273384  | 50.00   | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.959 | 15.962 | 1.000  | 152  | 641523   | 50.00   | ug/L  | 0.00      |
| System Monitoring Compounds   |        |        |        |      |          |         |       | Dev (Min) |
| 29) 1,2-Dichloroethane-d4     | 10.021 | 10.021 | 0.966  | 65   | 457956   | 52.96   | ug/L  | 0.00      |
| 43) Toluene-d8                | 12.016 | 12.016 | 0.887  | 98   | 1709272  | 49.22   | ug/L  | 0.00      |
| 61) Bromofluorobenzene        | 14.739 | 14.739 | 0.924  | 95   | 637912   | 52.11   | ug/L  | 0.00      |
| Target Compounds              |        |        |        |      |          |         |       | QValue    |
| 2) Dichlorodifluoromethane    | 4.678  | 4.689  | 0.451  | 85   | 156317   | 39.02   | ug/L  | 99        |
| 3) Chloromethane              | 5.061  | 5.051  | 0.488  | 50   | 475628   | 51.97   | ug/L  | 98        |
| 4) Vinyl chloride             | 5.283  | 5.283  | 0.509  | 62   | 448458   | 54.90   | ug/L  | 99        |
| 5) Bromomethane               | 5.867  | 5.877  | 0.565  | 94   | 286111   | 49.29   | ug/L  | 99        |
| 6) Chloroethane               | 6.008  | 6.018  | 0.579  | 64   | 257715   | 46.83   | ug/L  | 100       |
| 7) Trichlorofluoromethane     | 6.390  | 6.391  | 0.616  | 101  | 404345   | 50.29   | ug/L  | 99        |
| 8) Ethyl ether                | 6.733  | 6.733  | 0.649  | 59   | 342619   | 50.33   | ug/L  | 98        |
| 9) Acetone                    | 7.100  | 7.100  | 0.684  | 43   | 1587156  | 227.56  | ug/L  | 95        |
| 10) 1,1-Dichloroethylene      | 7.121  | 7.125  | 0.686  | 61   | 503316   | 58.02   | ug/L  | 97        |
| 11) Iodomethane               | 7.365  | 7.373  | 0.710  | 142  | 2196110  | 211.44  | ug/L  | 93        |
| 12) Acetonitrile              | 7.454  | 7.450  | 0.718  | 41   | 1576121  | 1367.95 | ug/L  | 99        |
| 13) Methyl acetate            | 7.493  | 7.493  | 0.722  | 43   | 1893666  | 271.46  | ug/L  | 98        |
| 14) Carbon disulfide          | 7.507  | 7.511  | 0.724  | 76   | 5238310  | 258.32  | ug/L  | 100       |
| 15) Methylene chloride        | 7.691  | 7.691  | 0.741  | 84   | 350760   | 44.20   | ug/L  | 94        |
| 16) tert-Butyl methyl ether   | 7.981  | 7.984  | 0.769  | 73   | 684499   | 44.56   | ug/L  | 99        |
| 17) trans-1,2-Dichloroethy... | 8.030  | 8.030  | 0.774  | 61   | 509418   | 52.93   | ug/L  | 96        |
| 18) Vinyl acetate             | 8.455  | 8.458  | 0.815  | 43   | 5561891  | 323.59  | ug/L  | 98        |
| 19) 1,1-Dichloroethane        | 8.508  | 8.511  | 0.820  | 63   | 632667   | 51.82   | ug/L  | 99        |
| 20) 2-Butanone                | 9.073  | 9.077  | 0.875  | 43   | 1880881  | 235.44  | ug/L  | 97        |
| 21) cis-1,2-Dichloroethylene  | 9.144  | 9.144  | 0.881  | 61   | 573626   | 52.51   | ug/L  | 96        |
| 22) 2,2-Dichloropropane       | 9.169  | 9.173  | 0.884  | 77   | 302764   | 49.42   | ug/L  | 93        |
| 23) Bromochloromethane        | 9.417  | 9.417  | 0.908  | 128  | 158239   | 43.06   | ug/L  | # 85      |
| 24) Chloroform                | 9.452  | 9.452  | 0.911  | 83   | 567009   | 50.68   | ug/L  | 100       |
| 25) 1,1,1-Trichloroethane     | 9.731  | 9.735  | 0.938  | 97   | 383465   | 49.11   | ug/L  | 97        |
| 26) Cyclohexane               | 9.830  | 9.830  | 0.948  | 56   | 592633   | 52.26   | ug/L  | 99        |
| 27) 1,1-Dichloropropene       | 9.887  | 9.887  | 0.953  | 75   | 448461   | 52.41   | ug/L  | 90        |
| 28) Carbon tetrachloride      | 9.929  | 9.929  | 0.957  | 117  | 341234   | 49.67   | ug/L  | 99        |
| 30) 1,2-Dichloroethane        | 10.103 | 10.103 | 0.974  | 62   | 502589   | 55.18   | ug/L  | 100       |
| 31) Benzene                   | 10.124 | 10.127 | 0.976  | 78   | 1405429  | 48.65   | ug/L  | 98        |
| 32) Cyclohexene               | 10.248 | 10.248 | 0.988  | 67   | 676420   | 50.49   | ug/L  | 96        |
| 33) n-Butyl alcohol           | 10.456 | 10.460 | 1.008  | 56   | 1520923  | 5579.92 | ug/L  | 96        |
| 34) Trichloroethylene         | 10.764 | 10.768 | 1.037  | 95   | 328320   | 49.03   | ug/L  | 95        |
| 35) 1,2-Dichloropropane       | 11.008 | 11.004 | 1.061  | 63   | 398575   | 53.25   | ug/L  | 100       |
| 36) Methylcyclohexane         | 11.019 | 11.019 | 1.062  | 83   | 560671   | 47.50   | ug/L  | 96        |
| 37) Dibromomethane            | 11.142 | 11.146 | 1.074  | 93   | 191470   | 48.71   | ug/L  | 89        |
| 38) Bromodichloromethane      | 11.252 | 11.256 | 1.085  | 83   | 425481   | 52.89   | ug/L  | 100       |
| 39) 2-Chloroethylvinyl ether  | 11.464 | 11.468 | 1.105  | 63   | 1035074  | 249.41  | ug/L  | 99        |
| 40) cis-1,3-Dichloropropylene | 11.701 | 11.705 | 1.128  | 75   | 537398   | 51.29   | ug/L  | 91        |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V703.D  
Acq On : 31 Jan 2010 12:15 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100131-02|CCV|1|VOA|1|VOA8260BS|  
Misc : CCV 5g N/A SOIL MIX[A]  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 08:47:52 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc   | Units |      |
|-------------------------------|--------|--------|--------|------|----------|--------|-------|------|
| 42) 4-Methyl-2-pentanone      | 11.786 | 11.786 | 0.870  | 58   | 970953   | 288.14 | ug/L  | 92   |
| 44) Toluene                   | 12.090 | 12.090 | 0.892  | 91   | 1494663  | 49.01  | ug/L  | 99   |
| 45) trans-1,3-Dichloroprop... | 12.239 | 12.239 | 0.903  | 75   | 498348   | 54.88  | ug/L  | 91   |
| 46) 1,1,2-Trichloroethane     | 12.461 | 12.465 | 0.920  | 83   | 249077   | 49.06  | ug/L  | 99   |
| 47) 2-Hexanone                | 12.631 | 12.631 | 0.932  | 43   | 2639206  | 264.49 | ug/L  | 97   |
| 48) 1,3-Dichloropropane       | 12.652 | 12.656 | 0.934  | 76   | 557555   | 51.89  | ug/L  | 97   |
| 49) Tetrachloroethylene       | 12.691 | 12.691 | 0.937  | 164  | 247444   | 43.50  | ug/L  | 94   |
| 50) Dibromochloromethane      | 12.928 | 12.928 | 0.954  | 129  | 292840   | 48.10  | ug/L  | 100  |
| 51) 1,2-Dibromoethane         | 13.094 | 13.094 | 0.967  | 107  | 272912   | 47.96  | ug/L  | 100  |
| 52) Chlorobenzene             | 13.579 | 13.579 | 1.002  | 112  | 898041   | 46.40  | ug/L  | 96   |
| 53) 1,1,1,2-Tetrachloroethane | 13.632 | 13.636 | 1.006  | 131  | 305969   | 48.91  | ug/L  | 98   |
| 54) Ethylbenzene              | 13.635 | 13.639 | 1.007  | 91   | 1666881  | 51.85  | ug/L  | 97   |
| 55) m,p-Xylenes               | 13.745 | 13.749 | 1.015  | 106  | 1286872  | 99.44  | ug/L  | 93   |
| 56) o-Xylene                  | 14.180 | 14.184 | 1.047  | 106  | 629253   | 50.71  | ug/L  | 92   |
| 57) Styrene                   | 14.184 | 14.184 | 1.047  | 104  | 1046638  | 53.73  | ug/L  | 93   |
| 59) Bromoform                 | 14.445 | 14.445 | 0.905  | 173  | 171804   | 47.76  | ug/L  | 100  |
| 60) Isopropylbenzene          | 14.537 | 14.537 | 0.911  | 105  | 1521409  | 52.30  | ug/L  | 98   |
| 62) 1,1,2,2-Tetrachloroethane | 14.809 | 14.810 | 0.928  | 83   | 386040   | 52.04  | ug/L  | 100  |
| 63) 1,2,3-Trichloropropane    | 14.901 | 14.898 | 0.934  | 110  | 99637    | 49.87  | ug/L  | 98   |
| 64) Bromobenzene              | 14.951 | 14.951 | 0.937  | 156  | 345315   | 45.50  | ug/L  | 87   |
| 65) n-Propylbenzene           | 14.962 | 14.965 | 0.938  | 91   | 1916968  | 54.93  | ug/L  | 97   |
| 66) 1,3,5-Trimethylbenzene    | 15.114 | 15.114 | 0.947  | 105  | 1308045  | 54.92  | ug/L  | 97   |
| 67) 2-Chlorotoluene           | 15.117 | 15.117 | 0.947  | 126  | 372171   | 51.03  | ug/L  | # 85 |
| 68) 4-Chlorotoluene           | 15.216 | 15.216 | 0.953  | 91   | 1117117  | 51.58  | ug/L  | 95   |
| 69) tert-Butylbenzene         | 15.488 | 15.489 | 0.971  | 134  | 265994   | 47.44  | ug/L  | # 87 |
| 70) 1,2,4-Trimethylbenzene    | 15.527 | 15.527 | 0.973  | 105  | 1281349  | 52.37  | ug/L  | 96   |
| 71) sec-Butylbenzene          | 15.711 | 15.711 | 0.984  | 105  | 1642820  | 51.27  | ug/L  | 98   |
| 72) 4-Isopropyltoluene        | 15.832 | 15.832 | 0.992  | 119  | 1282602  | 50.92  | ug/L  | 97   |
| 73) 1,3-Dichlorobenzene       | 15.902 | 15.902 | 0.996  | 146  | 663566   | 45.06  | ug/L  | 98   |
| 74) 1,4-Dichlorobenzene       | 15.987 | 15.991 | 1.002  | 146  | 680803   | 44.47  | ug/L  | 98   |
| 75) n-Butylbenzene            | 16.277 | 16.277 | 1.020  | 91   | 1322266  | 54.45  | ug/L  | 97   |
| 76) 1,2-Dichlorobenzene       | 16.419 | 16.422 | 1.029  | 146  | 625338   | 44.64  | ug/L  | 97   |
| 77) 1,2-Dibromo-3-chloropr... | 17.293 | 17.293 | 1.084  | 157  | 63788    | 47.08  | ug/L  | 91   |
| 78) 1,2,4-Trichlorobenzene    | 18.371 | 18.371 | 1.151  | 180  | 436395   | 45.06  | ug/L  | 99   |
| 79) Hexachlorobutadiene       | 18.548 | 18.548 | 1.162  | 225  | 234495   | 43.21  | ug/L  | 98   |
| 80) Naphthalene               | 18.762 | 18.762 | 1.176  | 128  | 1095763  | 51.40  | ug/L  | 100  |
| 81) 1,2,3-Trichlorobenzene    | 19.116 | 19.116 | 1.198  | 180  | 396744   | 47.60  | ug/L  | 99   |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D.   |       |      |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D.   |       |      |
| 85) Acrolein                  | 6.924  | 6.924  | 0.667  |      | 0m       | N.D.   | d     |      |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D.   |       |      |
| 87) Isopropyl Alcohol         | 7.146  | 7.175  | 0.689  |      | 0m       | N.D.   | d     |      |
| 88) Allyl chloride            | 7.454  | 7.546  | 0.718  |      | 0m       | N.D.   | d     |      |
| 89) tert-Butyl Alcohol        | 7.698  | 7.673  | 0.742  |      | 0m       | N.D.   | d     |      |
| 90) Acrylonitrile             | 7.974  | 7.928  | 0.769  |      | 0m       | N.D.   | d     |      |
| 91) Isopropyl ether           | 8.451  | 8.483  | 0.815  |      | 0m       | N.D.   | d     |      |
| 92) 2-Chloro-1,3-butadiene    | 8.617  | 8.617  | 0.831  |      | 0m       | N.D.   | d     |      |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D.   |       |      |
| 94) Ethyl acetate             | 9.073  | 9.088  | 0.875  |      | 0m       | N.D.   | d     |      |
| 95) Propionitrile             | 9.073  | 9.148  | 0.875  |      | 0m       | N.D.   | d     |      |
| 96) Methacrylonitrile         | 9.268  | 9.332  | 0.893  |      | 0m       | N.D.   | d     |      |
| 97) Tetrahydrofuran           | 9.455  | 9.466  | 0.911  |      | 0m       | N.D.   | d     |      |



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V703.D  
Acq On : 31 Jan 2010 12:15 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100131-02|CCV|1|VOA|1|VOA8260BS|  
Misc : CCV 5g N/A SOIL MIX[A]  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 08:47:52 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|--------|--------|--------|------|----------|------|-------|
| 98) Isobutyl alcohol           | 9.650  | 9.770  | 0.930  |      | 0m       | N.D. | d     |
| 99) Methyl tert-amyl ether     | 10.124 | 10.138 | 0.976  |      | 0m       | N.D. | d     |
| 100) Methyl methacrylate       | 11.015 | 10.969 | 1.062  |      | 0m       | N.D. | d     |
| 101) 1,4-Dioxane               | 11.146 | 11.089 | 1.074  |      | 0m       | N.D. | d     |
| 102) 2-Nitropropane            | 11.666 | 11.443 | 1.124  |      | 0m       | N.D. | d     |
| 104) Ethyl methacrylate        | 12.242 | 12.235 | 0.904  |      | 0m       | N.D. | d     |
| 106) 1-Chlorohexane            | 0.000  | 13.438 | 0.000  |      | 0        | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 14.537 | 14.573 | 0.911  |      | 0m       | N.D. | d     |
| 108) Cyclohexanone             | 14.700 | 14.693 | 0.921  |      | 0m       | N.D. | d     |
| 109) trans-1,4-Dichloro-2-b... | 14.855 | 14.856 | 0.931  |      | 0m       | N.D. | d     |
| 110) Pentachloroethane         | 15.559 | 15.559 | 0.975  |      | 0m       | N.D. | d     |
| 111) Benzyl chloride           | 16.097 | 16.100 | 1.009  |      | 0m       | N.D. | d     |
| 112) bis(2-Chloroisopropyl)... | 16.546 | 16.497 | 1.037  |      | 0m       | N.D. | d     |

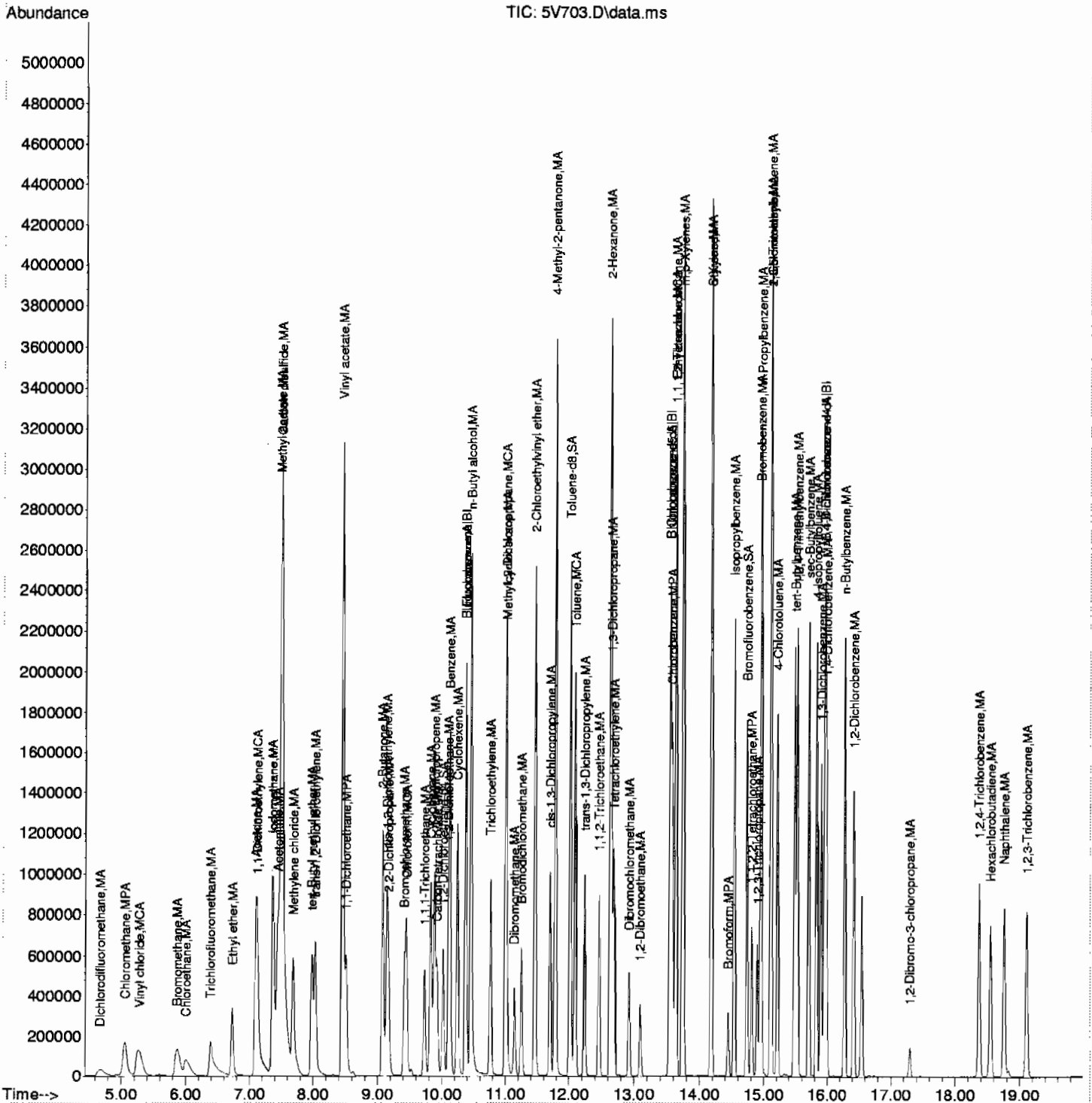
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V703.D  
Acq On : 31 Jan 2010 12:15 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100131-02|CCV|1|VOA|1|VOA8260BS|  
Misc : CCV 5g N/A SOIL MIX[A]  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 08:47:52 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :



## Continuing Calibration Summary

Client SDG: 10-1324

Instrument ID: VOA5.I

Injection Date 31-JAN-10 12:41

Data File: 013110V5\5V704.D

Init. Cal. Date(s) 08-JAN-10 13:40 - 08-JAN-10 20:59

Lab Sample ID W5VM100131-03 Quant Type ISTD

Method:VOA5-8260-010810.M

| Compound                    | AVERF / Amount | RF CCV  | Nominal CCV | Min RF | RF Q | %D / %Drift | Max | Drift Q | Curve Type |
|-----------------------------|----------------|---------|-------------|--------|------|-------------|-----|---------|------------|
| S 1,2-Dichloroethane-d4     | 0.2324         | 0.25538 |             | .01    |      | 9.88812     | 30  |         | Averaged   |
| S Toluene-d8                | 1.3636         | 1.36106 |             | .01    |      | -0.18627    | 30  |         | Averaged   |
| S Bromofluorobenzene        | 0.9541         | 1.08633 |             | .01    |      | 13.85913    | 30  |         | Averaged   |
| Acrolein                    | 0.0267         | 0.02441 |             | .01    |      | -8.57678    | 30  |         | Averaged   |
| Trichlorotrifluoroethane    | 0.0382         | 0.04967 |             | .01    |      | 30.02618    | 30  | *       | Averaged   |
| Allyl chloride              | 0.3168         | 0.36108 |             | .01    |      | 13.97727    | 30  |         | Averaged   |
| Acrylonitrile               | 0.0755         | 0.08278 |             | .01    |      | 9.64238     | 30  |         | Averaged   |
| 2-Chloro-1,3-butadiene      | 0.245          | 0.29753 |             | .01    |      | 21.44082    | 30  |         | Averaged   |
| Ethyl acetate               | 0.2299         | 0.25731 |             | .01    |      | 11.92258    | 40  |         | Averaged   |
| Propionitrile               | 0.0283         | 0.03325 |             | .01    |      | 17.49117    | 30  |         | Averaged   |
| Methacrylonitrile           | 0.1382         | 0.16569 |             | .01    |      | 19.89146    | 30  |         | Averaged   |
| Tetrahydrofuran             | 0.0724         | 0.08532 |             | .01    |      | 17.8453     | 30  |         | Averaged   |
| Isobutyl alcohol            | 0.0084         | 0.01103 |             | .01    |      | 31.30952    | 40  |         | Averaged   |
| Methyl methacrylate         | 0.1274         | 0.14959 |             | .01    |      | 17.41758    | 30  |         | Averaged   |
| 1,4-Dioxane                 | 0.0018         | 0.00211 |             | .01    |      | 17.22222    | 40  |         | Averaged   |
| 2-Nitropropane              | 250            | 293.03  | 250         |        |      | 17.212      | 30  |         | Linear     |
| Ethyl methacrylate          | 0.3365         | 0.44048 |             | .01    |      | 30.90045    | 30  | *       | Averaged   |
| cis-1,4-Dichloro-2-butene   | 0.1894         | 0.29829 |             | .01    |      | 57.49208    | 30  | *       | Averaged   |
| Cyclohexanone               | 1250           | 729.58  | 1250        |        |      | -41.6336    | 40  | *       | Linear     |
| trans-1,4-Dichloro-2-butene | 0.1815         | 0.28503 |             | .01    |      | 57.04132    | 30  | *       | Averaged   |
| Pentachloroethane           | 0.199          | 0.32022 |             | .01    |      | 60.91457    | 30  | *       | Averaged   |
| Benzyl chloride             | 250            | 313.24  | 250         |        |      | 25.296      | 30  |         | Linear     |
| bis(2-Chloroisopropyl)ether | 0.3332         | 0.446   |             | .01    |      | 33.85354    | 30  | *       | Averaged   |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V704.D  
Acq On : 31 Jan 2010 12:41 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100131-03|CCV|1|VOA|1|VOA8260Bs|  
Misc : CCV 5g N/A SOIL MIX[B]  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 01 08:49:34 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc  | Units |           |
|-------------------------------|--------|--------|--------|------|----------|-------|-------|-----------|
| Internal Standards            |        |        |        |      |          |       |       | Dev (Min) |
| 1) Fluorobenzene              | 10.375 | 10.375 | 1.000  | 96   | 1846900  | 50.00 | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547 | 13.547 | 1.000  | 117  | 1231006  | 50.00 | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.962 | 15.962 | 1.000  | 152  | 587419   | 50.00 | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.375 | 10.375 | 1.000  | 96   | 1846900  | 50.00 | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547 | 13.547 | 1.000  | 117  | 1231006  | 50.00 | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.962 | 15.962 | 1.000  | 152  | 587419   | 50.00 | ug/L  | 0.00      |
| System Monitoring Compounds   |        |        |        |      |          |       |       | Dev (Min) |
| 29) 1,2-Dichloroethane-d4     | 10.021 | 10.021 | 0.966  | 65   | 471662   | 54.95 | ug/L  | 0.00      |
| 43) Toluene-d8                | 12.016 | 12.016 | 0.887  | 98   | 1675476  | 49.91 | ug/L  | 0.00      |
| 61) Bromofluorobenzene        | 14.739 | 14.739 | 0.923  | 95   | 638128   | 56.93 | ug/L  | 0.00      |
| Target Compounds              |        |        |        |      |          |       |       | QValue    |
| 2) Dichlorodifluoromethane    | 0.000  | 4.689  | 0.000  |      | 0        | N.D.  |       |           |
| 3) Chloromethane              | 5.041  | 5.051  | 0.486  |      | 0m       | N.D.  | d     |           |
| 4) Vinyl chloride             | 5.303  | 5.283  | 0.511  |      | 0m       | N.D.  | d     |           |
| 5) Bromomethane               | 0.000  | 5.877  | 0.000  |      | 0        | N.D.  |       |           |
| 6) Chloroethane               | 0.000  | 6.018  | 0.000  |      | 0        | N.D.  |       |           |
| 7) Trichlorofluoromethane     | 0.000  | 6.391  | 0.000  |      | 0        | N.D.  |       |           |
| 8) Ethyl ether                | 6.733  | 6.733  | 0.649  |      | 0m       | N.D.  | d     |           |
| 9) Acetone                    | 7.100  | 7.100  | 0.684  |      | 0m       | N.D.  | d     |           |
| 10) 1,1-Dichloroethylene      | 7.111  | 7.125  | 0.685  |      | 0m       | N.D.  | d     |           |
| 11) Iodomethane               | 7.369  | 7.373  | 0.710  |      | 0m       | N.D.  | d     |           |
| 12) Acetonitrile              | 7.447  | 7.450  | 0.718  |      | 0m       | N.D.  | d     |           |
| 13) Methyl acetate            | 7.503  | 7.493  | 0.723  |      | 0m       | N.D.  | d     |           |
| 14) Carbon disulfide          | 7.549  | 7.511  | 0.728  |      | 0m       | N.D.  | d     |           |
| 15) Methylene chloride        | 7.694  | 7.691  | 0.742  |      | 0m       | N.D.  | d     |           |
| 16) tert-Butyl methyl ether   | 7.977  | 7.984  | 0.769  |      | 0m       | N.D.  | d     |           |
| 17) trans-1,2-Dichloroethy... | 8.030  | 8.030  | 0.774  |      | 0m       | N.D.  | d     |           |
| 18) Vinyl acetate             | 8.614  | 8.458  | 0.830  |      | 0m       | N.D.  | d     |           |
| 19) 1,1-Dichloroethane        | 8.511  | 8.511  | 0.820  |      | 0m       | N.D.  | d     |           |
| 20) 2-Butanone                | 9.091  | 9.077  | 0.876  |      | 0m       | N.D.  | d     |           |
| 21) cis-1,2-Dichloroethylene  | 9.091  | 9.144  | 0.876  |      | 0m       | N.D.  | d     |           |
| 22) 2,2-Dichloropropane       | 9.176  | 9.173  | 0.884  |      | 0m       | N.D.  | d     |           |
| 23) Bromochloromethane        | 0.000  | 9.417  | 0.000  |      | 0        | N.D.  |       |           |
| 24) Chloroform                | 9.456  | 9.452  | 0.911  |      | 0m       | N.D.  | d     |           |
| 25) 1,1,1-Trichloroethane     | 9.738  | 9.735  | 0.939  |      | 0m       | N.D.  | d     |           |
| 26) Cyclohexane               | 9.774  | 9.830  | 0.942  |      | 0m       | N.D.  | d     |           |
| 27) 1,1-Dichloropropene       | 9.880  | 9.887  | 0.952  |      | 0m       | N.D.  | d     |           |
| 28) Carbon tetrachloride      | 9.933  | 9.929  | 0.957  |      | 0m       | N.D.  | d     |           |
| 30) 1,2-Dichloroethane        | 10.103 | 10.103 | 0.974  |      | 0m       | N.D.  | d     |           |
| 31) Benzene                   | 10.124 | 10.127 | 0.976  |      | 0m       | N.D.  | d     |           |
| 32) Cyclohexene               | 10.255 | 10.248 | 0.988  |      | 0m       | N.D.  | d     |           |
| 33) n-Butyl alcohol           | 10.467 | 10.460 | 1.009  |      | 0m       | N.D.  | d     |           |
| 34) Trichloroethylene         | 10.771 | 10.768 | 1.038  |      | 0m       | N.D.  | d     |           |
| 35) 1,2-Dichloropropane       | 11.008 | 11.004 | 1.061  |      | 0m       | N.D.  | d     |           |
| 36) Methylcyclohexane         | 11.015 | 11.019 | 1.062  |      | 0m       | N.D.  | d     |           |
| 37) Dibromomethane            | 0.000  | 11.146 | 0.000  |      | 0        | N.D.  |       |           |
| 38) Bromodichloromethane      | 11.259 | 11.256 | 1.085  |      | 0m       | N.D.  | d     |           |
| 39) 2-Chloroethylvinyl ether  | 11.475 | 11.468 | 1.106  |      | 0m       | N.D.  | d     |           |
| 40) cis-1,3-Dichloropropylene | 11.698 | 11.705 | 1.127  |      | 0m       | N.D.  | d     |           |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V704.D  
Acq On : 31 Jan 2010 12:41 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100131-03|CCV|1|VOA|1|VOA8260Bs|  
Misc : CCV 5g N/A SOIL MIX[B]  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 01 08:49:34 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc        | Units |
|-------------------------------|--------|--------|--------|------|----------|-------------|-------|
| 42) 4-Methyl-2-pentanone      | 11.782 | 11.786 | 0.870  |      | 0m       | N.D.        | d     |
| 44) Toluene                   | 12.094 | 12.090 | 0.893  |      | 0m       | N.D.        | d     |
| 45) trans-1,3-Dichloroprop... | 12.242 | 12.239 | 0.904  |      | 0m       | N.D.        | d     |
| 46) 1,1,2-Trichloroethane     | 12.461 | 12.465 | 0.920  |      | 0m       | N.D.        | d     |
| 47) 2-Hexanone                | 12.635 | 12.631 | 0.933  |      | 0m       | N.D.        | d     |
| 48) 1,3-Dichloropropane       | 12.649 | 12.656 | 0.934  |      | 0m       | N.D.        | d     |
| 49) Tetrachloroethylene       | 12.691 | 12.691 | 0.937  |      | 0m       | N.D.        | d     |
| 50) Dibromochloromethane      | 12.935 | 12.928 | 0.955  |      | 0m       | N.D.        | d     |
| 51) 1,2-Dibromoethane         | 13.098 | 13.094 | 0.967  |      | 0m       | N.D.        | d     |
| 52) Chlorobenzene             | 13.582 | 13.579 | 1.003  |      | 0m       | N.D.        | d     |
| 53) 1,1,1,2-Tetrachloroethane | 13.632 | 13.636 | 1.006  |      | 0m       | N.D.        | d     |
| 54) Ethylbenzene              | 13.639 | 13.639 | 1.007  |      | 0m       | N.D.        | d     |
| 55) m,p-Xylenes               | 13.749 | 13.749 | 1.015  |      | 0m       | N.D.        | d     |
| 56) o-Xylene                  | 14.184 | 14.184 | 1.047  |      | 0m       | N.D.        | d     |
| 57) Styrene                   | 14.187 | 14.184 | 1.047  |      | 0m       | N.D.        | d     |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D.        |       |
| 60) Isopropylbenzene          | 14.541 | 14.537 | 0.911  |      | 0m       | N.D.        | d     |
| 62) 1,1,2,2-Tetrachloroethane | 14.803 | 14.810 | 0.927  |      | 0m       | N.D.        | d     |
| 63) 1,2,3-Trichloropropane    | 0.000  | 14.898 | 0.000  |      | 0        | N.D.        |       |
| 64) Bromobenzene              | 14.955 | 14.951 | 0.937  |      | 0m       | N.D.        | d     |
| 65) n-Propylbenzene           | 14.965 | 14.965 | 0.938  |      | 0m       | N.D.        | d     |
| 66) 1,3,5-Trimethylbenzene    | 15.110 | 15.114 | 0.947  |      | 0m       | N.D.        | d     |
| 67) 2-Chlorotoluene           | 15.117 | 15.117 | 0.947  |      | 0m       | N.D.        | d     |
| 68) 4-Chlorotoluene           | 15.216 | 15.216 | 0.953  |      | 0m       | N.D.        | d     |
| 69) tert-Butylbenzene         | 15.481 | 15.489 | 0.970  |      | 0m       | N.D.        | d     |
| 70) 1,2,4-Trimethylbenzene    | 15.527 | 15.527 | 0.973  |      | 0m       | N.D.        | d     |
| 71) sec-Butylbenzene          | 15.708 | 15.711 | 0.984  |      | 0m       | N.D.        | d     |
| 72) 4-Isopropyltoluene        | 15.832 | 15.832 | 0.992  |      | 0m       | N.D.        | d     |
| 73) 1,3-Dichlorobenzene       | 15.909 | 15.902 | 0.997  |      | 0m       | N.D.        | d     |
| 74) 1,4-Dichlorobenzene       | 15.987 | 15.991 | 1.002  |      | 0m       | N.D.        | d     |
| 75) n-Butylbenzene            | 16.277 | 16.277 | 1.020  |      | 0m       | N.D.        | d     |
| 76) 1,2-Dichlorobenzene       | 16.419 | 16.422 | 1.029  |      | 0m       | N.D.        | d     |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D.        |       |
| 78) 1,2,4-Trichlorobenzene    | 18.371 | 18.371 | 1.151  |      | 0m       | N.D.        | d     |
| 79) Hexachlorobutadiene       | 18.555 | 18.548 | 1.162  |      | 0m       | N.D.        | d     |
| 80) Naphthalene               | 18.769 | 18.762 | 1.176  |      | 0m       | N.D.        | d     |
| 81) 1,2,3-Trichlorobenzene    | 19.116 | 19.116 | 1.198  |      | 0m       | N.D.        | d     |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D.        |       |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D.        |       |
| 85) Acrolein                  | 6.924  | 6.924  | 0.667  | 56   | 225398   | 228.94 ug/L | 87    |
| 86) Trichlorotrifluoroethane  | 7.086  | 7.079  | 0.683  | 85   | 458713   | 325.10 ug/L | 87    |
| 87) Isopropyl Alcohol         | 7.337  | 7.175  | 0.707  | 45   | 249      | N.D.        |       |
| 88) Allyl chloride            | 7.549  | 7.546  | 0.728  | 41   | 3334391  | 284.96 ug/L | 94    |
| 89) tert-Butyl Alcohol        | 7.666  | 7.673  | 0.739  | 59   | 116      | N.D.        |       |
| 90) Acrylonitrile             | 7.931  | 7.928  | 0.764  | 53   | 764421   | 274.09 ug/L | 99    |
| 91) Isopropyl ether           | 8.487  | 8.483  | 0.818  | 45   | 298      | N.D.        |       |
| 92) 2-Chloro-1,3-butadiene    | 8.621  | 8.617  | 0.831  | 53   | 549517   | 60.73 ug/L  | 95    |
| 93) Ethyl tert-butyl ether    | 9.091  | 8.890  | 0.876  | 59   | 1184     | N.D.        |       |
| 94) Ethyl acetate             | 9.091  | 9.088  | 0.876  | 43   | 2376127  | 279.86 ug/L | 98    |
| 95) Propionitrile             | 9.155  | 9.148  | 0.882  | 54   | 307039   | 294.22 ug/L | 100   |
| 96) Methacrylonitrile         | 9.332  | 9.332  | 0.899  | 41   | 1530082  | 299.82 ug/L | 98    |
| 97) Tetrahydrofuran           | 9.466  | 9.466  | 0.912  | 42   | 787907   | 294.66 ug/L | 98    |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V704.D  
Acq On : 31 Jan 2010 12:41 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100131-03|CCV|1|VOA|1|VOA8260Bs|  
Misc : CCV 5g N/A SOIL MIX[B]  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 01 08:49:34 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

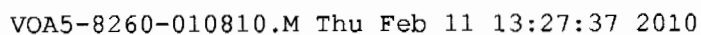
SubList :

| Compound                       | R.T.   | Exp RT | Rel RT | QIon | Response | Conc    | Units |    |
|--------------------------------|--------|--------|--------|------|----------|---------|-------|----|
| 98) Isobutyl alcohol           | 9.770  | 9.770  | 0.942  | 41   | 1018523  | 3270.83 | ug/L  | 98 |
| 99) Methyl tert-amyl ether     | 0.000  | 10.138 | 0.000  |      | 0        | N.D.    |       |    |
| 100) Methyl methacrylate       | 10.973 | 10.969 | 1.058  | 69   | 1381395  | 293.52  | ug/L  | 92 |
| 101) 1,4-Dioxane               | 11.089 | 11.089 | 1.069  | 88   | 194686   | 2858.46 | ug/L  | 98 |
| 102) 2-Nitropropane            | 11.446 | 11.443 | 1.103  | 43   | 723452   | 293.03  | ug/L  | 99 |
| 104) Ethyl methacrylate        | 12.235 | 12.235 | 0.903  | 69   | 2711172  | 327.26  | ug/L  | 94 |
| 106) 1-Chlorohexane            | 0.000  | 13.438 | 0.000  |      | 0        | N.D.    |       |    |
| 107) cis-1,4-Dichloro-2-butene | 14.573 | 14.573 | 0.913  | 53   | 876111   | 393.65  | ug/L  | 97 |
| 108) Cyclohexanone             | 14.689 | 14.693 | 0.920  | 42   | 478621   | 729.58  | ug/L  | 91 |
| 109) trans-1,4-Dichloro-2-b... | 14.856 | 14.856 | 0.931  | 53   | 837163   | 392.54  | ug/L  | 90 |
| 110) Pentachloroethane         | 15.559 | 15.559 | 0.975  | 167  | 940528   | 402.33  | ug/L  | 92 |
| 111) Benzyl chloride           | 16.100 | 16.100 | 1.009  | 91   | 3688889  | 313.24  | ug/L  | 97 |
| 112) bis(2-Chloroisopropyl)... | 16.496 | 16.497 | 1.033  | 45   | 1309938  | 334.64  | ug/L  | 95 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

```
Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V704.D  
Acq On : 31 Jan 2010 12:41 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |W5VM100131-03|CCV|1|VOA|1|VOA8260Bs|  
Misc : CCV 5g N/A SOIL MIX[B]  
ALS Vial : 4 Sample Multiplier: 1
```

SubList :



# Quality Control Data



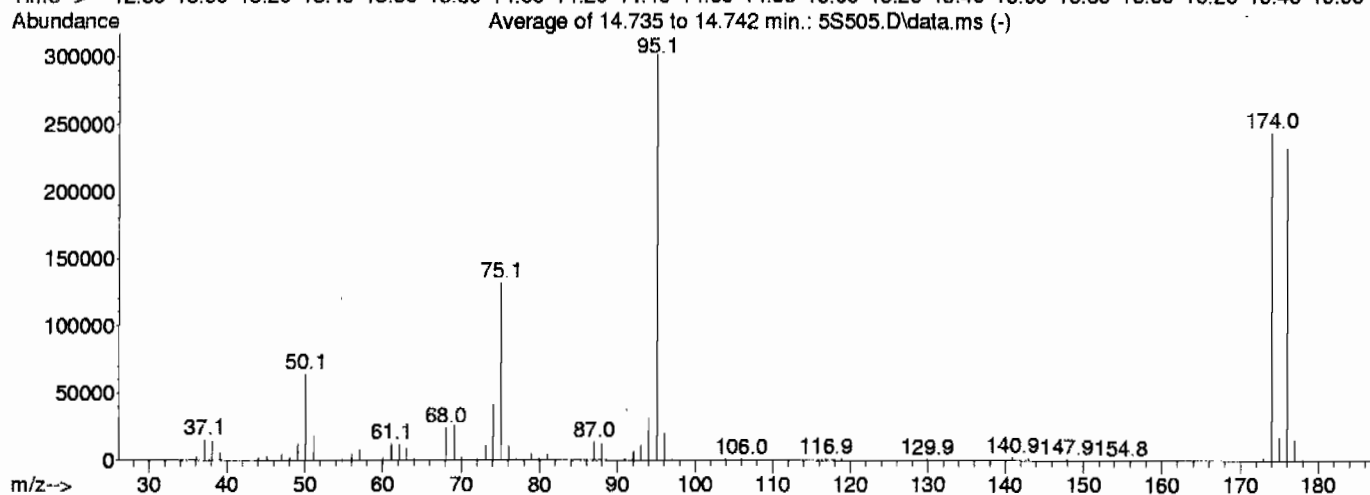
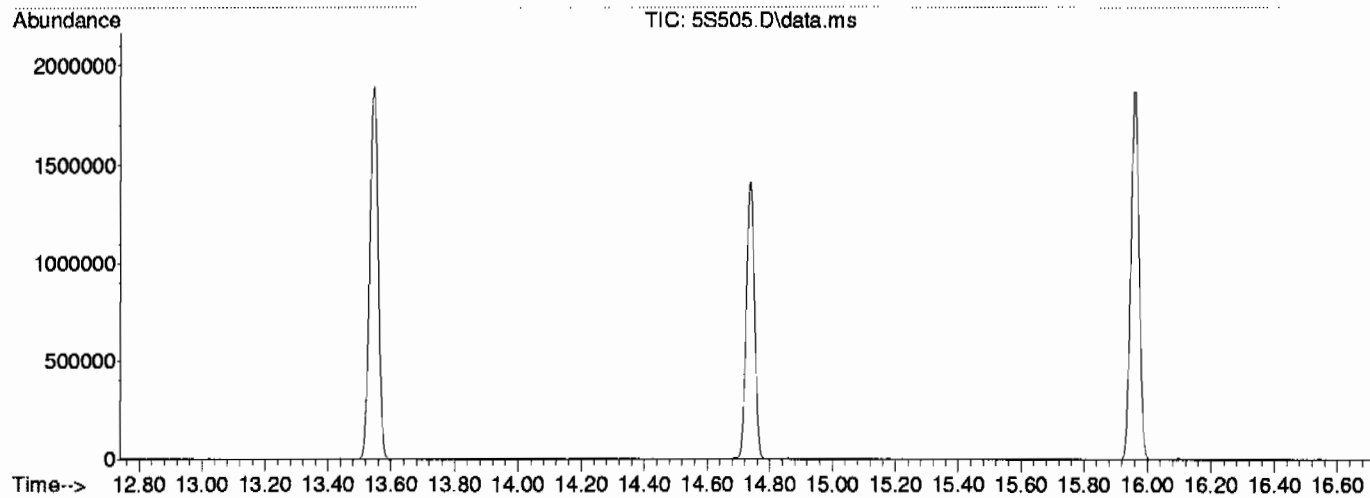
Tune Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\010810V5\  
Data File : 5S505.D  
Acq On : 8 Jan 2010 1:05 pm  
Operator : DXK1  
Sample : |UVM091117-02|BFB|1|VOA|1|  
Misc : GEL 5mL N/A  
ALS Vial : 1 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Title : Volatile Organics 8260B  
Last Update : Mon Jan 11 08:56:29 2010

SubList :



AutoFind: Scans 2439, 2440, 2441; Background Corrected with Scan 2425

| Target<br>Mass | Rel. to<br>Mass | Lower<br>Limit% | Upper<br>Limit% | Rel.<br>Abn% | Raw<br>Abn | Result<br>Pass/Fail |
|----------------|-----------------|-----------------|-----------------|--------------|------------|---------------------|
| 50             | 95              | 15              | 40              | 21.1         | 63680      | PASS                |
| 75             | 95              | 30              | 60              | 43.7         | 132048     | PASS                |
| 95             | 95              | 100             | 100             | 100.0        | 301888     | PASS                |
| 96             | 95              | 5               | 9               | 6.8          | 20637      | PASS                |
| 173            | 174             | 0.00            | 2               | 0.7          | 1750       | PASS                |
| 174            | 95              | 50              | 100             | 80.9         | 244224     | PASS                |
| 175            | 174             | 5               | 9               | 7.1          | 17424      | PASS                |
| 176            | 174             | 95              | 101             | 95.3         | 232725     | PASS                |
| 177            | 176             | 5               | 9               | 6.6          | 15330      | PASS                |

Tune Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\011110V5\  
Data File : 5T102.D  
Acq On : 11 Jan 2010 10:13 am  
Operator : DXK1  
Sample : |UVM091117-02|BFB|1|VOA|1|  
Misc : GEL 5mL N/A  
ALS Vial : 2 Sample Multiplier: 1

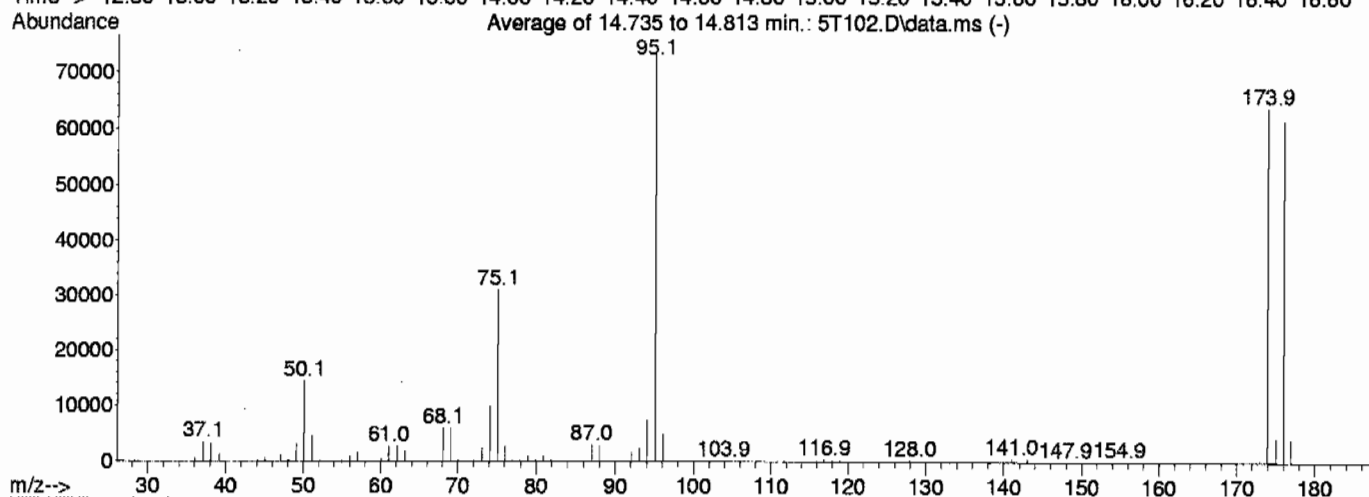
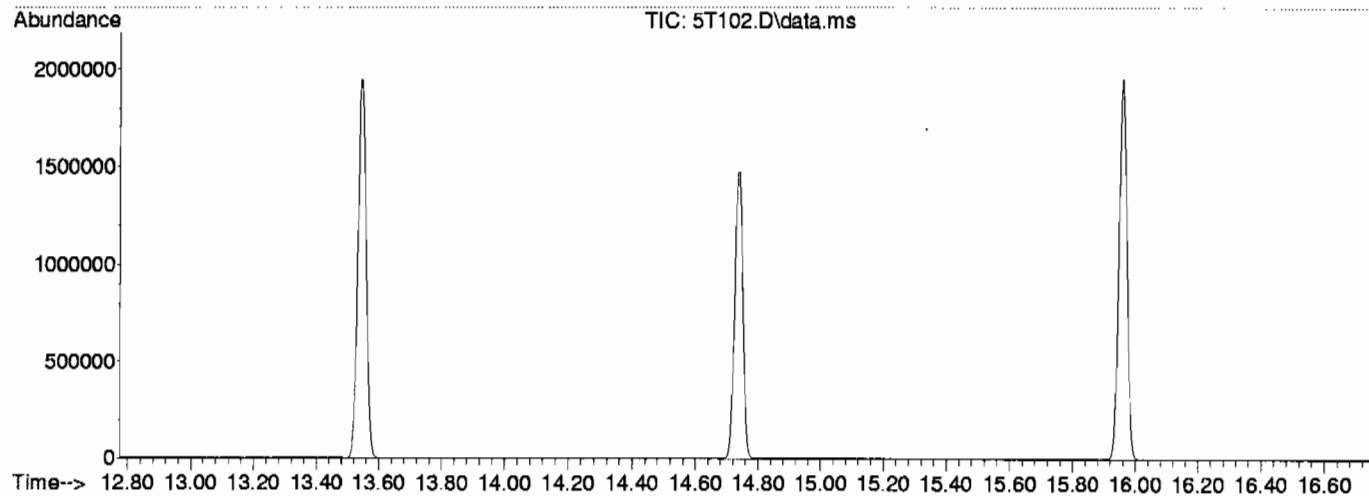
Integration File: default.P

Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Title : Volatile Organics 8260B

SubList :

Last Update : Mon Jan 11 08:56:29 2010



Spectrum Information: Average of 14.735 to 14.813 min.

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|-------------|--------------|--------------|--------------|-----------|---------|------------------|
| 50          | 95           | 15           | 40           | 19.7      | 14365   | PASS             |
| 75          | 95           | 30           | 60           | 42.7      | 31141   | PASS             |
| 95          | 95           | 100          | 100          | 100.0     | 73000   | PASS             |
| 96          | 95           | 5            | 9            | 6.8       | 4941    | PASS             |
| 173         | 174          | 0.00         | 2            | 0.6       | 404     | PASS             |
| 174         | 95           | 50           | 100          | 87.3      | 63742   | PASS             |
| 175         | 174          | 5            | 9            | 6.8       | 4364    | PASS             |
| 176         | 174          | 95           | 101          | 96.7      | 61653   | PASS             |
| 177         | 176          | 5            | 9            | 6.5       | 3989    | PASS             |

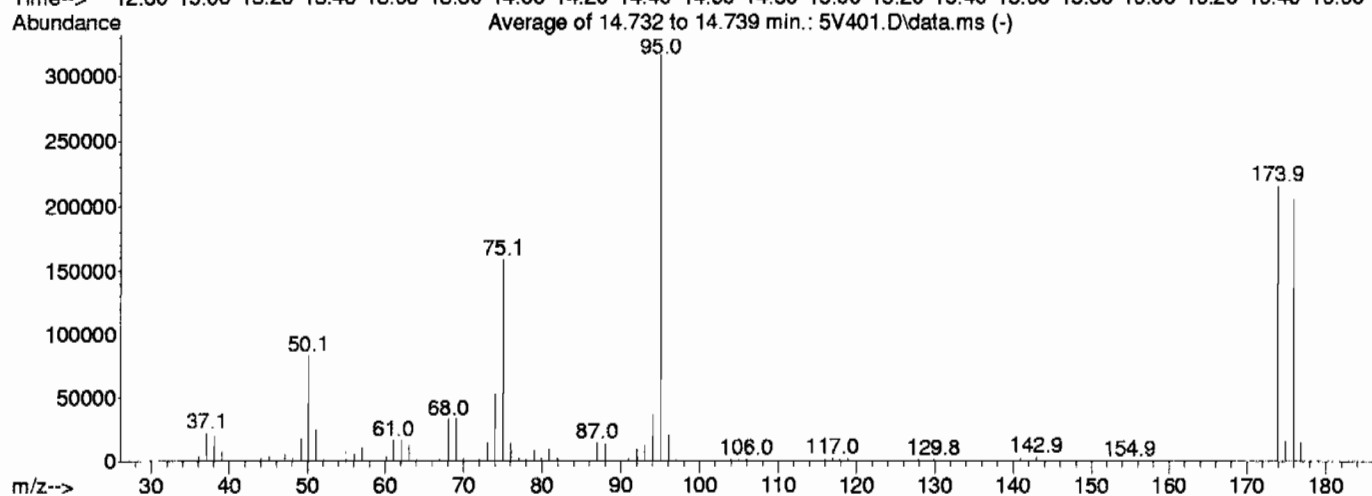
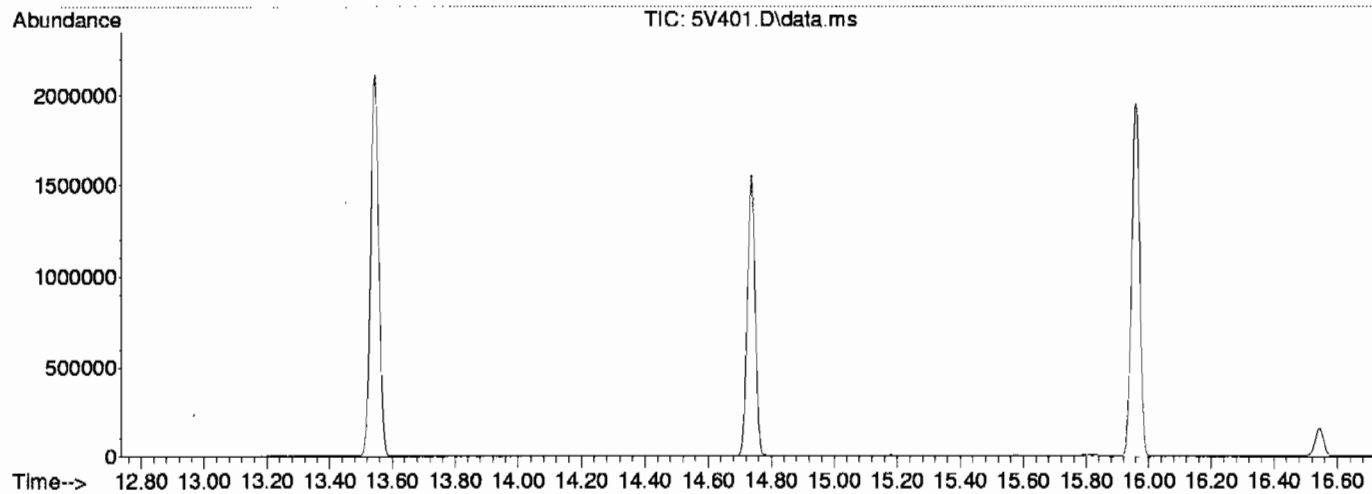
Tune Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V401.D  
Acq On : 28 Jan 2010 9:18 am  
Operator : DXK1  
Sample : |UVM091216-10|BFB|1|VOA|1|  
Misc : GEL 5mL N/A  
ALS Vial : 1 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Title : Volatile Organics 8260B  
Last Update : Mon Jan 11 08:56:29 2010

SubList :



AutoFind: Scans 2438, 2439, 2440; Background Corrected with Scan 2424

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|-------------|--------------|--------------|--------------|-----------|---------|------------------|
| 50          | 95           | 15           | 40           | 26.1      | 82528   | PASS             |
| 75          | 95           | 30           | 60           | 50.0      | 158123  | PASS             |
| 95          | 95           | 100          | 100          | 100.0     | 316288  | PASS             |
| 96          | 95           | 5            | 9            | 6.5       | 20635   | PASS             |
| 173         | 174          | 0.00         | 2            | 0.6       | 1280    | PASS             |
| 174         | 95           | 50           | 100          | 68.0      | 215189  | PASS             |
| 175         | 174          | 5            | 9            | 7.1       | 15332   | PASS             |
| 176         | 174          | 95           | 101          | 95.3      | 205163  | PASS             |
| 177         | 176          | 5            | 9            | 7.2       | 14750   | PASS             |

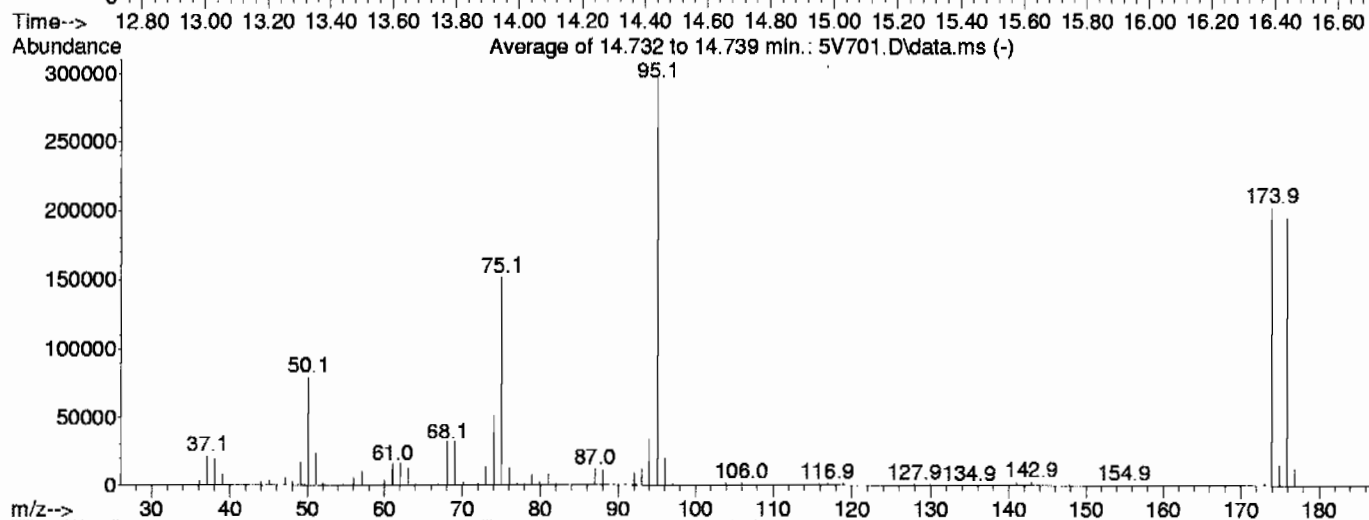
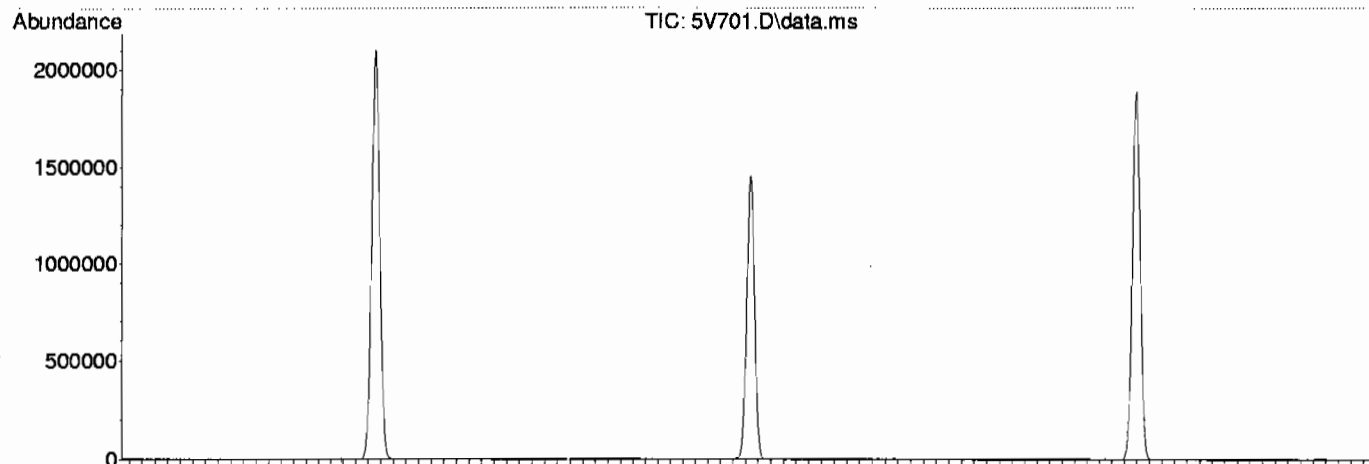
Tune Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V701.D  
Acq On : 31 Jan 2010 11:23 am  
Operator : DXK1  
Sample : |UVM091216-10|BFB|1|VOA|1|  
Misc : GEL 5mL N/A  
ALS Vial : 1 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Title : Volatile Organics 8260B  
Last Update : Mon Jan 11 08:56:29 2010

SubList :



AutoFind: Scans 2438, 2439, 2440; Background Corrected with Scan 2424

| Target | Rel. to | Lower  | Upper  | Rel.  | Raw    | Result    |
|--------|---------|--------|--------|-------|--------|-----------|
| Mass   | Mass    | Limit% | Limit% | Abn%  | Abn    | Pass/Fail |
| 50     | 95      | 15     | 40     | 26.9  | 79459  | PASS      |
| 75     | 95      | 30     | 60     | 51.1  | 151061 | PASS      |
| 95     | 95      | 100    | 100    | 100.0 | 295829 | PASS      |
| 96     | 95      | 5      | 9      | 6.6   | 19539  | PASS      |
| 173    | 174     | 0.00   | 2      | 0.7   | 1510   | PASS      |
| 174    | 95      | 50     | 100    | 68.3  | 202197 | PASS      |
| 175    | 174     | 5      | 9      | 7.4   | 15060  | PASS      |
| 176    | 174     | 95     | 101    | 96.2  | 194603 | PASS      |
| 177    | 176     | 5      | 9      | 6.4   | 12465  | PASS      |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324

Lab Sample ID: 1202026235

Client Sample: QC for batch 946006

Client ID: MB for batch 946006

Batch ID: 946008

Run Date: 01/28/2010 11:02

Prep Date: 01/28/2009 08:00

Data File: 012810V5SV405BL.D

Client: LANL010

Method: SW846 8260B

Inst: VOA5.I

Analyst: DXK1

Aliquot: 5 g

Column: DB-624

Matrix: SOIL

Project: QC

SOP Ref: GL-OA-E-038

Dilution: 1

Purge Vol: 5 mL

Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.00   | ug/kg | 0.340   | 1.00    |
| 74-87-3    | Chloromethane               | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-01-4    | Vinyl chloride              | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-83-9    | Bromomethane                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-00-3    | Chloroethane                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 67-64-1    | Acetone                     | U         | 5.00   | ug/kg | 1.66    | 5.00    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-88-4    | Iodomethane                 | U         | 5.00   | ug/kg | 1.60    | 5.00    |
| 75-09-2    | Methylene chloride          | U         | 5.00   | ug/kg | 2.00    | 5.00    |
| 75-15-0    | Carbon disulfide            | U         | 5.00   | ug/kg | 1.25    | 5.00    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 78-93-3    | 2-Butanone                  | U         | 5.00   | ug/kg | 1.50    | 5.00    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 67-66-3    | Chloroform                  | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-97-5    | Bromochloromethane          | U         | 1.00   | ug/kg | 0.330   | 1.00    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 71-43-2    | Benzene                     | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 79-01-6    | Trichloroethylene           | U         | 1.00   | ug/kg | 0.330   | 1.00    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-27-4    | Bromodichloromethane        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-95-3    | Dibromomethane              | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.00   | ug/kg | 1.25    | 5.00    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-88-3   | Toluene                     | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 591-78-6   | 2-Hexanone                  | U         | 5.00   | ug/kg | 1.50    | 5.00    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 124-48-1   | Dibromochloromethane        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-90-7   | Chlorobenzene               | U         | 1.00   | ug/kg | 0.300   | 1.00    |

# **Volatile Certificate of Analysis Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 1202026235  
 Client Sample: QC for batch 946006  
 Client ID: MB for batch 946006  
 Batch ID: 946008  
 Run Date: 01/28/2010 11:02  
 Prep Date: 01/28/2009 08:00  
 Data File: 012810V5SV405BL.D

Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: SOIL  
 Project: QC  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.00   | ug/kg | 0.300   | 2.00    |
| 95-47-6     | o-Xylene                              | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 100-42-5    | Styrene                               | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-25-2     | Bromoform                             | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-86-1    | Bromobenzene                          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.00   | ug/kg | 1.60    | 5.00    |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.00   | ug/kg | 0.300   | 1.00    |

## **Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V405BL.D  
Acq On : 28 Jan 2010 11:02 am  
Operator : DXK1  
InstName : VOA5  
Sample : |1202026235|946008|1|VOA|1|VOA8260BS|  
Misc : BLANK 5g N/A SOIL  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 28 12:53:10 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                           | R.T.   | Exp RT         | Rel RT   | QIon | Response | Conc  | Units  | Dev (Min) |
|------------------------------------|--------|----------------|----------|------|----------|-------|--------|-----------|
| <b>Internal Standards</b>          |        |                |          |      |          |       |        |           |
| 1) Fluorobenzene                   | 10.375 | 10.375         | 1.000    | 96   | 1864968  | 50.00 | ug/L   | 0.00      |
| 41) Chlorobenzene-d5               | 13.547 | 13.547         | 1.000    | 117  | 1206418  | 50.00 | ug/L   | 0.00      |
| 58) 1,4-Dichlorobenzene-d4         | 15.959 | 15.962         | 1.000    | 152  | 551655   | 50.00 | ug/L   | 0.00      |
| 82) B Fluorobenzene                | 10.375 | 10.375         | 1.000    | 96   | 1864968  | 50.00 | ug/L   | 0.00      |
| 103) B Chlorobenzene-d5            | 13.547 | 13.547         | 1.000    | 117  | 1206418  | 50.00 | ug/L   | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4      | 15.959 | 15.962         | 1.000    | 152  | 551655   | 50.00 | ug/L   | 0.00      |
| <b>System Monitoring Compounds</b> |        |                |          |      |          |       |        |           |
| 29) 1,2-Dichloroethane-d4          | 10.018 | 10.021         | 0.966    | 65   | 473561   | 54.63 | ug/L   | 0.00      |
| Spiked Amount                      | 50.000 | Range 68 - 131 | Recovery | =    | 109.26%  |       |        |           |
| 43) Toluene-d8                     | 12.016 | 12.016         | 0.887    | 98   | 1721759  | 52.33 | ug/L   | 0.00      |
| Spiked Amount                      | 50.000 | Range 75 - 129 | Recovery | =    | 104.66%  |       |        |           |
| 61) Bromofluorobenzene             | 14.739 | 14.739         | 0.924    | 95   | 591574   | 56.20 | ug/L   | 0.00      |
| Spiked Amount                      | 50.000 | Range 68 - 133 | Recovery | =    | 112.40%  |       |        |           |
| <b>Target Compounds</b>            |        |                |          |      |          |       |        |           |
| Compound                           | R.T.   | Exp RT         | Rel RT   | QIon | Response | Conc  | Units  | QValue    |
| 2) Dichlorodifluoromethane         | 0.000  | 4.689          | 0.000    |      | 0        | N.D.  |        |           |
| 3) Chloromethane                   | 5.091  | 5.051          | 0.491    | 50   | 1288     | N.D.  |        |           |
| 4) Vinyl chloride                  | 5.273  | 5.283          | 0.508    | 62   | 182      | N.D.  |        |           |
| 5) Bromomethane                    | 0.000  | 5.877          | 0.000    |      | 0        | N.D.  |        |           |
| 6) Chloroethane                    | 0.000  | 6.018          | 0.000    |      | 0        | N.D.  |        |           |
| 7) Trichlorofluoromethane          | 0.000  | 6.391          | 0.000    |      | 0        | N.D.  |        |           |
| 8) Ethyl ether                     | 0.000  | 6.733          | 0.000    |      | 0        | N.D.  |        |           |
| 9) Acetone                         | 7.115  | 7.100          | 0.686    | 43   | 3465     | N.D.  |        |           |
| 10) 1,1-Dichloroethylene           | 0.000  | 7.125          | 0.000    |      | 0        | N.D.  |        |           |
| 11) Iodomethane                    | 0.000  | 7.373          | 0.000    |      | 0        | N.D.  |        |           |
| 12) Acetonitrile                   | 7.461  | 7.450          | 0.719    | 41   | 707      | N.D.  |        |           |
| 13) Methyl acetate                 | 7.500  | 7.493          | 0.723    | 43   | 231      | N.D.  |        |           |
| 14) Carbon disulfide               | 7.525  | 7.511          | 0.725    | 76   | 965      | N.D.  |        |           |
| 15) Methylene chloride             | 7.691  | 7.691          | 0.741    | 84   | 6623     | N.D.  |        |           |
| 16) tert-Butyl methyl ether        | 0.000  | 7.984          | 0.000    |      | 0        | N.D.  |        |           |
| 17) trans-1,2-Dichloroethy...      | 0.000  | 8.030          | 0.000    |      | 0        | N.D.  |        |           |
| 18) Vinyl acetate                  | 8.317  | 8.458          | 0.802    | 43   | 2543     | N.D.  |        |           |
| 19) 1,1-Dichloroethane             | 0.000  | 8.511          | 0.000    |      | 0        | N.D.  |        |           |
| 20) 2-Butanone                     | 9.077  | 9.077          | 0.875    | 43   | 498      | N.D.  |        |           |
| 21) cis-1,2-Dichloroethylene       | 0.000  | 9.144          | 0.000    |      | 0        | N.D.  |        |           |
| 22) 2,2-Dichloropropane            | 0.000  | 9.173          | 0.000    |      | 0        | N.D.  |        |           |
| 23) Bromochloromethane             | 0.000  | 9.417          | 0.000    |      | 0        | N.D.  |        |           |
| 24) Chloroform                     | 0.000  | 9.452          | 0.000    |      | 0        | N.D.  |        |           |
| 25) 1,1,1-Trichloroethane          | 0.000  | 9.735          | 0.000    |      | 0        | N.D.  |        |           |
| 26) Cyclohexane                    | 0.000  | 9.830          | 0.000    |      | 0        | N.D.  |        |           |
| 27) 1,1-Dichloropropene            | 0.000  | 9.887          | 0.000    |      | 0        | N.D.  |        |           |
| 28) Carbon tetrachloride           | 0.000  | 9.929          | 0.000    |      | 0        | N.D.  |        |           |
| 30) 1,2-Dichloroethane             | 0.000  | 10.103         | 0.000    |      | 0        | N.D.  |        |           |
| 31) Benzene                        | 10.131 | 10.127         | 0.976    | 78   | 115      | N.D.  |        |           |
| 32) Cyclohexene                    | 0.000  | 10.248         | 0.000    |      | 0        | N.D.  |        |           |
| 33) n-Butyl alcohol                | 10.474 | 10.460         | 1.010    | 56   | 112      | 98.07 | ug/L # | 15        |
| 34) Trichloroethylene              | 0.000  | 10.768         | 0.000    |      | 0        | N.D.  |        |           |
| 35) 1,2-Dichloropropane            | 0.000  | 11.004         | 0.000    |      | 0        | N.D.  |        |           |
| 36) Methylcyclohexane              | 0.000  | 11.019         | 0.000    |      | 0        | N.D.  |        |           |
| 37) Dibromomethane                 | 0.000  | 11.146         | 0.000    |      | 0        | N.D.  |        |           |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V405BL.D  
Acq On : 28 Jan 2010 11:02 am  
Operator : DXK1  
InstName : VOA5  
Sample : |1202026235|946008|1|VOA|1|VOA8260BS|  
Misc : BLANK 5g N/A SOIL  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 28 12:53:10 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|-------------------------------|--------|--------|--------|------|----------|------|-------|
| 38) Bromodichloromethane      | 0.000  | 11.256 | 0.000  |      | 0        | N.D. |       |
| 39) 2-Chloroethylvinyl ether  | 0.000  | 11.468 | 0.000  |      | 0        | N.D. |       |
| 40) cis-1,3-Dichloropropylene | 0.000  | 11.705 | 0.000  |      | 0        | N.D. |       |
| 42) 4-Methyl-2-pentanone      | 0.000  | 11.786 | 0.000  |      | 0        | N.D. |       |
| 44) Toluene                   | 12.094 | 12.090 | 0.893  | 91   | 1026     | N.D. |       |
| 45) trans-1,3-Dichloroprop... | 0.000  | 12.239 | 0.000  |      | 0        | N.D. |       |
| 46) 1,1,2-Trichloroethane     | 0.000  | 12.465 | 0.000  |      | 0        | N.D. |       |
| 47) 2-Hexanone                | 12.645 | 12.631 | 0.933  | 43   | 1763     | N.D. |       |
| 48) 1,3-Dichloropropane       | 0.000  | 12.656 | 0.000  |      | 0        | N.D. |       |
| 49) Tetrachloroethylene       | 0.000  | 12.691 | 0.000  |      | 0        | N.D. |       |
| 50) Dibromochloromethane      | 0.000  | 12.928 | 0.000  |      | 0        | N.D. |       |
| 51) 1,2-Dibromoethane         | 0.000  | 13.094 | 0.000  |      | 0        | N.D. |       |
| 52) Chlorobenzene             | 13.583 | 13.579 | 1.003  | 112  | 138      | N.D. |       |
| 53) 1,1,1,2-Tetrachloroethane | 0.000  | 13.636 | 0.000  |      | 0        | N.D. |       |
| 54) Ethylbenzene              | 13.643 | 13.639 | 1.007  | 91   | 276      | N.D. |       |
| 55) m,p-Xylenes               | 13.749 | 13.749 | 1.015  | 106  | 121      | N.D. |       |
| 56) o-Xylene                  | 14.173 | 14.184 | 1.046  | 106  | 110      | N.D. |       |
| 57) Styrene                   | 14.180 | 14.184 | 1.047  | 104  | 124      | N.D. |       |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D. |       |
| 60) Isopropylbenzene          | 14.746 | 14.537 | 0.924  | 105  | 124      | N.D. |       |
| 62) 1,1,2,2-Tetrachloroethane | 0.000  | 14.810 | 0.000  |      | 0        | N.D. |       |
| 63) 1,2,3-Trichloropropane    | 0.000  | 14.898 | 0.000  |      | 0        | N.D. |       |
| 64) Bromobenzene              | 0.000  | 14.951 | 0.000  |      | 0        | N.D. |       |
| 65) n-Propylbenzene           | 14.965 | 14.965 | 0.938  | 91   | 1057     | N.D. |       |
| 66) 1,3,5-Trimethylbenzene    | 15.117 | 15.114 | 0.947  | 105  | 227      | N.D. |       |
| 67) 2-Chlorotoluene           | 0.000  | 15.117 | 0.000  |      | 0        | N.D. |       |
| 68) 4-Chlorotoluene           | 15.223 | 15.216 | 0.954  | 91   | 758      | N.D. |       |
| 69) tert-Butylbenzene         | 0.000  | 15.489 | 0.000  |      | 0        | N.D. |       |
| 70) 1,2,4-Trimethylbenzene    | 15.524 | 15.527 | 0.973  | 105  | 854      | N.D. |       |
| 71) sec-Butylbenzene          | 15.711 | 15.711 | 0.984  | 105  | 112      | N.D. |       |
| 72) 4-Isopropyltoluene        | 15.832 | 15.832 | 0.992  | 119  | 253      | N.D. |       |
| 73) 1,3-Dichlorobenzene       | 15.902 | 15.902 | 0.996  | 146  | 473      | N.D. |       |
| 74) 1,4-Dichlorobenzene       | 15.977 | 15.991 | 1.001  | 146  | 1511     | N.D. |       |
| 75) n-Butylbenzene            | 16.281 | 16.277 | 1.020  | 91   | 562      | N.D. |       |
| 76) 1,2-Dichlorobenzene       | 16.429 | 16.422 | 1.029  | 146  | 396      | N.D. |       |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D. |       |
| 78) 1,2,4-Trichlorobenzene    | 18.378 | 18.371 | 1.152  | 180  | 983      | N.D. |       |
| 79) Hexachlorobutadiene       | 18.563 | 18.548 | 1.163  | 225  | 120      | N.D. |       |
| 80) Naphthalene               | 18.769 | 18.762 | 1.176  | 128  | 2850     | N.D. |       |
| 81) 1,2,3-Trichlorobenzene    | 19.123 | 19.116 | 1.198  | 180  | 379      | N.D. |       |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D. |       |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D. |       |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D. |       |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D. |       |
| 87) Isopropyl Alcohol         | 0.000  | 7.175  | 0.000  |      | 0        | N.D. |       |
| 88) Allyl chloride            | 7.546  | 7.546  | 0.727  | 41   | 1191     | N.D. |       |
| 89) tert-Butyl Alcohol        | 0.000  | 7.673  | 0.000  |      | 0        | N.D. |       |
| 90) Acrylonitrile             | 7.928  | 7.928  | 0.764  | 53   | 122      | N.D. |       |
| 91) Isopropyl ether           | 0.000  | 8.483  | 0.000  |      | 0        | N.D. |       |
| 92) 2-Chloro-1,3-butadiene    | 0.000  | 8.617  | 0.000  |      | 0        | N.D. |       |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D. |       |
| 94) Ethyl acetate             | 9.091  | 9.088  | 0.876  | 43   | 1896     | N.D. |       |



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V405BL.D  
Acq On : 28 Jan 2010 11:02 am  
Operator : DXK1  
InstName : VOA5  
Sample : |1202026235|946008|1|VOA|1|VOA8260BS|  
Misc : BLANK 5g N/A SOIL  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 28 12:53:10 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|--------|--------|--------|------|----------|------|-------|
| 95) Propionitrile              | 0.000  | 9.148  | 0.000  |      | 0        | N.D. |       |
| 96) Methacrylonitrile          | 9.332  | 9.332  | 0.899  | 41   | 517      | N.D. |       |
| 97) Tetrahydrofuran            | 9.466  | 9.466  | 0.912  | 42   | 1741     | N.D. |       |
| 98) Isobutyl alcohol           | 9.795  | 9.770  | 0.944  | 41   | 107      | N.D. |       |
| 99) Methyl tert-amyl ether     | 0.000  | 10.138 | 0.000  |      | 0        | N.D. |       |
| 100) Methyl methacrylate       | 10.980 | 10.969 | 1.058  | 69   | 132      | N.D. |       |
| 101) 1,4-Dioxane               | 0.000  | 11.089 | 0.000  |      | 0        | N.D. |       |
| 102) 2-Nitropropane            | 0.000  | 11.443 | 0.000  |      | 0        | N.D. |       |
| 104) Ethyl methacrylate        | 12.235 | 12.235 | 0.903  | 69   | 1227     | N.D. |       |
| 106) 1-Chlorohexane            | 0.000  | 13.438 | 0.000  |      | 0        | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 14.573 | 14.573 | 0.913  | 53   | 287      | N.D. |       |
| 108) Cyclohexanone             | 0.000  | 14.693 | 0.000  |      | 0m       | N.D. | d     |
| 109) trans-1,4-Dichloro-2-b... | 14.859 | 14.856 | 0.931  | 53   | 554      | N.D. |       |
| 110) Pentachloroethane         | 0.000  | 15.559 | 0.000  |      | 0        | N.D. |       |
| 111) Benzyl chloride           | 0.000  | 16.100 | 0.000  |      | 0m       | N.D. | d     |
| 112) bis(2-Chloroisopropyl)... | 16.493 | 16.497 | 1.033  | 45   | 2149     | N.D. |       |

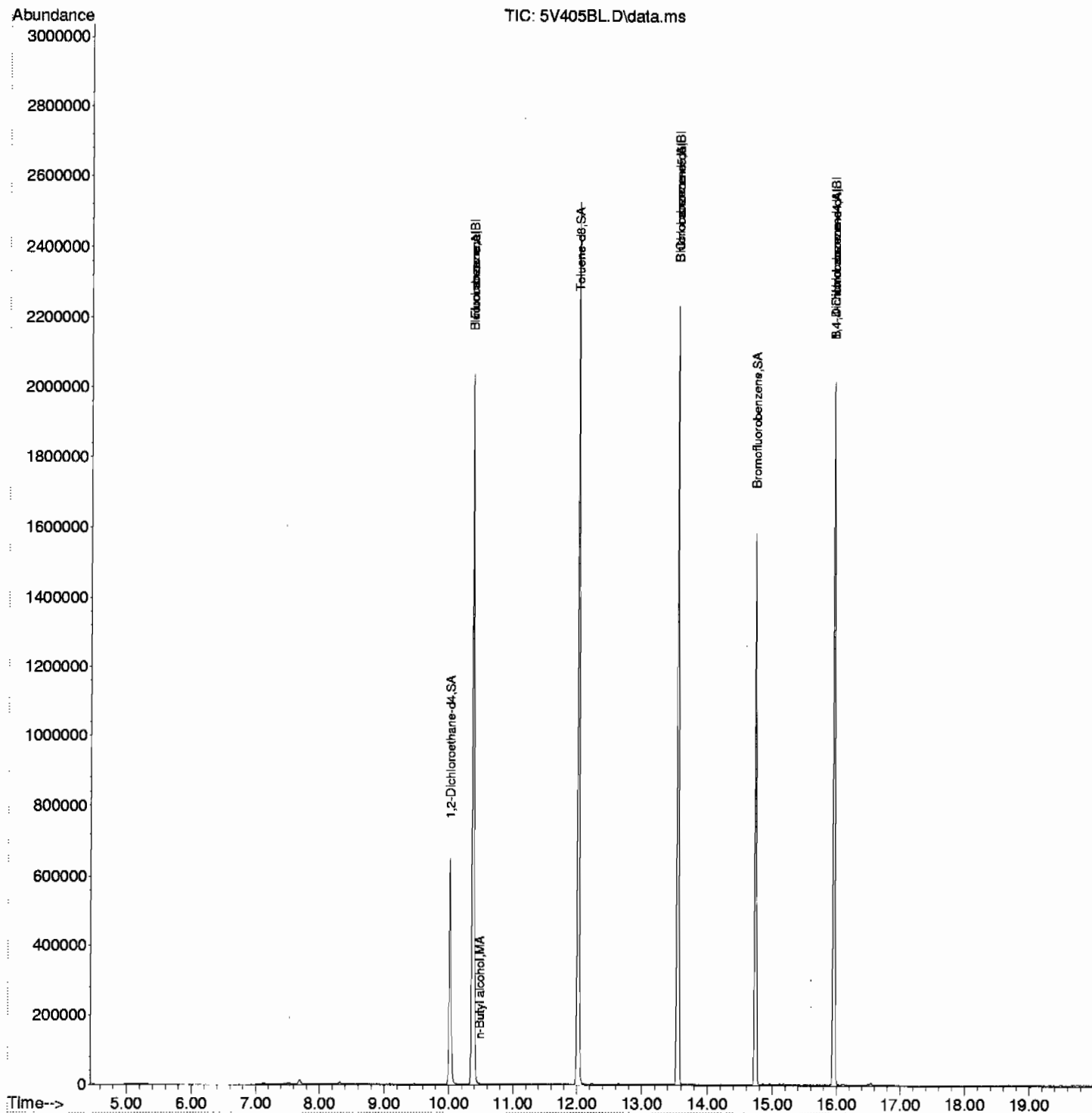
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

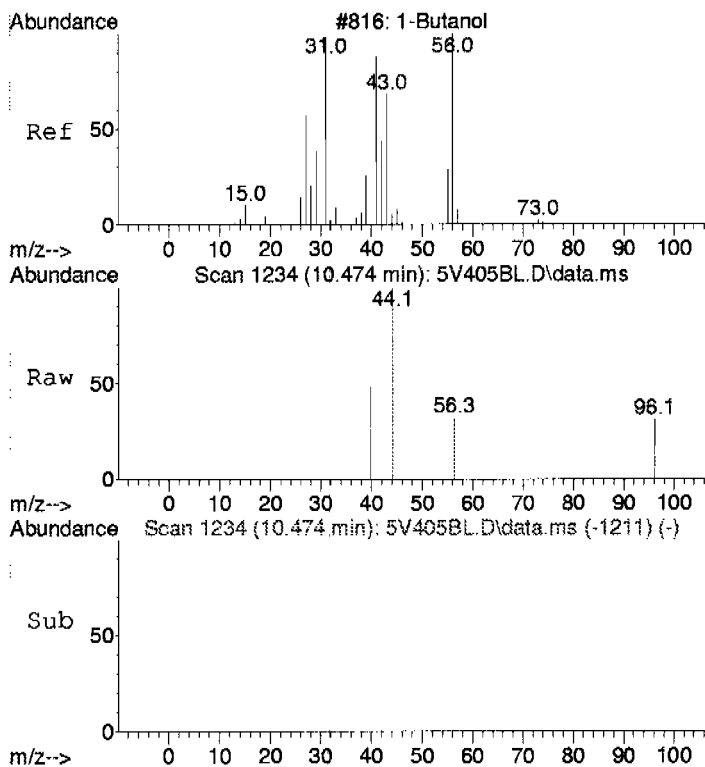
Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V405BL.D  
Acq On : 28 Jan 2010 11:02 am  
Operator : DXK1  
InstName : VOA5  
Sample : |1202026235|946008|1|VOA|1|VOA8260BS|  
Misc : BLANK 5g N/A SOIL  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 28 12:53:10 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

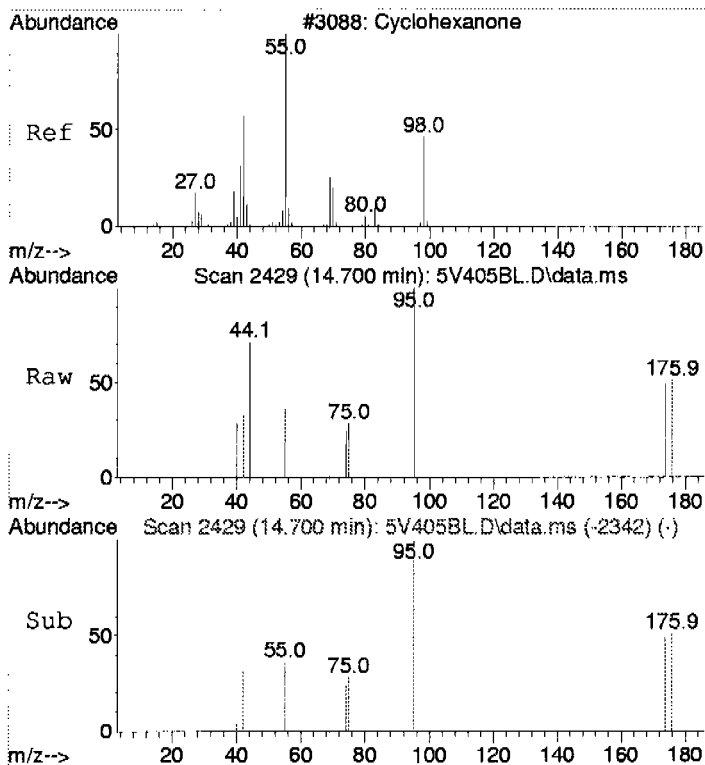
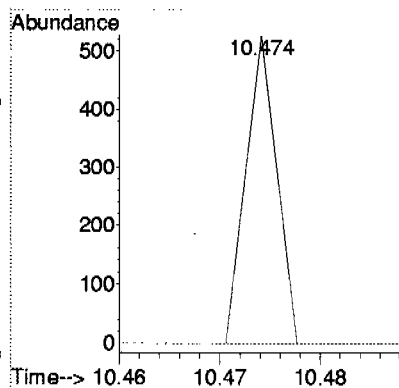
SubList :





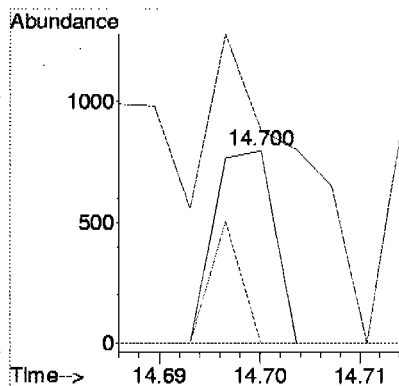
#33  
n-Butyl alcohol  
Concen: 98.07 ug/L  
RT: 10.474 min Scan# 1234  
Delta R.T. 0.014 min  
Lab File: 5V405BL.D  
Acq: 28 Jan 2010 11:02 am

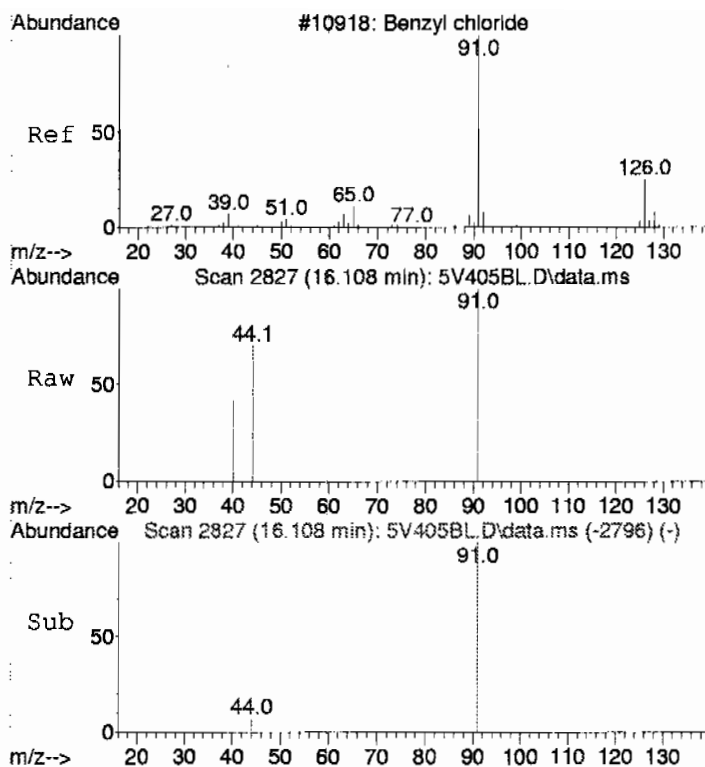
Tgt Ion: 56 Resp: 112  
Ion Ratio Lower Upper  
56 100  
41 0.0 47.2 107.2#  
43 0.0 31.2 91.2#



#108 BEFORE analyst DELETION  
Cyclohexanone  
Concen: 28.61 ug/L  
RT: 14.700 min Scan# 2429  
Delta R.T. 0.007 min  
Lab File: 5V405BL.D  
Acq: 28 Jan 2010 11:02 am

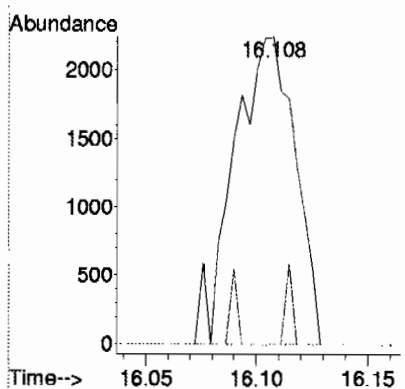
Tgt Ion: 42 Resp: 332  
Ion Ratio Lower Upper  
42 100  
55 231.0 104.7 164.7#  
98 32.2 21.5 81.5





#111 BEFORE analyst DELETION  
Benzyl chloride  
Concen: 4.85 ug/L  
RT: 16.108 min Scan# 2827  
Delta R.T. 0.008 min  
Lab File: 5V405BL.D  
Acq: 28 Jan 2010 11:02 am

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 91      | 100   | 4293 |       |       |
| 126     | 2.9   | 0.0  | 51.6  |       |
| 65      | 0.0   | 0.0  | 41.9  |       |



Library Search Compound Report

GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V405BL.D  
Acq On : 28 Jan 2010 11:02 am  
Operator : DXK1  
Sample : |1202026235|946008|1|VOA|1|VOA8260BS|  
Misc : BLANK 5g N/A SOIL  
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V405BL.D  
Acq On : 28 Jan 2010 11:02 am  
Operator : DXK1  
Sample : |1202026235|946008|1|VOA|1|VOA8260BS|  
Misc : BLANK 5g N/A SOIL  
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

| TIC Top Hit name | RT | EstConc | Units | Response | ---Internal Standard--- |
|------------------|----|---------|-------|----------|-------------------------|
|                  |    |         |       | #        | RT Resp Conc            |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324

Matrix: SOIL

Lab Sample ID: 1202037686

Client Sample: QC for batch 946006

Client: LANL010

Project: QC

Client ID: MB for batch 946006

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 946008

Inst: VOA5.I

Dilution: 1

Run Date: 01/31/2010 13:07

Analyst: DXK1

Purge Vol: 5 mL

Prep Date: 01/31/2009 08:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 013110V5SV705BL.D

Column: DB-624

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.00   | ug/kg | 0.340   | 1.00    |
| 74-87-3    | Chloromethane               | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-01-4    | Vinyl chloride              | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-83-9    | Bromomethane                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-00-3    | Chloroethane                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 67-64-1    | Acetone                     | U         | 5.00   | ug/kg | 1.66    | 5.00    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-88-4    | Iodomethane                 | U         | 5.00   | ug/kg | 1.60    | 5.00    |
| 75-09-2    | Methylene chloride          | U         | 5.00   | ug/kg | 2.00    | 5.00    |
| 75-15-0    | Carbon disulfide            | U         | 5.00   | ug/kg | 1.25    | 5.00    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 78-93-3    | 2-Butanone                  | U         | 5.00   | ug/kg | 1.50    | 5.00    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 67-66-3    | Chloroform                  | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-97-5    | Bromochloromethane          | U         | 1.00   | ug/kg | 0.330   | 1.00    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 71-43-2    | Benzene                     | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 79-01-6    | Trichloroethylene           | U         | 1.00   | ug/kg | 0.330   | 1.00    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-27-4    | Bromodichloromethane        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-95-3    | Dibromomethane              | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.00   | ug/kg | 1.25    | 5.00    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-88-3   | Toluene                     | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 591-78-6   | 2-Hexanone                  | U         | 5.00   | ug/kg | 1.50    | 5.00    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 124-48-1   | Dibromochloromethane        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-90-7   | Chlorobenzene               | U         | 1.00   | ug/kg | 0.300   | 1.00    |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 1202037686  
Client Sample: QC for batch 946006  
Client ID: MB for batch 946006  
Batch ID: 946008  
Run Date: 01/31/2010 13:07  
Prep Date: 01/31/2009 08:00  
Data File: 013110V55V705BLD

Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: SOIL  
Project: QC  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.00   | ug/kg | 0.300   | 2.00    |
| 95-47-6     | o-Xylene                              | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 100-42-5    | Styrene                               | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-25-2     | Bromoform                             | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-86-1    | Bromobenzene                          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.00   | ug/kg | 1.60    | 5.00    |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.00   | ug/kg | 0.300   | 1.00    |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|-------|-----------|-------|-----|------|
|         | unknown siloxane                      | 16.55 | 10.3      | ug/kg | 0   | J    |



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V705BL.D  
Acq On : 31 Jan 2010 1:07 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202037686|946008|1|VOA|1|VOA8260BS|  
Misc : BLANK 5g N/A SOIL  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 01 08:56:31 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.     | Exp RT | Rel RT   | QIon | Response | Conc  | Units |           |
|-------------------------------|----------|--------|----------|------|----------|-------|-------|-----------|
| Internal Standards            |          |        |          |      |          |       |       | Dev (Min) |
| 1) Fluorobenzene              | 10.375   | 10.375 | 1.000    | 96   | 1748987  | 50.00 | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547   | 13.547 | 1.000    | 117  | 1142688  | 50.00 | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.959   | 15.962 | 1.000    | 152  | 525209   | 50.00 | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.375   | 10.375 | 1.000    | 96   | 1748987  | 50.00 | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547   | 13.547 | 1.000    | 117  | 1142688  | 50.00 | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.959   | 15.962 | 1.000    | 152  | 525209   | 50.00 | ug/L  | 0.00      |
| System Monitoring Compounds   |          |        |          |      |          |       |       | Dev (Min) |
| 29) 1,2-Dichloroethane-d4     | 10.021   | 10.021 | 0.966    | 65   | 428366   | 52.70 | ug/L  | 0.00      |
| Spiked Amount 50.000          | Range 68 | - 131  | Recovery | =    | 105.40%  |       |       |           |
| 43) Toluene-d8                | 12.016   | 12.016 | 0.887    | 98   | 1560250  | 50.07 | ug/L  | 0.00      |
| Spiked Amount 50.000          | Range 75 | - 129  | Recovery | =    | 100.14%  |       |       |           |
| 61) Bromofluorobenzene        | 14.739   | 14.739 | 0.924    | 95   | 554163   | 55.29 | ug/L  | 0.00      |
| Spiked Amount 50.000          | Range 68 | - 133  | Recovery | =    | 110.58%  |       |       |           |
| Target Compounds              | R.T.     | Exp RT | Rel RT   | QIon | Response | Conc  | Units | QValue    |
| 2) Dichlorodifluoromethane    | 0.000    | 4.689  | 0.000    |      | 0        | N.D.  |       |           |
| 3) Chloromethane              | 5.071    | 5.051  | 0.489    | 50   | 1822     | N.D.  |       |           |
| 4) Vinyl chloride             | 5.283    | 5.283  | 0.509    | 62   | 189      | N.D.  |       |           |
| 5) Bromomethane               | 0.000    | 5.877  | 0.000    |      | 0        | N.D.  |       |           |
| 6) Chloroethane               | 0.000    | 6.018  | 0.000    |      | 0        | N.D.  |       |           |
| 7) Trichlorofluoromethane     | 0.000    | 6.391  | 0.000    |      | 0        | N.D.  |       |           |
| 8) Ethyl ether                | 0.000    | 6.733  | 0.000    |      | 0        | N.D.  |       |           |
| 9) Acetone                    | 7.111    | 7.100  | 0.685    | 43   | 3503     | N.D.  |       |           |
| 10) 1,1-Dichloroethylene      | 0.000    | 7.125  | 0.000    |      | 0        | N.D.  |       |           |
| 11) Iodomethane               | 0.000    | 7.373  | 0.000    |      | 0        | N.D.  |       |           |
| 12) Acetonitrile              | 7.440    | 7.450  | 0.717    | 41   | 141      | N.D.  |       |           |
| 13) Methyl acetate            | 0.000    | 7.493  | 0.000    |      | 0        | N.D.  |       |           |
| 14) Carbon disulfide          | 7.521    | 7.511  | 0.725    | 76   | 4576     | N.D.  |       |           |
| 15) Methylene chloride        | 7.687    | 7.691  | 0.741    | 84   | 5465     | N.D.  |       |           |
| 16) tert-Butyl methyl ether   | 0.000    | 7.984  | 0.000    |      | 0        | N.D.  |       |           |
| 17) trans-1,2-Dichloroethy... | 0.000    | 8.030  | 0.000    |      | 0        | N.D.  |       |           |
| 18) Vinyl acetate             | 8.462    | 8.458  | 0.816    | 43   | 502      | N.D.  |       |           |
| 19) 1,1-Dichloroethane        | 0.000    | 8.511  | 0.000    |      | 0        | N.D.  |       |           |
| 20) 2-Butanone                | 9.095    | 9.077  | 0.877    | 43   | 1894     | N.D.  |       |           |
| 21) cis-1,2-Dichloroethylene  | 0.000    | 9.144  | 0.000    |      | 0        | N.D.  |       |           |
| 22) 2,2-Dichloropropane       | 0.000    | 9.173  | 0.000    |      | 0        | N.D.  |       |           |
| 23) Bromochloromethane        | 0.000    | 9.417  | 0.000    |      | 0        | N.D.  |       |           |
| 24) Chloroform                | 0.000    | 9.452  | 0.000    |      | 0        | N.D.  |       |           |
| 25) 1,1,1-Trichloroethane     | 0.000    | 9.735  | 0.000    |      | 0        | N.D.  |       |           |
| 26) Cyclohexane               | 0.000    | 9.830  | 0.000    |      | 0        | N.D.  |       |           |
| 27) 1,1-Dichloropropene       | 0.000    | 9.887  | 0.000    |      | 0        | N.D.  |       |           |
| 28) Carbon tetrachloride      | 0.000    | 9.929  | 0.000    |      | 0        | N.D.  |       |           |
| 30) 1,2-Dichloroethane        | 0.000    | 10.103 | 0.000    |      | 0        | N.D.  |       |           |
| 31) Benzene                   | 10.131   | 10.127 | 0.976    | 78   | 111      | N.D.  |       |           |
| 32) Cyclohexene               | 0.000    | 10.248 | 0.000    |      | 0        | N.D.  |       |           |
| 33) n-Butyl alcohol           | 0.000    | 10.460 | 0.000    |      | 0        | N.D.  |       |           |
| 34) Trichloroethylene         | 0.000    | 10.768 | 0.000    |      | 0        | N.D.  |       |           |
| 35) 1,2-Dichloropropane       | 0.000    | 11.004 | 0.000    |      | 0        | N.D.  |       |           |
| 36) Methylcyclohexane         | 0.000    | 11.019 | 0.000    |      | 0        | N.D.  |       |           |
| 37) Dibromomethane            | 0.000    | 11.146 | 0.000    |      | 0        | N.D.  |       |           |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V705BL.D  
Acq On : 31 Jan 2010 1:07 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202037686|946008|1|VOA|1|VOA8260BS|  
Misc : BLANK 5g N/A SOIL  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 01 08:56:31 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|-------------------------------|--------|--------|--------|------|----------|------|-------|
| 38) Bromodichloromethane      | 0.000  | 11.256 | 0.000  |      | 0        | N.D. |       |
| 39) 2-Chloroethylvinyl ether  | 0.000  | 11.468 | 0.000  |      | 0        | N.D. |       |
| 40) cis-1,3-Dichloropropylene | 0.000  | 11.705 | 0.000  |      | 0        | N.D. |       |
| 42) 4-Methyl-2-pentanone      | 0.000  | 11.786 | 0.000  |      | 0        | N.D. |       |
| 44) Toluene                   | 12.094 | 12.090 | 0.893  | 91   | 787      | N.D. |       |
| 45) trans-1,3-Dichloroprop... | 0.000  | 12.239 | 0.000  |      | 0        | N.D. |       |
| 46) 1,1,2-Trichloroethane     | 0.000  | 12.465 | 0.000  |      | 0        | N.D. |       |
| 47) 2-Hexanone                | 12.642 | 12.631 | 0.933  | 43   | 443      | N.D. |       |
| 48) 1,3-Dichloropropane       | 0.000  | 12.656 | 0.000  |      | 0        | N.D. |       |
| 49) Tetrachloroethylene       | 0.000  | 12.691 | 0.000  |      | 0        | N.D. |       |
| 50) Dibromochloromethane      | 12.691 | 12.928 | 0.937  | 129  | 112      | N.D. |       |
| 51) 1,2-Dibromoethane         | 0.000  | 13.094 | 0.000  |      | 0        | N.D. |       |
| 52) Chlorobenzene             | 13.583 | 13.579 | 1.003  | 112  | 253      | N.D. |       |
| 53) 1,1,1,2-Tetrachloroethane | 0.000  | 13.636 | 0.000  |      | 0        | N.D. |       |
| 54) Ethylbenzene              | 13.639 | 13.639 | 1.007  | 91   | 218      | N.D. |       |
| 55) m,p-Xylenes               | 13.745 | 13.749 | 1.015  | 106  | 124      | N.D. |       |
| 56) o-Xylene                  | 0.000  | 14.184 | 0.000  |      | 0        | N.D. |       |
| 57) Styrene                   | 14.187 | 14.184 | 1.047  | 104  | 117      | N.D. |       |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D. |       |
| 60) Isopropylbenzene          | 14.530 | 14.537 | 0.910  | 105  | 229      | N.D. |       |
| 62) 1,1,2,2-Tetrachloroethane | 0.000  | 14.810 | 0.000  |      | 0        | N.D. |       |
| 63) 1,2,3-Trichloropropane    | 0.000  | 14.898 | 0.000  |      | 0        | N.D. |       |
| 64) Bromobenzene              | 0.000  | 14.951 | 0.000  |      | 0        | N.D. |       |
| 65) n-Propylbenzene           | 14.969 | 14.965 | 0.938  | 91   | 723      | N.D. |       |
| 66) 1,3,5-Trimethylbenzene    | 0.000  | 15.114 | 0.000  |      | 0        | N.D. |       |
| 67) 2-Chlorotoluene           | 0.000  | 15.117 | 0.000  |      | 0        | N.D. |       |
| 68) 4-Chlorotoluene           | 15.213 | 15.216 | 0.953  | 91   | 513      | N.D. |       |
| 69) tert-Butylbenzene         | 0.000  | 15.489 | 0.000  |      | 0        | N.D. |       |
| 70) 1,2,4-Trimethylbenzene    | 15.588 | 15.527 | 0.977  | 105  | 269      | N.D. |       |
| 71) sec-Butylbenzene          | 15.701 | 15.711 | 0.984  | 105  | 151      | N.D. |       |
| 72) 4-Isopropyltoluene        | 15.832 | 15.832 | 0.992  | 119  | 156      | N.D. |       |
| 73) 1,3-Dichlorobenzene       | 15.895 | 15.902 | 0.996  | 146  | 107      | N.D. |       |
| 74) 1,4-Dichlorobenzene       | 16.005 | 15.991 | 1.003  | 146  | 107      | N.D. |       |
| 75) n-Butylbenzene            | 16.281 | 16.277 | 1.020  | 91   | 723      | N.D. |       |
| 76) 1,2-Dichlorobenzene       | 16.412 | 16.422 | 1.028  | 146  | 121      | N.D. |       |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D. |       |
| 78) 1,2,4-Trichlorobenzene    | 18.378 | 18.371 | 1.152  | 180  | 795      | N.D. |       |
| 79) Hexachlorobutadiene       | 0.000  | 18.548 | 0.000  |      | 0        | N.D. |       |
| 80) Naphthalene               | 18.762 | 18.762 | 1.176  | 128  | 2606     | N.D. |       |
| 81) 1,2,3-Trichlorobenzene    | 19.109 | 19.116 | 1.197  | 180  | 603      | N.D. |       |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D. |       |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D. |       |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D. |       |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D. |       |
| 87) Isopropyl Alcohol         | 0.000  | 7.175  | 0.000  |      | 0        | N.D. |       |
| 88) Allyl chloride            | 7.542  | 7.546  | 0.727  | 41   | 262      | N.D. |       |
| 89) tert-Butyl Alcohol        | 0.000  | 7.673  | 0.000  |      | 0        | N.D. |       |
| 90) Acrylonitrile             | 7.946  | 7.928  | 0.766  | 53   | 369      | N.D. |       |
| 91) Isopropyl ether           | 0.000  | 8.483  | 0.000  |      | 0        | N.D. |       |
| 92) 2-Chloro-1,3-butadiene    | 0.000  | 8.617  | 0.000  |      | 0        | N.D. |       |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D. |       |
| 94) Ethyl acetate             | 9.095  | 9.088  | 0.877  | 43   | 1894     | N.D. |       |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V705BL.D  
Acq On : 31 Jan 2010 1:07 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202037686|946008|1|VOA|1|VOA8260BS|  
Misc : BLANK 5g N/A SOIL  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 01 08:56:31 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|--------|--------|--------|------|----------|------|-------|
| 95) Propionitrile              | 0.000  | 9.148  | 0.000  |      | 0        | N.D. |       |
| 96) Methacrylonitrile          | 9.342  | 9.332  | 0.900  | 41   | 546      | N.D. |       |
| 97) Tetrahydrofuran            | 9.459  | 9.466  | 0.912  | 42   | 273      | N.D. |       |
| 98) Isobutyl alcohol           | 9.767  | 9.770  | 0.941  | 41   | 131      | N.D. |       |
| 99) Methyl tert-amyl ether     | 0.000  | 10.138 | 0.000  |      | 0        | N.D. |       |
| 100) Methyl methacrylate       | 0.000  | 10.969 | 0.000  |      | 0        | N.D. |       |
| 101) 1,4-Dioxane               | 0.000  | 11.089 | 0.000  |      | 0        | N.D. |       |
| 102) 2-Nitropropane            | 0.000  | 11.443 | 0.000  |      | 0        | N.D. |       |
| 104) Ethyl methacrylate        | 12.239 | 12.235 | 0.903  | 69   | 1915     | N.D. |       |
| 106) 1-Chlorohexane            | 0.000  | 13.438 | 0.000  |      | 0        | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 0.000  | 14.573 | 0.000  |      | 0        | N.D. |       |
| 108) Cyclohexanone             | 0.000  | 14.693 | 0.000  |      | 0m       | N.D. | d     |
| 109) trans-1,4-Dichloro-2-b... | 14.856 | 14.856 | 0.931  | 53   | 252      | N.D. |       |
| 110) Pentachloroethane         | 0.000  | 15.559 | 0.000  |      | 0        | N.D. |       |
| 111) Benzyl chloride           | 0.000  | 16.100 | 0.000  |      | 0m       | N.D. | d     |
| 112) bis(2-Chloroisopropyl)... | 0.000  | 16.497 | 0.000  |      | 0m       | N.D. | d     |

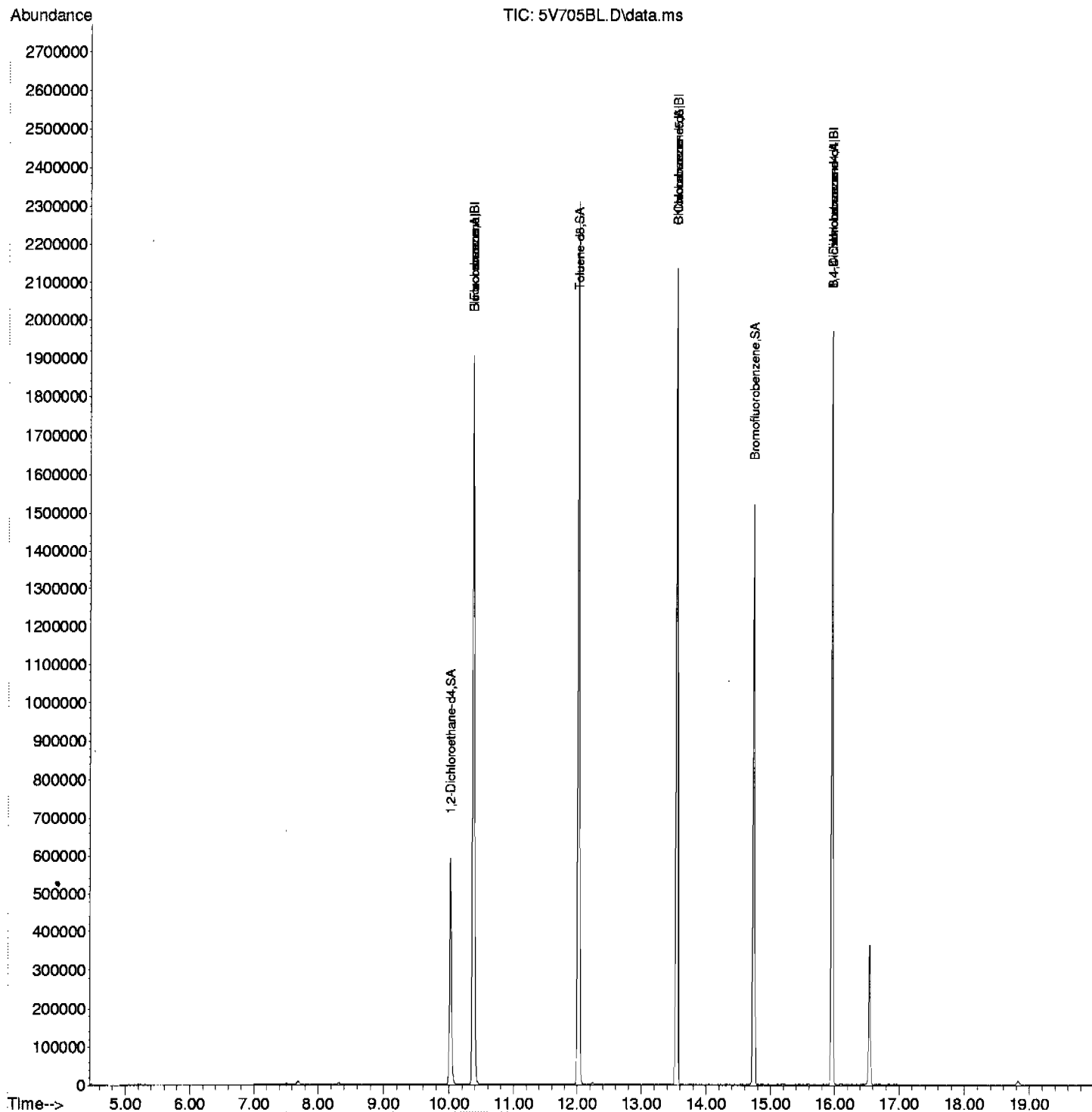
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

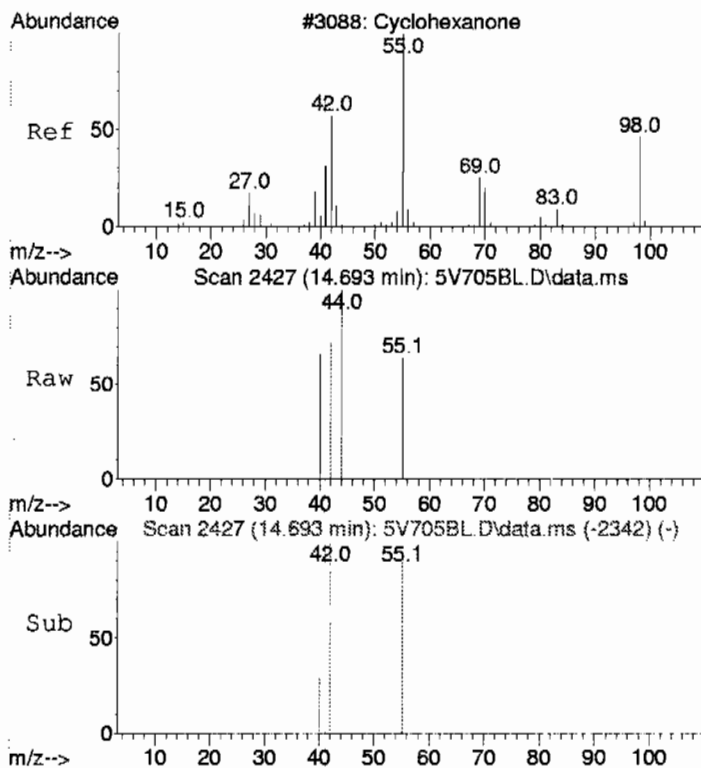
Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V705BL.D  
Acq On : 31 Jan 2010 1:07 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202037686|946008|1|VOA|1|VOA8260BS|  
Misc : BLANK 5g N/A SOIL  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 01 08:56:31 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

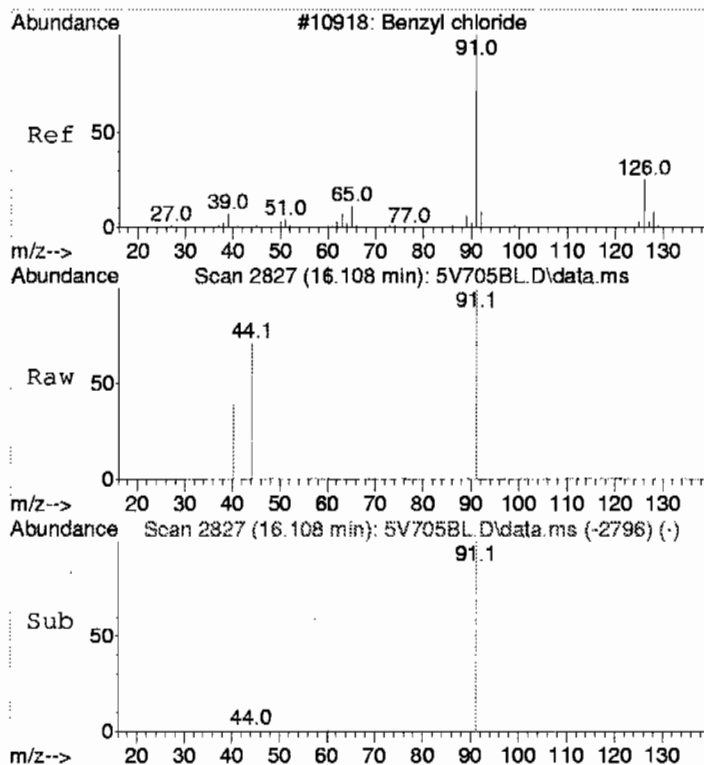
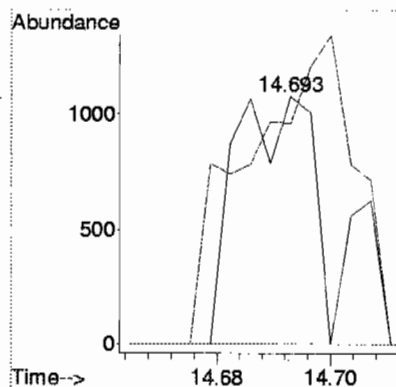
SubList :





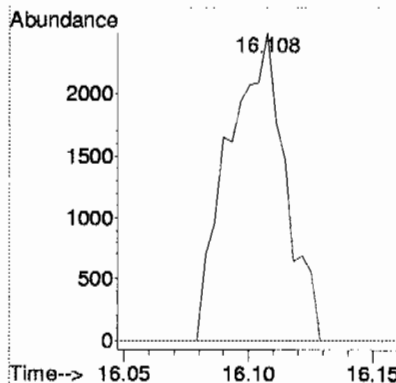
#108 BEFORE analyst DELETION  
Cyclohexanone  
Concen: 29.77 ug/L  
RT: 14.693 min Scan# 2427  
Delta R.T. -0.000 min  
Lab File: 5V705BL.D  
Acq: 31 Jan 2010 1:07 pm

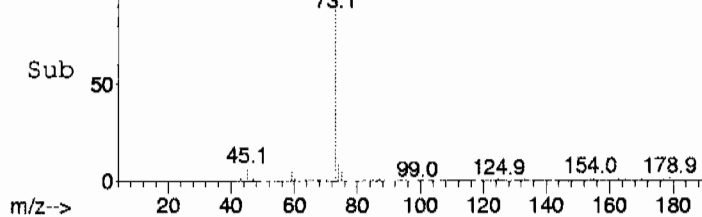
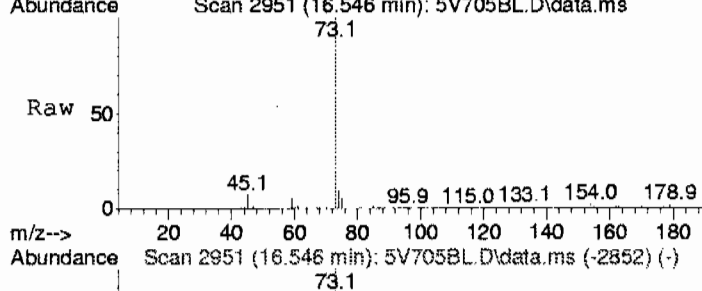
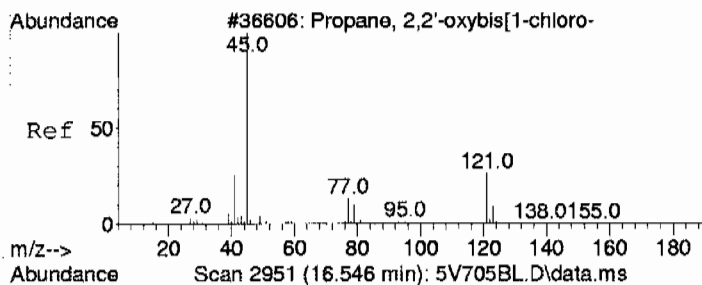
Tgt Ion: 42 Resp: 1020  
Ion Ratio Lower Upper  
42 100  
55 172.4 104.7 164.7#  
98 0.0 21.5 81.5#



#111 BEFORE analyst DELETION  
Benzyl chloride  
Concen: 4.84 ug/L  
RT: 16.108 min Scan# 2827  
Delta R.T. 0.008 min  
Lab File: 5V705BL.D  
Acq: 31 Jan 2010 1:07 pm

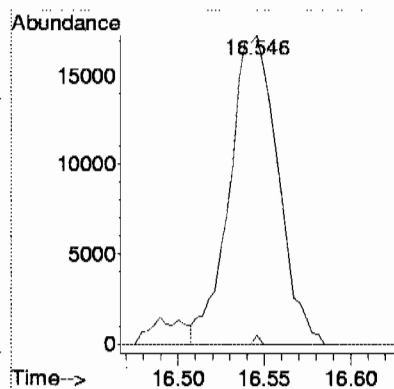
Tgt Ion: 91 Resp: 3963  
Ion Ratio Lower Upper  
91 100  
126 0.0 0.0 51.6  
65 0.0 0.0 41.9





#112 BEFORE analyst DELETION  
 bis(2-Chloroisopropyl) ether  
 Concen: 9.56 ug/L  
 RT: 16.546 min Scan# 2951  
 Delta R.T. 0.049 min  
 Lab File: 5V705BL.D  
 Acq: 31 Jan 2010 1:07 pm

Tgt Ion: 45 Resp: 33476  
 Ion Ratio Lower Upper  
 45 100  
 121 0.3 0.0 49.2



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V705BL.D  
Acq On : 31 Jan 2010 1:07 pm  
Operator : DXK1  
Sample : |1202037686|946008|1|VOA|1|VOA8260BS|  
Misc : BLANK 5g N/A SOIL  
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

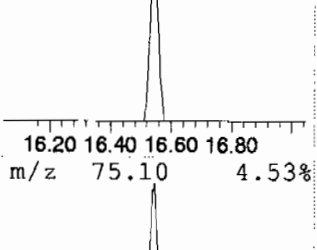
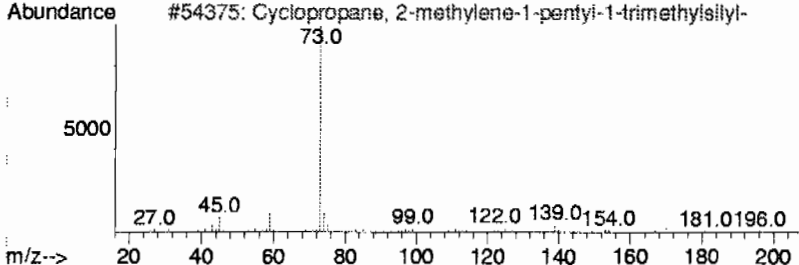
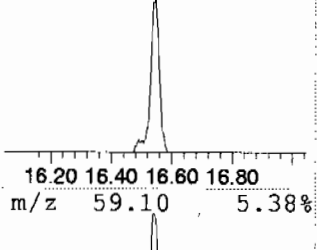
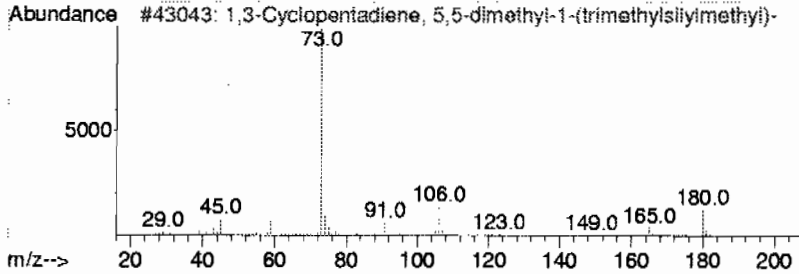
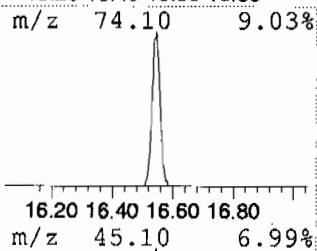
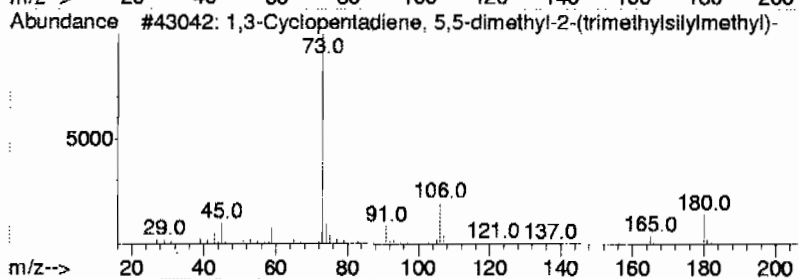
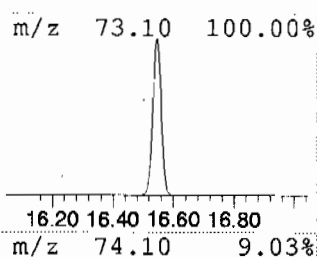
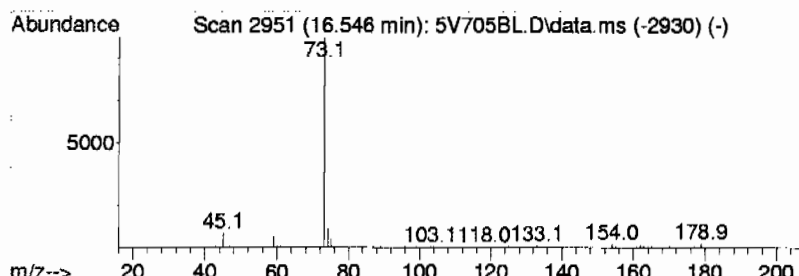
SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

\*\*\*\*\*  
Peak Number 1 unknown siloxane Concentration Rank 1

| R.T.   | EstConc    | Area   | Relative to ISTD         | R.T.   |
|--------|------------|--------|--------------------------|--------|
| 16.546 | 10.32 ug/L | 709484 | B 1,4-Dichlorobenzene-d4 | 15.959 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|-------------------------------------|-----|-----------|--------------|------|
| 1    | 5  | 1,3-Cyclopentadiene, 5,5-dimethy... | 180 | C11H20Si  | 1000163-64-8 | 38   |
| 2    |    | 1,3-Cyclopentadiene, 5,5-dimethy... | 180 | C11H20Si  | 1000163-65-0 | 38   |
| 3    |    | Cyclopropane, 2-methylene-1-pent... | 196 | C12H24Si  | 167300-47-2  | 9    |
| 4    |    | Silane, trimethyl-3-penten-2-yl...  | 142 | C8H18Si   | 053264-56-5  | 9    |
| 5    |    | Silane, 1,4-butanediylbis[trimet... | 202 | C10H26Si2 | 018001-81-5  | 9    |



Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V705BL.D  
Acq On : 31 Jan 2010 1:07 pm  
Operator : DXK1  
Sample : |1202037686|946008|1|VOA|1|VOA8260BS|  
Misc : BLANK 5g N/A SOIL  
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

| TIC Top Hit name | RT     | EstConc | Units | Response | ---Internal Standard--- |        |         |      |
|------------------|--------|---------|-------|----------|-------------------------|--------|---------|------|
|                  |        |         |       |          | #                       | RT     | Resp    | Conc |
| unknown siloxane | 16.546 | 10.3    | ug/L  | 709484   | 6                       | 15.959 | 3437630 | 50.0 |



**Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 2

SDG Number: 10-1324

Matrix: SOIL

Lab Sample ID: 1202037689

Client Sample: QC for batch 946006

Client: LANL010

Project: QC

Client ID: HB for batch 946006

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 946008

Inst: VOA5.I

Dilution: 50

Run Date: 01/28/2010 18:06

Analyst: DXK1

Purge Vol: 5 mL

Prep Date: 01/28/2009 15:10

Aliquot: 5 g

Final Volume: 10 mL

Data File: 012810V5SV421HLL.D

Column: DB-624

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 100    | ug/kg | 34.0    | 100     |
| 74-87-3    | Chloromethane               | U         | 100    | ug/kg | 30.0    | 100     |
| 75-01-4    | Vinyl chloride              | U         | 100    | ug/kg | 30.0    | 100     |
| 74-83-9    | Bromomethane                | U         | 100    | ug/kg | 30.0    | 100     |
| 75-00-3    | Chloroethane                | U         | 100    | ug/kg | 30.0    | 100     |
| 75-69-4    | Trichlorofluoromethane      | U         | 100    | ug/kg | 30.0    | 100     |
| 67-64-1    | Acetone                     | U         | 500    | ug/kg | 166     | 500     |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 100    | ug/kg | 30.0    | 100     |
| 74-88-4    | Iodomethane                 | U         | 500    | ug/kg | 160     | 500     |
| 75-09-2    | Methylene chloride          | U         | 500    | ug/kg | 200     | 500     |
| 75-15-0    | Carbon disulfide            | U         | 500    | ug/kg | 125     | 500     |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 100    | ug/kg | 30.0    | 100     |
| 75-34-3    | 1,1-Dichloroethane          | U         | 100    | ug/kg | 30.0    | 100     |
| 78-93-3    | 2-Butanone                  | U         | 500    | ug/kg | 150     | 500     |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 100    | ug/kg | 30.0    | 100     |
| 594-20-7   | 2,2-Dichloropropane         | U         | 100    | ug/kg | 30.0    | 100     |
| 67-66-3    | Chloroform                  | U         | 100    | ug/kg | 30.0    | 100     |
| 74-97-5    | Bromochloromethane          | U         | 100    | ug/kg | 33.0    | 100     |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 100    | ug/kg | 30.0    | 100     |
| 563-58-6   | 1,1-Dichloropropene         | U         | 100    | ug/kg | 30.0    | 100     |
| 56-23-5    | Carbon tetrachloride        | U         | 100    | ug/kg | 30.0    | 100     |
| 107-06-2   | 1,2-Dichloroethane          | U         | 100    | ug/kg | 30.0    | 100     |
| 71-43-2    | Benzene                     | U         | 100    | ug/kg | 30.0    | 100     |
| 79-01-6    | Trichloroethylene           | U         | 100    | ug/kg | 33.0    | 100     |
| 78-87-5    | 1,2-Dichloropropane         | U         | 100    | ug/kg | 30.0    | 100     |
| 75-27-4    | Bromodichloromethane        | U         | 100    | ug/kg | 30.0    | 100     |
| 74-95-3    | Dibromomethane              | U         | 100    | ug/kg | 30.0    | 100     |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 500    | ug/kg | 125     | 500     |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 100    | ug/kg | 30.0    | 100     |
| 108-88-3   | Toluene                     | U         | 100    | ug/kg | 30.0    | 100     |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 100    | ug/kg | 30.0    | 100     |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 100    | ug/kg | 30.0    | 100     |
| 591-78-6   | 2-Hexanone                  | U         | 500    | ug/kg | 150     | 500     |
| 142-28-9   | 1,3-Dichloropropane         | U         | 100    | ug/kg | 30.0    | 100     |
| 127-18-4   | Tetrachloroethylene         | U         | 100    | ug/kg | 30.0    | 100     |
| 124-48-1   | Dibromochloromethane        | U         | 100    | ug/kg | 30.0    | 100     |
| 106-93-4   | 1,2-Dibromoethane           | U         | 100    | ug/kg | 30.0    | 100     |
| 108-90-7   | Chlorobenzene               | U         | 100    | ug/kg | 30.0    | 100     |

**Volatile  
Certificate of Analysis  
Sample Summary**

Page 2 of 2

SDG Number: 10-1324  
Lab Sample ID: 1202037689  
Client Sample: QC for batch 946006  
Client ID: HB for batch 946006  
Batch ID: 946008  
Run Date: 01/28/2010 18:06  
Prep Date: 01/28/2009 15:10  
Data File: 012810V5SV421HL.D

Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: SOIL  
Project: QC  
SOP Ref: GL-OA-E-038  
Dilution: 50  
Purge Vol: 5 mL  
Final Volume: 10 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 100    | ug/kg | 30.0    | 100     |
| 179601-23-1 | m,p-Xylenes                           | U         | 200    | ug/kg | 30.0    | 200     |
| 95-47-6     | o-Xylene                              | U         | 100    | ug/kg | 30.0    | 100     |
| 100-42-5    | Styrene                               | U         | 100    | ug/kg | 30.0    | 100     |
| 75-25-2     | Bromoform                             | U         | 100    | ug/kg | 30.0    | 100     |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 100    | ug/kg | 30.0    | 100     |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 100    | ug/kg | 30.0    | 100     |
| 108-86-1    | Bromobenzene                          | U         | 100    | ug/kg | 30.0    | 100     |
| 103-65-1    | n-Propylbenzene                       | U         | 100    | ug/kg | 30.0    | 100     |
| 95-49-8     | 2-Chlorotoluene                       | U         | 100    | ug/kg | 30.0    | 100     |
| 98-82-8     | Isopropylbenzene                      | U         | 100    | ug/kg | 30.0    | 100     |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 100    | ug/kg | 30.0    | 100     |
| 106-43-4    | 4-Chlorotoluene                       | U         | 100    | ug/kg | 30.0    | 100     |
| 98-06-6     | tert-Butylbenzene                     | U         | 100    | ug/kg | 30.0    | 100     |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 100    | ug/kg | 30.0    | 100     |
| 135-98-8    | sec-Butylbenzene                      | U         | 100    | ug/kg | 30.0    | 100     |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 100    | ug/kg | 30.0    | 100     |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 100    | ug/kg | 30.0    | 100     |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 100    | ug/kg | 30.0    | 100     |
| 104-51-8    | n-Butylbenzene                        | U         | 100    | ug/kg | 30.0    | 100     |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 100    | ug/kg | 30.0    | 100     |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 500    | ug/kg | 160     | 500     |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 100    | ug/kg | 30.0    | 100     |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 100    | ug/kg | 30.0    | 100     |

**Tentatively Identified Compound Summary**

| CAS No.                                   | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---------------------------------------|----|-----------|-------|-----|------|
| No Tentatively Identified Compounds Found |                                       |    |           | ug/kg |     |      |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V421HL.D  
Acq On : 28 Jan 2010 6:06 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202037689|946008|50|VOA|1|VOA8260BS|  
Misc : HB 100uL N/A SOIL  
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 29 09:30:38 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.     | Exp RT | Rel RT   | QIon | Response | Conc  | Units |           |
|-------------------------------|----------|--------|----------|------|----------|-------|-------|-----------|
| Internal Standards            |          |        |          |      |          |       |       | Dev (Min) |
| 1) Fluorobenzene              | 10.375   | 10.375 | 1.000    | 96   | 1654994  | 50.00 | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547   | 13.547 | 1.000    | 117  | 1066409  | 50.00 | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.959   | 15.962 | 1.000    | 152  | 469511   | 50.00 | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.375   | 10.375 | 1.000    | 96   | 1654994  | 50.00 | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547   | 13.547 | 1.000    | 117  | 1066409  | 50.00 | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.959   | 15.962 | 1.000    | 152  | 469511   | 50.00 | ug/L  | 0.00      |
| System Monitoring Compounds   |          |        |          |      |          |       |       | Dev (Min) |
| 29) 1,2-Dichloroethane-d4     | 10.021   | 10.021 | 0.966    | 65   | 410303   | 53.34 | ug/L  | 0.00      |
| Spiked Amount 50.000          | Range 68 | - 131  | Recovery | =    | 106.68%  |       |       |           |
| 43) Toluene-d8                | 12.016   | 12.016 | 0.887    | 98   | 1499019  | 51.54 | ug/L  | 0.00      |
| Spiked Amount 50.000          | Range 75 | - 129  | Recovery | =    | 103.08%  |       |       |           |
| 61) Bromofluorobenzene        | 14.739   | 14.739 | 0.924    | 95   | 500351   | 55.85 | ug/L  | 0.00      |
| Spiked Amount 50.000          | Range 68 | - 133  | Recovery | =    | 111.70%  |       |       |           |
| Target Compounds              | R.T.     | Exp RT | Rel RT   | QIon | Response | Conc  | Units | QValue    |
| 2) Dichlorodifluoromethane    | 0.000    | 4.689  | 0.000    |      | 0        | N.D.  |       |           |
| 3) Chloromethane              | 5.051    | 5.051  | 0.487    | 50   | 891      | N.D.  |       |           |
| 4) Vinyl chloride             | 5.273    | 5.283  | 0.508    | 62   | 324      | N.D.  |       |           |
| 5) Bromomethane               | 0.000    | 5.877  | 0.000    |      | 0        | N.D.  |       |           |
| 6) Chloroethane               | 0.000    | 6.018  | 0.000    |      | 0        | N.D.  |       |           |
| 7) Trichlorofluoromethane     | 0.000    | 6.391  | 0.000    |      | 0        | N.D.  |       |           |
| 8) Ethyl ether                | 0.000    | 6.733  | 0.000    |      | 0        | N.D.  |       |           |
| 9) Acetone                    | 7.093    | 7.100  | 0.684    | 43   | 138      | N.D.  |       |           |
| 10) 1,1-Dichloroethylene      | 0.000    | 7.125  | 0.000    |      | 0        | N.D.  |       |           |
| 11) Iodomethane               | 0.000    | 7.373  | 0.000    |      | 0        | N.D.  |       |           |
| 12) Acetonitrile              | 0.000    | 7.450  | 0.000    |      | 0        | N.D.  |       |           |
| 13) Methyl acetate            | 0.000    | 7.493  | 0.000    |      | 0        | N.D.  |       |           |
| 14) Carbon disulfide          | 0.000    | 7.511  | 0.000    |      | 0        | N.D.  |       |           |
| 15) Methylene chloride        | 7.687    | 7.691  | 0.741    | 84   | 1527     | N.D.  |       |           |
| 16) tert-Butyl methyl ether   | 0.000    | 7.984  | 0.000    |      | 0        | N.D.  |       |           |
| 17) trans-1,2-Dichloroethy... | 0.000    | 8.030  | 0.000    |      | 0        | N.D.  |       |           |
| 18) Vinyl acetate             | 8.320    | 8.458  | 0.802    | 43   | 229      | N.D.  |       |           |
| 19) 1,1-Dichloroethane        | 0.000    | 8.511  | 0.000    |      | 0        | N.D.  |       |           |
| 20) 2-Butanone                | 0.000    | 9.077  | 0.000    |      | 0        | N.D.  |       |           |
| 21) cis-1,2-Dichloroethylene  | 0.000    | 9.144  | 0.000    |      | 0        | N.D.  |       |           |
| 22) 2,2-Dichloropropane       | 0.000    | 9.173  | 0.000    |      | 0        | N.D.  |       |           |
| 23) Bromochloromethane        | 0.000    | 9.417  | 0.000    |      | 0        | N.D.  |       |           |
| 24) Chloroform                | 0.000    | 9.452  | 0.000    |      | 0        | N.D.  |       |           |
| 25) 1,1,1-Trichloroethane     | 0.000    | 9.735  | 0.000    |      | 0        | N.D.  |       |           |
| 26) Cyclohexane               | 0.000    | 9.830  | 0.000    |      | 0        | N.D.  |       |           |
| 27) 1,1-Dichloropropene       | 0.000    | 9.887  | 0.000    |      | 0        | N.D.  |       |           |
| 28) Carbon tetrachloride      | 0.000    | 9.929  | 0.000    |      | 0        | N.D.  |       |           |
| 30) 1,2-Dichloroethane        | 0.000    | 10.103 | 0.000    |      | 0        | N.D.  |       |           |
| 31) Benzene                   | 10.371   | 10.127 | 1.000    | 78   | 1635     | N.D.  |       |           |
| 32) Cyclohexene               | 0.000    | 10.248 | 0.000    |      | 0        | N.D.  |       |           |
| 33) n-Butyl alcohol           | 0.000    | 10.460 | 0.000    |      | 0        | N.D.  |       |           |
| 34) Trichloroethylene         | 0.000    | 10.768 | 0.000    |      | 0        | N.D.  |       |           |
| 35) 1,2-Dichloropropane       | 0.000    | 11.004 | 0.000    |      | 0        | N.D.  |       |           |
| 36) Methylcyclohexane         | 0.000    | 11.019 | 0.000    |      | 0        | N.D.  |       |           |
| 37) Dibromomethane            | 0.000    | 11.146 | 0.000    |      | 0        | N.D.  |       |           |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V421HL.D  
Acq On : 28 Jan 2010 6:06 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202037689|946008|50|VOA|1|VOA8260BS|  
Misc : HB 100uL N/A SOIL  
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 29 09:30:38 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|-------------------------------|--------|--------|--------|------|----------|------|-------|
| 38) Bromodichloromethane      | 0.000  | 11.256 | 0.000  |      | 0        | N.D. |       |
| 39) 2-Chloroethylvinyl ether  | 0.000  | 11.468 | 0.000  |      | 0        | N.D. |       |
| 40) cis-1,3-Dichloropropylene | 0.000  | 11.705 | 0.000  |      | 0        | N.D. |       |
| 42) 4-Methyl-2-pentanone      | 0.000  | 11.786 | 0.000  |      | 0        | N.D. |       |
| 44) Toluene                   | 12.101 | 12.090 | 0.893  | 91   | 145      | N.D. |       |
| 45) trans-1,3-Dichloroprop... | 0.000  | 12.239 | 0.000  |      | 0        | N.D. |       |
| 46) 1,1,2-Trichloroethane     | 0.000  | 12.465 | 0.000  |      | 0        | N.D. |       |
| 47) 2-Hexanone                | 0.000  | 12.631 | 0.000  |      | 0        | N.D. |       |
| 48) 1,3-Dichloropropane       | 0.000  | 12.656 | 0.000  |      | 0        | N.D. |       |
| 49) Tetrachloroethylene       | 0.000  | 12.691 | 0.000  |      | 0        | N.D. |       |
| 50) Dibromochloromethane      | 0.000  | 12.928 | 0.000  |      | 0        | N.D. |       |
| 51) 1,2-Dibromoethane         | 0.000  | 13.094 | 0.000  |      | 0        | N.D. |       |
| 52) Chlorobenzene             | 0.000  | 13.579 | 0.000  |      | 0        | N.D. |       |
| 53) 1,1,1,2-Tetrachloroethane | 0.000  | 13.636 | 0.000  |      | 0        | N.D. |       |
| 54) Ethylbenzene              | 13.547 | 13.639 | 1.000  | 91   | 2239     | N.D. |       |
| 55) m,p-Xylenes               | 0.000  | 13.749 | 0.000  |      | 0        | N.D. |       |
| 56) o-Xylene                  | 0.000  | 14.184 | 0.000  |      | 0        | N.D. |       |
| 57) Styrene                   | 0.000  | 14.184 | 0.000  |      | 0        | N.D. |       |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D. |       |
| 60) Isopropylbenzene          | 0.000  | 14.537 | 0.000  |      | 0        | N.D. |       |
| 62) 1,1,2,2-Tetrachloroethane | 0.000  | 14.810 | 0.000  |      | 0        | N.D. |       |
| 63) 1,2,3-Trichloropropane    | 0.000  | 14.898 | 0.000  |      | 0        | N.D. |       |
| 64) Bromobenzene              | 0.000  | 14.951 | 0.000  |      | 0        | N.D. |       |
| 65) n-Propylbenzene           | 14.735 | 14.965 | 0.923  | 91   | 1416     | N.D. |       |
| 66) 1,3,5-Trimethylbenzene    | 0.000  | 15.114 | 0.000  |      | 0        | N.D. |       |
| 67) 2-Chlorotoluene           | 0.000  | 15.117 | 0.000  |      | 0        | N.D. |       |
| 68) 4-Chlorotoluene           | 0.000  | 15.216 | 0.000  |      | 0        | N.D. |       |
| 69) tert-Butylbenzene         | 0.000  | 15.489 | 0.000  |      | 0        | N.D. |       |
| 70) 1,2,4-Trimethylbenzene    | 0.000  | 15.527 | 0.000  |      | 0        | N.D. |       |
| 71) sec-Butylbenzene          | 0.000  | 15.711 | 0.000  |      | 0        | N.D. |       |
| 72) 4-Isopropyltoluene        | 0.000  | 15.832 | 0.000  |      | 0        | N.D. |       |
| 73) 1,3-Dichlorobenzene       | 0.000  | 15.902 | 0.000  |      | 0        | N.D. |       |
| 74) 1,4-Dichlorobenzene       | 0.000  | 15.991 | 0.000  |      | 0        | N.D. |       |
| 75) n-Butylbenzene            | 0.000  | 16.277 | 0.000  |      | 0        | N.D. |       |
| 76) 1,2-Dichlorobenzene       | 0.000  | 16.422 | 0.000  |      | 0        | N.D. |       |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D. |       |
| 78) 1,2,4-Trichlorobenzene    | 0.000  | 18.371 | 0.000  |      | 0        | N.D. |       |
| 79) Hexachlorobutadiene       | 0.000  | 18.548 | 0.000  |      | 0        | N.D. |       |
| 80) Naphthalene               | 18.784 | 18.762 | 1.177  | 128  | 111      | N.D. |       |
| 81) 1,2,3-Trichlorobenzene    | 0.000  | 19.116 | 0.000  |      | 0        | N.D. |       |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D. |       |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D. |       |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D. |       |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D. |       |
| 87) Isopropyl Alcohol         | 0.000  | 7.175  | 0.000  |      | 0        | N.D. |       |
| 88) Allyl chloride            | 0.000  | 7.546  | 0.000  |      | 0        | N.D. |       |
| 89) tert-Butyl Alcohol        | 0.000  | 7.673  | 0.000  |      | 0        | N.D. |       |
| 90) Acrylonitrile             | 0.000  | 7.928  | 0.000  |      | 0        | N.D. |       |
| 91) Isopropyl ether           | 0.000  | 8.483  | 0.000  |      | 0        | N.D. |       |
| 92) 2-Chloro-1,3-butadiene    | 0.000  | 8.617  | 0.000  |      | 0        | N.D. |       |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D. |       |
| 94) Ethyl acetate             | 0.000  | 9.088  | 0.000  |      | 0        | N.D. |       |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V421HL.D  
Acq On : 28 Jan 2010 6:06 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202037689|946008|50|VOA|1|VOA8260BS|  
Misc : HB 100uL N/A SOIL  
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 29 09:30:38 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|--------|--------|--------|------|----------|------|-------|
| 95) Propionitrile              | 0.000  | 9.148  | 0.000  |      | 0        | N.D. |       |
| 96) Methacrylonitrile          | 9.466  | 9.332  | 0.912  | 41   | 121      | N.D. |       |
| 97) Tetrahydrofuran            | 9.463  | 9.466  | 0.912  | 42   | 397      | N.D. |       |
| 98) Isobutyl alcohol           | 0.000  | 9.770  | 0.000  |      | 0        | N.D. |       |
| 99) Methyl tert-amyl ether     | 0.000  | 10.138 | 0.000  |      | 0        | N.D. |       |
| 100) Methyl methacrylate       | 0.000  | 10.969 | 0.000  |      | 0        | N.D. |       |
| 101) 1,4-Dioxane               | 0.000  | 11.089 | 0.000  |      | 0        | N.D. |       |
| 102) 2-Nitropropane            | 0.000  | 11.443 | 0.000  |      | 0        | N.D. |       |
| 104) Ethyl methacrylate        | 0.000  | 12.235 | 0.000  |      | 0        | N.D. |       |
| 106) 1-Chlorohexane            | 0.000  | 13.438 | 0.000  |      | 0        | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 0.000  | 14.573 | 0.000  |      | 0        | N.D. |       |
| 108) Cyclohexanone             | 0.000  | 14.693 | 0.000  |      | 0        | N.D. |       |
| 109) trans-1,4-Dichloro-2-b... | 0.000  | 14.856 | 0.000  |      | 0        | N.D. |       |
| 110) Pentachloroethane         | 0.000  | 15.559 | 0.000  |      | 0        | N.D. |       |
| 111) Benzyl chloride           | 0.000  | 16.100 | 0.000  |      | 0        | N.D. |       |
| 112) bis(2-Chloroisopropyl)... | 16.546 | 16.497 | 1.037  | 45   | 1314     | N.D. |       |

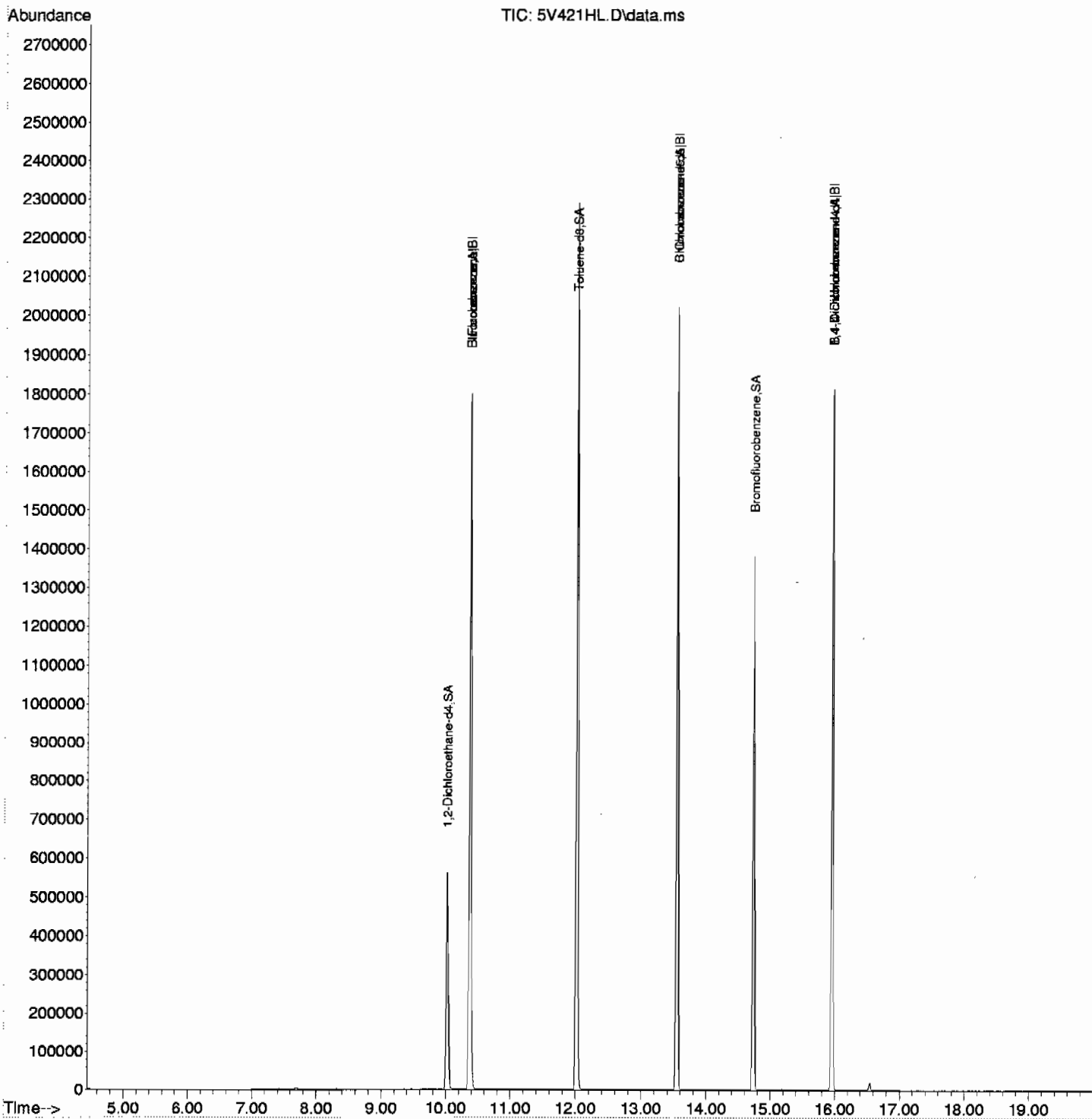
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V421HL.D  
Acq On : 28 Jan 2010 6:06 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202037689|946008|50|VOA|1|VOA8260BS|  
Misc : HB 100uL N/A SOIL  
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 29 09:30:38 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V421HL.D  
Acq On : 28 Jan 2010 6:06 pm  
Operator : DXK1  
Sample : |1202037689|946008|50|VOA|1|VOA8260BS|  
Misc : HB 100uL N/A SOIL  
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V421HL.D  
Acq On : 28 Jan 2010 6:06 pm  
Operator : DXK1  
Sample : |1202037689|946008|50|VOA|1|VOA8260BS|  
Misc : HB 100uL N/A SOIL  
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

| TIC Top Hit name | RT | EstConc | Units | Response | ---Internal Standard--- |
|------------------|----|---------|-------|----------|-------------------------|
|                  |    |         |       | #        | RT Resp Conc            |



**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 1202026238  
Client Sample: QC for batch 946006  
Client ID: LCS for batch 946006  
Batch ID: 946008  
Run Date: 01/28/2010 10:10  
Prep Date: 01/28/2009 08:00  
Data File: 012810V55V403LL.D

Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: SOIL  
Project: QC  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     |           | 44.7   | ug/kg | 0.340   | 1.00    |
| 74-87-3    | Chloromethane               |           | 54.5   | ug/kg | 0.300   | 1.00    |
| 75-01-4    | Vinyl chloride              |           | 57.6   | ug/kg | 0.300   | 1.00    |
| 74-83-9    | Bromomethane                |           | 50.0   | ug/kg | 0.300   | 1.00    |
| 75-00-3    | Chloroethane                |           | 50.4   | ug/kg | 0.300   | 1.00    |
| 75-69-4    | Trichlorofluoromethane      |           | 51.7   | ug/kg | 0.300   | 1.00    |
| 67-64-1    | Acetone                     |           | 261    | ug/kg | 1.66    | 5.00    |
| 75-35-4    | 1,1-Dichloroethylene        |           | 59.8   | ug/kg | 0.300   | 1.00    |
| 74-88-4    | Iodomethane                 |           | 212    | ug/kg | 1.60    | 5.00    |
| 75-09-2    | Methylene chloride          |           | 43.9   | ug/kg | 2.00    | 5.00    |
| 75-15-0    | Carbon disulfide            |           | 273    | ug/kg | 1.25    | 5.00    |
| 156-60-5   | trans-1,2-Dichloroethylene  |           | 54.2   | ug/kg | 0.300   | 1.00    |
| 75-34-3    | 1,1-Dichloroethane          |           | 52.5   | ug/kg | 0.300   | 1.00    |
| 78-93-3    | 2-Butanone                  |           | 270    | ug/kg | 1.50    | 5.00    |
| 156-59-2   | cis-1,2-Dichloroethylen     |           | 52.4   | ug/kg | 0.300   | 1.00    |
| 594-20-7   | 2,2-Dichloropropane         |           | 50.3   | ug/kg | 0.300   | 1.00    |
| 67-66-3    | Chloroform                  |           | 50.2   | ug/kg | 0.300   | 1.00    |
| 74-97-5    | Bromochloromethane          |           | 40.9   | ug/kg | 0.330   | 1.00    |
| 71-55-6    | 1,1,1-Trichloroethane       |           | 50.8   | ug/kg | 0.300   | 1.00    |
| 563-58-6   | 1,1-Dichloropropene         |           | 54.5   | ug/kg | 0.300   | 1.00    |
| 56-23-5    | Carbon tetrachloride        |           | 51.8   | ug/kg | 0.300   | 1.00    |
| 107-06-2   | 1,2-Dichloroethane          |           | 51.4   | ug/kg | 0.300   | 1.00    |
| 71-43-2    | Benzene                     |           | 49.4   | ug/kg | 0.300   | 1.00    |
| 79-01-6    | Trichloroethylene           |           | 50.6   | ug/kg | 0.330   | 1.00    |
| 78-87-5    | 1,2-Dichloropropane         |           | 52.8   | ug/kg | 0.300   | 1.00    |
| 75-27-4    | Bromodichloromethane        |           | 51.4   | ug/kg | 0.300   | 1.00    |
| 74-95-3    | Dibromomethane              |           | 46.7   | ug/kg | 0.300   | 1.00    |
| 108-10-1   | 4-Methyl-2-pentanone        |           | 288    | ug/kg | 1.25    | 5.00    |
| 10061-01-5 | cis-1,3-Dichloropropylene   |           | 50.9   | ug/kg | 0.300   | 1.00    |
| 108-88-3   | Toluene                     |           | 51.8   | ug/kg | 0.300   | 1.00    |
| 10061-02-6 | trans-1,3-Dichloropropylene |           | 55.6   | ug/kg | 0.300   | 1.00    |
| 79-00-5    | 1,1,2-Trichloroethane       |           | 49.6   | ug/kg | 0.300   | 1.00    |
| 591-78-6   | 2-Hexanone                  |           | 307    | ug/kg | 1.50    | 5.00    |
| 142-28-9   | 1,3-Dichloropropane         |           | 51.7   | ug/kg | 0.300   | 1.00    |
| 127-18-4   | Tetrachloroethylene         |           | 46.1   | ug/kg | 0.300   | 1.00    |
| 124-48-1   | Dibromochloromethane        |           | 48.0   | ug/kg | 0.300   | 1.00    |
| 106-93-4   | 1,2-Dibromoethane           |           | 48.3   | ug/kg | 0.300   | 1.00    |
| 108-90-7   | Chlorobenzene               |           | 47.6   | ug/kg | 0.300   | 1.00    |

**Volatile  
Certificate of Analysis  
Sample Summary**

Page 2 of 2

SDG Number: 10-1324  
Lab Sample ID: 1202026238  
Client Sample: QC for batch 946006  
Client ID: LCS for batch 946006  
Batch ID: 946008  
Run Date: 01/28/2010 10:10  
Prep Date: 01/28/2009 08:00  
Data File: 012810V55V403LL.D

Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: SOIL  
Project: QC  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          |           | 54.6   | ug/kg | 0.300   | 1.00    |
| 179601-23-1 | m,p-Xylenes                           |           | 104    | ug/kg | 0.300   | 2.00    |
| 95-47-6     | o-Xylene                              |           | 52.2   | ug/kg | 0.300   | 1.00    |
| 100-42-5    | Styrene                               |           | 54.6   | ug/kg | 0.300   | 1.00    |
| 75-25-2     | Bromoform                             |           | 48.5   | ug/kg | 0.300   | 1.00    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             |           | 53.4   | ug/kg | 0.300   | 1.00    |
| 96-18-4     | 1,2,3-Trichloropropane                |           | 50.2   | ug/kg | 0.300   | 1.00    |
| 108-86-1    | Bromobenzene                          |           | 46.5   | ug/kg | 0.300   | 1.00    |
| 103-65-1    | n-Propylbenzene                       |           | 59.8   | ug/kg | 0.300   | 1.00    |
| 95-49-8     | 2-Chlorotoluene                       |           | 53.5   | ug/kg | 0.300   | 1.00    |
| 98-82-8     | Isopropylbenzene                      |           | 56.9   | ug/kg | 0.300   | 1.00    |
| 108-67-8    | 1,3,5-Trimethylbenzene                |           | 58.7   | ug/kg | 0.300   | 1.00    |
| 106-43-4    | 4-Chlorotoluene                       |           | 55.4   | ug/kg | 0.300   | 1.00    |
| 98-06-6     | tert-Butylbenzene                     |           | 51.9   | ug/kg | 0.300   | 1.00    |
| 95-63-6     | 1,2,4-Trimethylbenzene                |           | 55.7   | ug/kg | 0.300   | 1.00    |
| 135-98-8    | sec-Butylbenzene                      |           | 56.7   | ug/kg | 0.300   | 1.00    |
| 99-87-6     | 4-Isopropyltoluene                    |           | 55.6   | ug/kg | 0.300   | 1.00    |
| 541-73-1    | 1,3-Dichlorobenzene                   |           | 47.4   | ug/kg | 0.300   | 1.00    |
| 106-46-7    | 1,4-Dichlorobenzene                   |           | 46.3   | ug/kg | 0.300   | 1.00    |
| 104-51-8    | n-Butylbenzene                        |           | 60.4   | ug/kg | 0.300   | 1.00    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           |           | 48.4   | ug/kg | 0.300   | 1.00    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 5.00   | ug/kg | 1.60    | 5.00    |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             |           | 49.8   | ug/kg | 0.300   | 1.00    |
| 95-50-1     | 1,2-Dichlorobenzene                   |           | 46.4   | ug/kg | 0.300   | 1.00    |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V403LL.D  
Acq On : 28 Jan 2010 10:10 am  
Operator : DXK1  
InstName : VOA5  
Sample : |1202026238|946008|1|VOA|1|VOA8260BS|  
Misc : LCS 5g N/A SOIL MIX[A]  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 28 13:01:03 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT   | QIon     | Response | Conc    | Units |           |
|-------------------------------|--------|--------|----------|----------|----------|---------|-------|-----------|
| Internal Standards            |        |        |          |          |          |         |       | Dev (Min) |
| 1) Fluorobenzene              | 10.375 | 10.375 | 1.000    | 96       | 1993245  | 50.00   | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547 | 13.547 | 1.000    | 117      | 1312881  | 50.00   | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.959 | 15.962 | 1.000    | 152      | 649435   | 50.00   | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.375 | 10.375 | 1.000    | 96       | 1993245  | 50.00   | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547 | 13.547 | 1.000    | 117      | 1312881  | 50.00   | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.959 | 15.962 | 1.000    | 152      | 649435   | 50.00   | ug/L  | 0.00      |
| System Monitoring Compounds   |        |        |          |          |          |         |       | Dev (Min) |
| 29) 1,2-Dichloroethane-d4     | 10.021 | 10.021 | 0.966    | 65       | 477056   | 51.50   | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range  | 68 - 131 | Recovery | =        | 103.00% |       |           |
| 43) Toluene-d8                | 12.016 | 12.016 | 0.887    | 98       | 1807084  | 50.47   | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range  | 75 - 129 | Recovery | =        | 100.94% |       |           |
| 61) Bromofluorobenzene        | 14.735 | 14.739 | 0.923    | 95       | 642336   | 51.83   | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range  | 68 - 133 | Recovery | =        | 103.66% |       |           |
| Target Compounds              |        |        |          |          |          |         |       | QValue    |
| 2) Dichlorodifluoromethane    | 4.689  | 4.689  | 0.452    | 85       | 191927   | 44.69   | ug/L  | 100       |
| 3) Chloromethane              | 5.061  | 5.051  | 0.488    | 50       | 534501   | 54.51   | ug/L  | 100       |
| 4) Vinyl chloride             | 5.263  | 5.283  | 0.507    | 62       | 504255   | 57.62   | ug/L  | 99        |
| 5) Bromomethane               | 5.877  | 5.877  | 0.566    | 94       | 310661   | 49.96   | ug/L  | 99        |
| 6) Chloroethane               | 6.008  | 6.018  | 0.579    | 64       | 296966   | 50.37   | ug/L  | 99        |
| 7) Trichlorofluoromethane     | 6.390  | 6.391  | 0.616    | 101      | 445646   | 51.74   | ug/L  | 99        |
| 8) Ethyl ether                | 6.733  | 6.733  | 0.649    | 59       | 355403   | 48.73   | ug/L  | 100       |
| 9) Acetone                    | 7.100  | 7.100  | 0.684    | 43       | 1948943  | 260.82  | ug/L  | 97        |
| 10) 1,1-Dichloroethylene      | 7.125  | 7.125  | 0.687    | 61       | 555738   | 59.80   | ug/L  | 97        |
| 11) Iodomethane               | 7.369  | 7.373  | 0.710    | 142      | 2354584  | 211.59  | ug/L  | 93        |
| 12) Acetonitrile              | 7.450  | 7.450  | 0.718    | 41       | 1565180  | 1267.97 | ug/L  | 98        |
| 13) Methyl acetate            | 7.493  | 7.493  | 0.722    | 43       | 1871862  | 250.46  | ug/L  | 99        |
| 14) Carbon disulfide          | 7.507  | 7.511  | 0.724    | 76       | 5927162  | 272.82  | ug/L  | 99        |
| 15) Methylene chloride        | 7.687  | 7.691  | 0.741    | 84       | 373166   | 43.89   | ug/L  | 95        |
| 16) tert-Butyl methyl ether   | 7.981  | 7.984  | 0.769    | 73       | 734029   | 44.60   | ug/L  | 99        |
| 17) trans-1,2-Dichloroethy... | 8.034  | 8.030  | 0.774    | 61       | 559104   | 54.22   | ug/L  | 95        |
| 18) Vinyl acetate             | 8.455  | 8.458  | 0.815    | 43       | 5360355  | 291.09  | ug/L  | 99        |
| 19) 1,1-Dichloroethane        | 8.508  | 8.511  | 0.820    | 63       | 686859   | 52.51   | ug/L  | 100       |
| 20) 2-Butanone                | 9.077  | 9.077  | 0.875    | 43       | 2313885  | 270.35  | ug/L  | 98        |
| 21) cis-1,2-Dichloroethylene  | 9.148  | 9.144  | 0.882    | 61       | 612660   | 52.35   | ug/L  | 96        |
| 22) 2,2-Dichloropropane       | 9.166  | 9.173  | 0.883    | 77       | 329949   | 50.27   | ug/L  | 97        |
| 23) Bromochloromethane        | 9.417  | 9.417  | 0.908    | 128      | 160950   | 40.88   | ug/L  | # 82      |
| 24) Chloroform                | 9.452  | 9.452  | 0.911    | 83       | 601758   | 50.20   | ug/L  | 99        |
| 25) 1,1,1-Trichloroethane     | 9.731  | 9.735  | 0.938    | 97       | 424768   | 50.77   | ug/L  | 98        |
| 26) Cyclohexane               | 9.830  | 9.830  | 0.948    | 56       | 668828   | 55.05   | ug/L  | 93        |
| 27) 1,1-Dichloropropene       | 9.887  | 9.887  | 0.953    | 75       | 499136   | 54.45   | ug/L  | 93        |
| 28) Carbon tetrachloride      | 9.929  | 9.929  | 0.957    | 117      | 381433   | 51.82   | ug/L  | 98        |
| 30) 1,2-Dichloroethane        | 10.103 | 10.103 | 0.974    | 62       | 501351   | 51.38   | ug/L  | 100       |
| 31) Benzene                   | 10.127 | 10.127 | 0.976    | 78       | 1529457  | 49.42   | ug/L  | 99        |
| 32) Cyclohexene               | 10.244 | 10.248 | 0.987    | 67       | 774818   | 53.99   | ug/L  | 100       |
| 33) n-Butyl alcohol           | 10.456 | 10.460 | 1.008    | 56       | 1588858  | 5443.33 | ug/L  | 97        |
| 34) Trichloroethylene         | 10.764 | 10.768 | 1.037    | 95       | 363029   | 50.61   | ug/L  | 94        |
| 35) 1,2-Dichloropropane       | 11.004 | 11.004 | 1.061    | 63       | 423255   | 52.79   | ug/L  | 100       |
| 36) Methylcyclohexane         | 11.019 | 11.019 | 1.062    | 83       | 638148   | 50.46   | ug/L  | 98        |
| 37) Dibromomethane            | 11.142 | 11.146 | 1.074    | 93       | 196685   | 46.71   | ug/L  | 88        |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V403LL.D  
Acq On : 28 Jan 2010 10:10 am  
Operator : DXK1  
InstName : VOA5  
Sample : |1202026238|946008|1|VOA|1|VOA8260BS|  
Misc : LCS 5g N/A SOIL MIX[A]  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 28 13:01:03 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc   | Units  |     |
|-------------------------------|--------|--------|--------|------|----------|--------|--------|-----|
| 38) Bromodichloromethane      | 11.256 | 11.256 | 1.085  | 83   | 442612   | 51.35  | ug/L   | 99  |
| 39) 2-Chloroethylvinyl ether  | 11.468 | 11.468 | 1.105  | 63   | 1086112  | 244.28 | ug/L   | 98  |
| 40) cis-1,3-Dichloropropylene | 11.701 | 11.705 | 1.128  | 75   | 571574   | 50.91  | ug/L   | 96  |
| 42) 4-Methyl-2-pentanone      | 11.782 | 11.786 | 0.870  | 58   | 1002243  | 288.48 | ug/L   | 95  |
| 44) Toluene                   | 12.090 | 12.090 | 0.892  | 91   | 1629605  | 51.83  | ug/L   | 99  |
| 45) trans-1,3-Dichloroprop... | 12.239 | 12.239 | 0.903  | 75   | 520325   | 55.58  | ug/L   | 96  |
| 46) 1,1,2-Trichloroethane     | 12.461 | 12.465 | 0.920  | 83   | 259469   | 49.57  | ug/L   | 98  |
| 47) 2-Hexanone                | 12.631 | 12.631 | 0.932  | 43   | 3156762  | 306.84 | ug/L   | 97  |
| 48) 1,3-Dichloropropane       | 12.652 | 12.656 | 0.934  | 76   | 573028   | 51.72  | ug/L   | 97  |
| 49) Tetrachloroethylene       | 12.691 | 12.691 | 0.937  | 164  | 270095   | 46.05  | ug/L   | 94  |
| 50) Dibromochloromethane      | 12.928 | 12.928 | 0.954  | 129  | 301322   | 48.00  | ug/L   | 99  |
| 51) 1,2-Dibromoethane         | 13.094 | 13.094 | 0.967  | 107  | 283497   | 48.32  | ug/L   | 99  |
| 52) Chlorobenzene             | 13.579 | 13.579 | 1.002  | 112  | 949554   | 47.59  | ug/L   | 96  |
| 53) 1,1,1,2-Tetrachloroethane | 13.632 | 13.636 | 1.006  | 131  | 321328   | 49.82  | ug/L   | 97  |
| 54) Ethylbenzene              | 13.639 | 13.639 | 1.007  | 91   | 1810168  | 54.62  | ug/L   | 98  |
| 55) m,p-Xylenes               | 13.745 | 13.749 | 1.015  | 106  | 1390508  | 104.22 | ug/L   | 93  |
| 56) o-Xylene                  | 14.180 | 14.184 | 1.047  | 106  | 668324   | 52.24  | ug/L   | 92  |
| 57) Styrene                   | 14.184 | 14.184 | 1.047  | 104  | 1096088  | 54.58  | ug/L   | 93  |
| 59) Bromoform                 | 14.445 | 14.445 | 0.905  | 173  | 176452   | 48.45  | ug/L   | 98  |
| 60) Isopropylbenzene          | 14.537 | 14.537 | 0.911  | 105  | 1676300  | 56.93  | ug/L   | 98  |
| 62) 1,1,2,2-Tetrachloroethane | 14.810 | 14.810 | 0.928  | 83   | 400699   | 53.36  | ug/L   | 99  |
| 63) 1,2,3-Trichloropropane    | 14.898 | 14.898 | 0.934  | 110  | 101499   | 50.19  | ug/L   | 95  |
| 64) Bromobenzene              | 14.951 | 14.951 | 0.937  | 156  | 357569   | 46.54  | ug/L # | 85  |
| 65) n-Propylbenzene           | 14.962 | 14.965 | 0.938  | 91   | 2114279  | 59.84  | ug/L   | 97  |
| 66) 1,3,5-Trimethylbenzene    | 15.114 | 15.114 | 0.947  | 105  | 1415122  | 58.69  | ug/L   | 96  |
| 67) 2-Chlorotoluene           | 15.117 | 15.117 | 0.947  | 126  | 395230   | 53.53  | ug/L # | 84  |
| 68) 4-Chlorotoluene           | 15.216 | 15.216 | 0.953  | 91   | 1213622  | 55.36  | ug/L   | 95  |
| 69) tert-Butylbenzene         | 15.489 | 15.489 | 0.971  | 134  | 294276   | 51.85  | ug/L # | 88  |
| 70) 1,2,4-Trimethylbenzene    | 15.527 | 15.527 | 0.973  | 105  | 1379745  | 55.71  | ug/L   | 96  |
| 71) sec-Butylbenzene          | 15.711 | 15.711 | 0.984  | 105  | 1838258  | 56.67  | ug/L   | 97  |
| 72) 4-Isopropyltoluene        | 15.832 | 15.832 | 0.992  | 119  | 1418638  | 55.64  | ug/L   | 96  |
| 73) 1,3-Dichlorobenzene       | 15.902 | 15.902 | 0.996  | 146  | 706056   | 47.36  | ug/L   | 98  |
| 74) 1,4-Dichlorobenzene       | 15.987 | 15.991 | 1.002  | 146  | 717156   | 46.27  | ug/L   | 98  |
| 75) n-Butylbenzene            | 16.277 | 16.277 | 1.020  | 91   | 1485661  | 60.43  | ug/L   | 97  |
| 76) 1,2-Dichlorobenzene       | 16.419 | 16.422 | 1.029  | 146  | 658271   | 46.41  | ug/L   | 98  |
| 77) 1,2-Dibromo-3-chloropr... | 17.293 | 17.293 | 1.084  | 157  | 66395    | 48.41  | ug/L   | 90  |
| 78) 1,2,4-Trichlorobenzene    | 18.371 | 18.371 | 1.151  | 180  | 451070   | 46.01  | ug/L   | 100 |
| 79) Hexachlorobutadiene       | 18.548 | 18.548 | 1.162  | 225  | 253803   | 46.20  | ug/L   | 98  |
| 80) Naphthalene               | 18.762 | 18.762 | 1.176  | 128  | 1133665  | 52.53  | ug/L   | 100 |
| 81) 1,2,3-Trichlorobenzene    | 19.109 | 19.116 | 1.197  | 180  | 411707   | 48.79  | ug/L   | 99  |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D.   |        |     |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D.   |        |     |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D.   |        |     |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D.   |        |     |
| 87) Isopropyl Alcohol         | 7.171  | 7.175  | 0.691  |      | 0m       | N.D.   | d      |     |
| 88) Allyl chloride            | 7.450  | 7.546  | 0.718  |      | 0m       | N.D.   | d      |     |
| 89) tert-Butyl Alcohol        | 7.705  | 7.673  | 0.743  |      | 0m       | N.D.   | d      |     |
| 90) Acrylonitrile             | 7.974  | 7.928  | 0.769  |      | 0m       | N.D.   | d      |     |
| 91) Isopropyl ether           | 8.458  | 8.483  | 0.815  |      | 0m       | N.D.   | d      |     |
| 92) 2-Chloro-1,3-butadiene    | 8.614  | 8.617  | 0.830  |      | 0m       | N.D.   | d      |     |
| 93) Ethyl tert-butyl ether    | 8.893  | 8.890  | 0.857  |      | 0m       | N.D.   | d      |     |
| 94) Ethyl acetate             | 9.077  | 9.088  | 0.875  |      | 0m       | N.D.   | d      |     |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V403LL.D  
Acq On : 28 Jan 2010 10:10 am  
Operator : DXK1  
InstName : VOA5  
Sample : |1202026238|946008|1|VOA|1|VOA8260BS|  
Misc : LCS 5g N/A SOIL MIX[A]  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 28 13:01:03 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

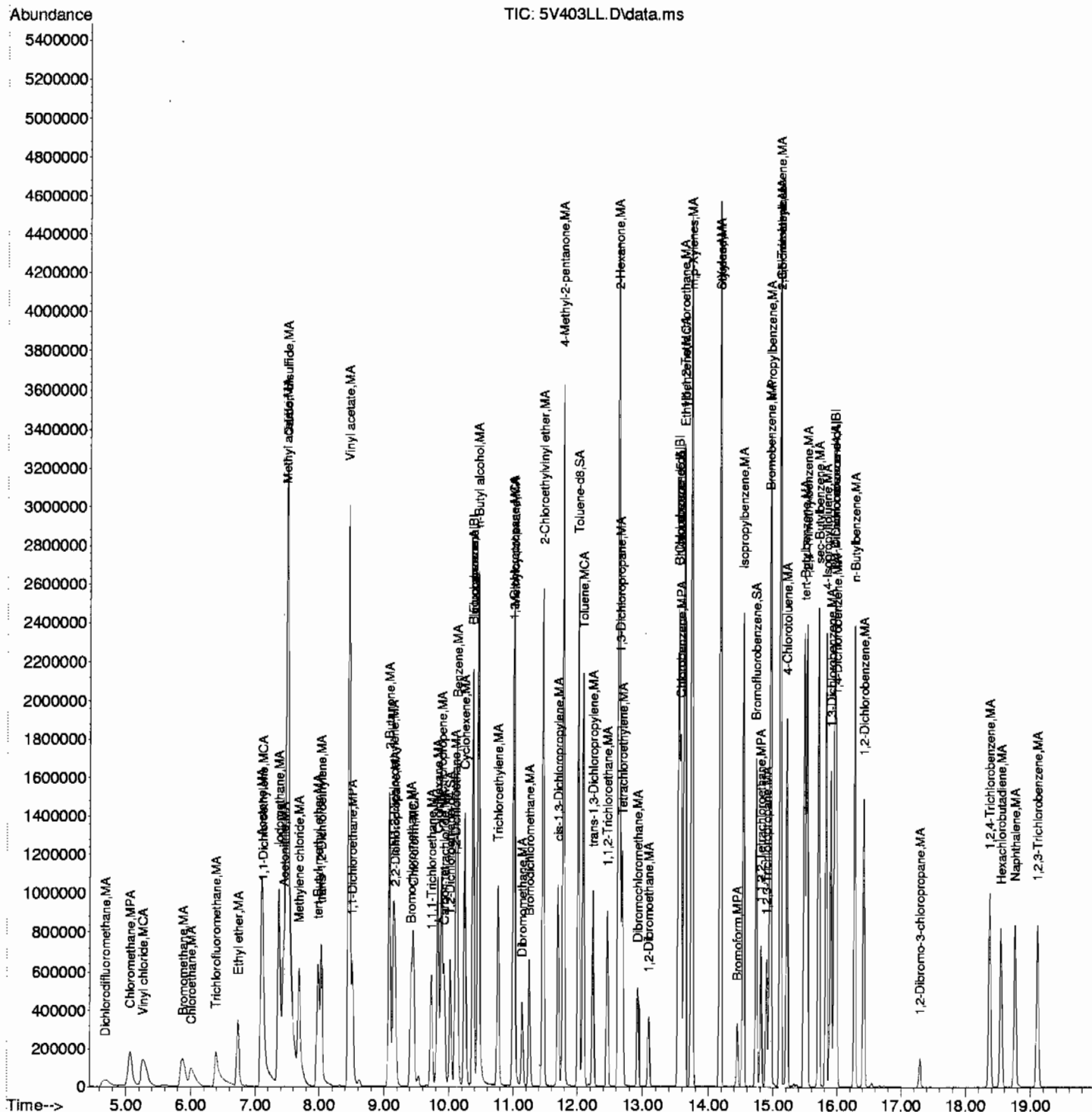
| Compound                       | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|--------|--------|--------|------|----------|------|-------|
| 95) Propionitrile              | 9.077  | 9.148  | 0.875  |      | 0m       | N.D. | d     |
| 96) Methacrylonitrile          | 9.166  | 9.332  | 0.883  |      | 0m       | N.D. | d     |
| 97) Tetrahydrofuran            | 9.459  | 9.466  | 0.912  |      | 0m       | N.D. | d     |
| 98) Isobutyl alcohol           | 9.657  | 9.770  | 0.931  |      | 0m       | N.D. | d     |
| 99) Methyl tert-amyl ether     | 10.124 | 10.138 | 0.976  |      | 0m       | N.D. | d     |
| 100) Methyl methacrylate       | 11.015 | 10.969 | 1.062  |      | 0m       | N.D. | d     |
| 101) 1,4-Dioxane               | 11.132 | 11.089 | 1.073  |      | 0m       | N.D. | d     |
| 102) 2-Nitropropane            | 11.556 | 11.443 | 1.114  |      | 0m       | N.D. | d     |
| 104) Ethyl methacrylate        | 12.235 | 12.235 | 0.903  |      | 0m       | N.D. | d     |
| 106) 1-Chlorohexane            | 0.000  | 13.438 | 0.000  |      | 0        | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 14.537 | 14.573 | 0.911  |      | 0m       | N.D. | d     |
| 108) Cyclohexanone             | 14.537 | 14.693 | 0.911  |      | 0m       | N.D. | d     |
| 109) trans-1,4-Dichloro-2-b... | 14.856 | 14.856 | 0.931  |      | 0m       | N.D. | d     |
| 110) Pentachloroethane         | 15.559 | 15.559 | 0.975  |      | 0m       | N.D. | d     |
| 111) Benzyl chloride           | 16.093 | 16.100 | 1.008  |      | 0m       | N.D. | d     |
| 112) bis(2-Chloroisopropyl)... | 16.500 | 16.497 | 1.034  |      | 0m       | N.D. | d     |

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V403LL.D  
Acq On : 28 Jan 2010 10:10 am  
Operator : DXK1  
InstName : VOA5  
Sample : |1202026238|946008|1|VOA|1|VOA8260BS|  
Misc : LCS 5g N/A SOIL MIX[A]  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 28 13:01:03 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :



**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324

Lab Sample ID: 1202026239

Client Sample: QC for batch 946006

Client ID: LCS for batch 946006

Batch ID: 946008

Run Date: 01/28/2010 10:36

Prep Date: 01/28/2009 08:00

Data File: 012810V55V404SL.D

Client: LANL010

Method: SW846 8260B

Inst: VOA5.I

Analyst: DXK1

Aliquot: 5 g

Column: DB-624

Matrix: SOIL

Project: QC

SOP Ref: GL-OA-E-038

Dilution: 1

Purge Vol: 5 mL

Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.00   | ug/kg | 0.340   | 1.00    |
| 74-87-3    | Chloromethane               | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-01-4    | Vinyl chloride              | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-83-9    | Bromomethane                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-00-3    | Chloroethane                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 67-64-1    | Acetone                     | U         | 5.00   | ug/kg | 1.66    | 5.00    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-88-4    | Iodomethane                 | U         | 5.00   | ug/kg | 1.60    | 5.00    |
| 75-09-2    | Methylene chloride          | U         | 5.00   | ug/kg | 2.00    | 5.00    |
| 75-15-0    | Carbon disulfide            | U         | 5.00   | ug/kg | 1.25    | 5.00    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 78-93-3    | 2-Butanone                  | U         | 5.00   | ug/kg | 1.50    | 5.00    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 67-66-3    | Chloroform                  | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-97-5    | Bromochloromethane          | U         | 1.00   | ug/kg | 0.330   | 1.00    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 71-43-2    | Benzene                     | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 79-01-6    | Trichloroethylene           | U         | 1.00   | ug/kg | 0.330   | 1.00    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-27-4    | Bromodichloromethane        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-95-3    | Dibromomethane              | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.00   | ug/kg | 1.25    | 5.00    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-88-3   | Toluene                     | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 591-78-6   | 2-Hexanone                  | U         | 5.00   | ug/kg | 1.50    | 5.00    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 124-48-1   | Dibromochloromethane        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-90-7   | Chlorobenzene               | U         | 1.00   | ug/kg | 0.300   | 1.00    |

Volatile  
Certificate of Analysis  
Sample Summary

Page 2 of 2

SDG Number: 10-1324

Matrix: SOIL

Lab Sample ID: 1202026239

Client Sample: QC for batch 946006

Client: LANL010

Project: QC

Client ID: LCS for batch 946006

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 946008

Inst: VOA5.I

Dilution: 1

Run Date: 01/28/2010 10:36

Analyst: DXK1

Purge Vol: 5 mL

Prep Date: 01/28/2009 08:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 012810V5SV404SL.D

Column: DB-624

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.00   | ug/kg | 0.300   | 2.00    |
| 95-47-6     | o-Xylene                              | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 100-42-5    | Styrene                               | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-25-2     | Bromoform                             | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-86-1    | Bromobenzene                          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane |           | 346    | ug/kg | 1.60    | 5.00    |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.00   | ug/kg | 0.300   | 1.00    |



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V404SL.D  
Acq On : 28 Jan 2010 10:36 am  
Operator : DXK1  
InstName : VOA5  
Sample : |1202026239|946008|1|VOA|1|VOA8260BS|  
Misc : LCS 5g N/A SOIL MIX[B]  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 28 12:51:57 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT         | Rel RT   | QIon | Response | Conc  | Units |           |
|-------------------------------|--------|----------------|----------|------|----------|-------|-------|-----------|
| Internal Standards            |        |                |          |      |          |       |       | Dev (Min) |
| 1) Fluorobenzene              | 10.375 | 10.375         | 1.000    | 96   | 2029338  | 50.00 | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547 | 13.547         | 1.000    | 117  | 1320347  | 50.00 | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.963 | 15.962         | 1.000    | 152  | 616980   | 50.00 | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.375 | 10.375         | 1.000    | 96   | 2029338  | 50.00 | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547 | 13.547         | 1.000    | 117  | 1320347  | 50.00 | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.963 | 15.962         | 1.000    | 152  | 616980   | 50.00 | ug/L  | 0.00      |
| System Monitoring Compounds   |        |                |          |      |          |       |       | Dev (Min) |
| 29) 1,2-Dichloroethane-d4     | 10.021 | 10.021         | 0.966    | 65   | 492583   | 52.23 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 131 | Recovery | =    | 104.46%  |       |       |           |
| 43) Toluene-d8                | 12.016 | 12.016         | 0.887    | 98   | 1820365  | 50.55 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 75 - 129 | Recovery | =    | 101.10%  |       |       |           |
| 61) Bromofluorobenzene        | 14.735 | 14.739         | 0.923    | 95   | 645652   | 54.84 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 133 | Recovery | =    | 109.68%  |       |       |           |
| Target Compounds              | R.T.   | Exp RT         | Rel RT   | QIon | Response | Conc  | Units | QValue    |
| 2) Dichlorodifluoromethane    | 0.000  | 4.689          | 0.000    |      | 0        | N.D.  |       |           |
| 3) Chloromethane              | 5.061  | 5.051          | 0.488    |      | 0m       | N.D.  | d     |           |
| 4) Vinyl chloride             | 5.283  | 5.283          | 0.509    |      | 0m       | N.D.  | d     |           |
| 5) Bromomethane               | 0.000  | 5.877          | 0.000    |      | 0        | N.D.  |       |           |
| 6) Chloroethane               | 0.000  | 6.018          | 0.000    |      | 0        | N.D.  |       |           |
| 7) Trichlorofluoromethane     | 6.411  | 6.391          | 0.618    |      | 0m       | N.D.  | d     |           |
| 8) Ethyl ether                | 6.733  | 6.733          | 0.649    |      | 0m       | N.D.  | d     |           |
| 9) Acetone                    | 7.104  | 7.100          | 0.685    |      | 0m       | N.D.  | d     |           |
| 10) 1,1-Dichloroethylene      | 7.125  | 7.125          | 0.687    |      | 0m       | N.D.  | d     |           |
| 11) Iodomethane               | 7.362  | 7.373          | 0.710    |      | 0m       | N.D.  | d     |           |
| 12) Acetonitrile              | 7.454  | 7.450          | 0.718    |      | 0m       | N.D.  | d     |           |
| 13) Methyl acetate            | 7.493  | 7.493          | 0.722    |      | 0m       | N.D.  | d     |           |
| 14) Carbon disulfide          | 7.550  | 7.511          | 0.728    |      | 0m       | N.D.  | d     |           |
| 15) Methylene chloride        | 7.694  | 7.691          | 0.742    |      | 0m       | N.D.  | d     |           |
| 16) tert-Butyl methyl ether   | 7.988  | 7.984          | 0.770    |      | 0m       | N.D.  | d     |           |
| 17) trans-1,2-Dichloroethy... | 8.023  | 8.030          | 0.773    |      | 0m       | N.D.  | d     |           |
| 18) Vinyl acetate             | 8.458  | 8.458          | 0.815    |      | 0m       | N.D.  | d     |           |
| 19) 1,1-Dichloroethane        | 8.508  | 8.511          | 0.820    |      | 0m       | N.D.  | d     |           |
| 20) 2-Butanone                | 9.091  | 9.077          | 0.876    |      | 0m       | N.D.  | d     |           |
| 21) cis-1,2-Dichloroethylene  | 9.187  | 9.144          | 0.885    |      | 0m       | N.D.  | d     |           |
| 22) 2,2-Dichloropropane       | 9.173  | 9.173          | 0.884    |      | 0m       | N.D.  | d     |           |
| 23) Bromochloromethane        | 0.000  | 9.417          | 0.000    |      | 0        | N.D.  |       |           |
| 24) Chloroform                | 9.449  | 9.452          | 0.911    |      | 0m       | N.D.  | d     |           |
| 25) 1,1,1-Trichloroethane     | 9.724  | 9.735          | 0.937    |      | 0m       | N.D.  | d     |           |
| 26) Cyclohexane               | 9.770  | 9.830          | 0.942    |      | 0m       | N.D.  | d     |           |
| 27) 1,1-Dichloropropene       | 9.894  | 9.887          | 0.954    |      | 0m       | N.D.  | d     |           |
| 28) Carbon tetrachloride      | 9.926  | 9.929          | 0.957    |      | 0m       | N.D.  | d     |           |
| 30) 1,2-Dichloroethane        | 10.092 | 10.103         | 0.973    |      | 0m       | N.D.  | d     |           |
| 31) Benzene                   | 10.128 | 10.127         | 0.976    |      | 0m       | N.D.  | d     |           |
| 32) Cyclohexene               | 10.251 | 10.248         | 0.988    |      | 0m       | N.D.  | d     |           |
| 33) n-Butyl alcohol           | 10.463 | 10.460         | 1.009    |      | 0m       | N.D.  | d     |           |
| 34) Trichloroethylene         | 10.768 | 10.768         | 1.038    |      | 0m       | N.D.  | d     |           |
| 35) 1,2-Dichloropropane       | 11.005 | 11.004         | 1.061    |      | 0m       | N.D.  | d     |           |
| 36) Methylcyclohexane         | 11.019 | 11.019         | 1.062    |      | 0m       | N.D.  | d     |           |
| 37) Dibromomethane            | 11.146 | 11.146         | 1.074    |      | 0m       | N.D.  | d     |           |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V404SL.D  
Acq On : 28 Jan 2010 10:36 am  
Operator : DXK1  
InstName : VOA5  
Sample : |1202026239|946008|1|VOA|1|VOA8260BS|  
Misc : LCS 5g N/A SOIL MIX[B]  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 28 12:51:57 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc   | Units |    |
|-------------------------------|--------|--------|--------|------|----------|--------|-------|----|
| 38) Bromodichloromethane      | 11.249 | 11.256 | 1.084  |      | 0m       | N.D.   | d     |    |
| 39) 2-Chloroethylvinyl ether  | 11.468 | 11.468 | 1.105  |      | 0m       | N.D.   | d     |    |
| 40) cis-1,3-Dichloropropylene | 11.705 | 11.705 | 1.128  |      | 0m       | N.D.   | d     |    |
| 42) 4-Methyl-2-pentanone      | 11.786 | 11.786 | 0.870  |      | 0m       | N.D.   | d     |    |
| 44) Toluene                   | 12.090 | 12.090 | 0.892  |      | 0m       | N.D.   | d     |    |
| 45) trans-1,3-Dichloroprop... | 12.235 | 12.239 | 0.903  |      | 0m       | N.D.   | d     |    |
| 46) 1,1,2-Trichloroethane     | 12.465 | 12.465 | 0.920  |      | 0m       | N.D.   | d     |    |
| 47) 2-Hexanone                | 12.628 | 12.631 | 0.932  |      | 0m       | N.D.   | d     |    |
| 48) 1,3-Dichloropropane       | 12.660 | 12.656 | 0.934  |      | 0m       | N.D.   | d     |    |
| 49) Tetrachloroethylene       | 12.691 | 12.691 | 0.937  |      | 0m       | N.D.   | d     |    |
| 50) Dibromochloromethane      | 12.918 | 12.928 | 0.954  |      | 0m       | N.D.   | d     |    |
| 51) 1,2-Dibromoethane         | 13.102 | 13.094 | 0.967  |      | 0m       | N.D.   | d     |    |
| 52) Chlorobenzene             | 13.575 | 13.579 | 1.002  |      | 0m       | N.D.   | d     |    |
| 53) 1,1,1,2-Tetrachloroethane | 13.643 | 13.636 | 1.007  |      | 0m       | N.D.   | d     |    |
| 54) Ethylbenzene              | 13.639 | 13.639 | 1.007  |      | 0m       | N.D.   | d     |    |
| 55) m,p-Xylenes               | 13.749 | 13.749 | 1.015  |      | 0m       | N.D.   | d     |    |
| 56) o-Xylene                  | 14.184 | 14.184 | 1.047  |      | 0m       | N.D.   | d     |    |
| 57) Styrene                   | 14.180 | 14.184 | 1.047  |      | 0m       | N.D.   | d     |    |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D.   |       |    |
| 60) Isopropylbenzene          | 14.541 | 14.537 | 0.911  |      | 0m       | N.D.   | d     |    |
| 62) 1,1,2,2-Tetrachloroethane | 14.813 | 14.810 | 0.928  |      | 0m       | N.D.   | d     |    |
| 63) 1,2,3-Trichloropropane    | 0.000  | 14.898 | 0.000  |      | 0        | N.D.   |       |    |
| 64) Bromobenzene              | 14.951 | 14.951 | 0.937  |      | 0m       | N.D.   | d     |    |
| 65) n-Propylbenzene           | 14.962 | 14.965 | 0.937  |      | 0m       | N.D.   | d     |    |
| 66) 1,3,5-Trimethylbenzene    | 15.110 | 15.114 | 0.947  |      | 0m       | N.D.   | d     |    |
| 67) 2-Chlorotoluene           | 15.114 | 15.117 | 0.947  |      | 0m       | N.D.   | d     |    |
| 68) 4-Chlorotoluene           | 15.216 | 15.216 | 0.953  |      | 0m       | N.D.   | d     |    |
| 69) tert-Butylbenzene         | 15.485 | 15.489 | 0.970  |      | 0m       | N.D.   | d     |    |
| 70) 1,2,4-Trimethylbenzene    | 15.528 | 15.527 | 0.973  |      | 0m       | N.D.   | d     |    |
| 71) sec-Butylbenzene          | 15.711 | 15.711 | 0.984  |      | 0m       | N.D.   | d     |    |
| 72) 4-Isopropyltoluene        | 15.835 | 15.832 | 0.992  |      | 0m       | N.D.   | d     |    |
| 73) 1,3-Dichlorobenzene       | 15.909 | 15.902 | 0.997  |      | 0m       | N.D.   | d     |    |
| 74) 1,4-Dichlorobenzene       | 15.987 | 15.991 | 1.002  |      | 0m       | N.D.   | d     |    |
| 75) n-Butylbenzene            | 16.277 | 16.277 | 1.020  |      | 0m       | N.D.   | d     |    |
| 76) 1,2-Dichlorobenzene       | 16.415 | 16.422 | 1.028  |      | 0m       | N.D.   | d     |    |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D.   |       |    |
| 78) 1,2,4-Trichlorobenzene    | 18.371 | 18.371 | 1.151  |      | 0m       | N.D.   | d     |    |
| 79) Hexachlorobutadiene       | 18.555 | 18.548 | 1.162  |      | 0m       | N.D.   | d     |    |
| 80) Naphthalene               | 18.762 | 18.762 | 1.175  |      | 0m       | N.D.   | d     |    |
| 81) 1,2,3-Trichlorobenzene    | 19.109 | 19.116 | 1.197  |      | 0m       | N.D.   | d     |    |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D.   |       |    |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D.   |       |    |
| 85) Acrolein                  | 6.924  | 6.924  | 0.667  | 56   | 235555   | 217.75 | ug/L  | 91 |
| 86) Trichlorotrifluoroethane  | 7.076  | 7.079  | 0.682  | 85   | 535736   | 345.56 | ug/L  | 86 |
| 87) Isopropyl Alcohol         | 0.000  | 7.175  | 0.000  |      | 0m       | N.D.   | d     |    |
| 88) Allyl chloride            | 7.550  | 7.546  | 0.728  | 41   | 3824784  | 297.49 | ug/L  | 96 |
| 89) tert-Butyl Alcohol        | 7.666  | 7.673  | 0.739  | 59   | 123      | N.D.   |       |    |
| 90) Acrylonitrile             | 7.931  | 7.928  | 0.764  | 53   | 814710   | 265.85 | ug/L  | 99 |
| 91) Isopropyl ether           | 8.473  | 8.483  | 0.817  | 45   | 119      | N.D.   |       |    |
| 92) 2-Chloro-1,3-butadiene    | 8.621  | 8.617  | 0.831  | 53   | 623960   | 62.75  | ug/L  | 98 |
| 93) Ethyl tert-butyl ether    | 9.095  | 8.890  | 0.877  | 59   | 1763     | N.D.   |       |    |
| 94) Ethyl acetate             | 9.091  | 9.088  | 0.876  | 43   | 2403094  | 257.59 | ug/L  | 99 |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V404SL.D  
Acq On : 28 Jan 2010 10:36 am  
Operator : DXK1  
InstName : VOA5  
Sample : |1202026239|946008|1|VOA|1|VOA8260BS|  
Misc : LCS 5g N/A SOIL MIX[B]  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 28 12:51:57 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

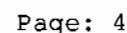
SubList :

| Compound                       | R.T.   | Exp RT | Rel RT | QIon | Response | Conc    | Units |     |
|--------------------------------|--------|--------|--------|------|----------|---------|-------|-----|
| 95) Propionitrile              | 9.148  | 9.148  | 0.882  | 54   | 318948   | 278.16  | ug/L  | 99  |
| 96) Methacrylonitrile          | 9.332  | 9.332  | 0.899  | 41   | 1563175  | 278.77  | ug/L  | 98  |
| 97) Tetrahydrofuran            | 9.466  | 9.466  | 0.912  | 42   | 806005   | 274.33  | ug/L  | 100 |
| 98) Isobutyl alcohol           | 9.767  | 9.770  | 0.941  | 41   | 1000982  | 2925.52 | ug/L  | 98  |
| 99) Methyl tert-amyl ether     | 0.000  | 10.138 | 0.000  |      | 0        | N.D.    |       |     |
| 100) Methyl methacrylate       | 10.969 | 10.969 | 1.057  | 69   | 1453144  | 281.00  | ug/L  | 95  |
| 101) 1,4-Dioxane               | 11.086 | 11.089 | 1.069  | 88   | 205660   | 2748.12 | ug/L  | 97  |
| 102) 2-Nitropropane            | 11.443 | 11.443 | 1.103  | 43   | 704938   | 260.75  | ug/L  | 98  |
| 104) Ethyl methacrylate        | 12.235 | 12.235 | 0.903  | 69   | 2811105  | 316.36  | ug/L  | 96  |
| 106) 1-Chlorohexane            | 0.000  | 13.438 | 0.000  |      | 0        | N.D.    |       |     |
| 107) cis-1,4-Dichloro-2-butene | 14.573 | 14.573 | 0.913  | 53   | 896261   | 383.41  | ug/L  | 97  |
| 108) Cyclohexanone             | 14.689 | 14.693 | 0.920  | 42   | 480474   | 698.56  | ug/L  | 93  |
| 109) trans-1,4-Dichloro-2-b... | 14.856 | 14.856 | 0.931  | 53   | 840197   | 375.09  | ug/L  | 95  |
| 110) Pentachloroethane         | 15.559 | 15.559 | 0.975  | 167  | 827937   | 337.20  | ug/L  | 93  |
| 111) Benzyl chloride           | 16.100 | 16.100 | 1.009  | 91   | 3778042  | 305.55  | ug/L  | 96  |
| 112) bis(2-Chloroisopropyl)... | 16.497 | 16.497 | 1.033  | 45   | 1245508  | 302.93  | ug/L  | 97  |

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

```
Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V404SL.D  
Acq On : 28 Jan 2010 10:36 am  
Operator : DXK1  
InstName : VOA5  
Sample : |1202026239|946008|1|VOA|1|VOA8260BS|  
Misc : LCS 5g N/A SOIL MIX[B]  
ALS Vial : 4 Sample Multiplier: 1
```

SubList :



**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324

Matrix: SOIL

Lab Sample ID: 1202037687

Client Sample: QC for batch 946006

Client: LANL010

Project: QC

Client ID: LCS for batch 946006

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 946008

Inst: VOA5.I

Dilution: 1

Run Date: 01/31/2010 12:15

Analyst: DXK1

Purge Vol: 5 mL

Prep Date: 01/31/2009 08:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 013110V5SV703JLLD

Column: DB-624

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     |           | 39.0   | ug/kg | 0.340   | 1.00    |
| 74-87-3    | Chloromethane               |           | 52.0   | ug/kg | 0.300   | 1.00    |
| 75-01-4    | Vinyl chloride              |           | 54.9   | ug/kg | 0.300   | 1.00    |
| 74-83-9    | Bromomethane                |           | 49.3   | ug/kg | 0.300   | 1.00    |
| 75-00-3    | Chloroethane                |           | 46.8   | ug/kg | 0.300   | 1.00    |
| 75-69-4    | Trichlorofluoromethane      |           | 50.3   | ug/kg | 0.300   | 1.00    |
| 67-64-1    | Acetone                     |           | 228    | ug/kg | 1.66    | 5.00    |
| 75-35-4    | 1,1-Dichloroethylene        |           | 58.0   | ug/kg | 0.300   | 1.00    |
| 74-88-4    | Iodomethane                 |           | 211    | ug/kg | 1.60    | 5.00    |
| 75-09-2    | Methylene chloride          |           | 44.2   | ug/kg | 2.00    | 5.00    |
| 75-15-0    | Carbon disulfide            |           | 258    | ug/kg | 1.25    | 5.00    |
| 156-60-5   | trans-1,2-Dichloroethylene  |           | 52.9   | ug/kg | 0.300   | 1.00    |
| 75-34-3    | 1,1-Dichloroethane          |           | 51.8   | ug/kg | 0.300   | 1.00    |
| 78-93-3    | 2-Butanone                  |           | 235    | ug/kg | 1.50    | 5.00    |
| 156-59-2   | cis-1,2-Dichloroethylene    |           | 52.5   | ug/kg | 0.300   | 1.00    |
| 594-20-7   | 2,2-Dichloropropane         |           | 49.4   | ug/kg | 0.300   | 1.00    |
| 67-66-3    | Chloroform                  |           | 50.7   | ug/kg | 0.300   | 1.00    |
| 74-97-5    | Bromochloromethane          |           | 43.1   | ug/kg | 0.330   | 1.00    |
| 71-55-6    | 1,1,1-Trichloroethane       |           | 49.1   | ug/kg | 0.300   | 1.00    |
| 563-58-6   | 1,1-Dichloropropene         |           | 52.4   | ug/kg | 0.300   | 1.00    |
| 56-23-5    | Carbon tetrachloride        |           | 49.7   | ug/kg | 0.300   | 1.00    |
| 107-06-2   | 1,2-Dichloroethane          |           | 55.2   | ug/kg | 0.300   | 1.00    |
| 71-43-2    | Benzene                     |           | 48.7   | ug/kg | 0.300   | 1.00    |
| 79-01-6    | Trichloroethylene           |           | 49.0   | ug/kg | 0.330   | 1.00    |
| 78-87-5    | 1,2-Dichloropropane         |           | 53.3   | ug/kg | 0.300   | 1.00    |
| 75-27-4    | Bromodichloromethane        |           | 52.9   | ug/kg | 0.300   | 1.00    |
| 74-95-3    | Dibromomethane              |           | 48.7   | ug/kg | 0.300   | 1.00    |
| 108-10-1   | 4-Methyl-2-pentanone        |           | 288    | ug/kg | 1.25    | 5.00    |
| 10061-01-5 | cis-1,3-Dichloropropylene   |           | 51.3   | ug/kg | 0.300   | 1.00    |
| 108-88-3   | Toluene                     |           | 49.0   | ug/kg | 0.300   | 1.00    |
| 10061-02-6 | trans-1,3-Dichloropropylene |           | 54.9   | ug/kg | 0.300   | 1.00    |
| 79-00-5    | 1,1,2-Trichloroethane       |           | 49.1   | ug/kg | 0.300   | 1.00    |
| 591-78-6   | 2-Hexanone                  |           | 264    | ug/kg | 1.50    | 5.00    |
| 142-28-9   | 1,3-Dichloropropane         |           | 51.9   | ug/kg | 0.300   | 1.00    |
| 127-18-4   | Tetrachloroethylene         |           | 43.5   | ug/kg | 0.300   | 1.00    |
| 124-48-1   | Dibromochloromethane        |           | 48.1   | ug/kg | 0.300   | 1.00    |
| 106-93-4   | 1,2-Dibromoethane           |           | 48.0   | ug/kg | 0.300   | 1.00    |
| 108-90-7   | Chlorobenzene               |           | 46.4   | ug/kg | 0.300   | 1.00    |

Volatile  
Certificate of Analysis  
Sample Summary

Page 2 of 2

SDG Number: 10-1324  
Lab Sample ID: 1202037687  
Client Sample: QC for batch 946006  
Client ID: LCS for batch 946006  
Batch ID: 946008  
Run Date: 01/31/2010 12:15  
Prep Date: 01/31/2009 08:00  
Data File: 013110V55V7031.L.D

Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: SOIL  
Project: QC  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|--|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene   |           | 51.9   | ug/kg | 0.300   | 1.00    |
| 179601-23-1 | m,p-Xylenes  |           | 99.4   | ug/kg | 0.300   | 2.00    |
| 95-47-6     | o-Xylene   |           | 50.7   | ug/kg | 0.300   | 1.00    |
| 100-42-5    | Styrene  |           | 53.7   | ug/kg | 0.300   | 1.00    |
| 75-25-2     | Bromoform  |           | 47.8   | ug/kg | 0.300   | 1.00    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane  |           | 52.0   | ug/kg | 0.300   | 1.00    |
| 96-18-4     | 1,2,3-Trichloropropane   |           | 49.9   | ug/kg | 0.300   | 1.00    |
| 108-86-1    | Bromobenzene   |           | 45.5   | ug/kg | 0.300   | 1.00    |
| 103-65-1    | n-Propylbenzene  |           | 54.9   | ug/kg | 0.300   | 1.00    |
| 95-49-8     | 2-Chlorotoluene  |           | 51.0   | ug/kg | 0.300   | 1.00    |
| 98-82-8     | Isopropylbenzene   |           | 52.3   | ug/kg | 0.300   | 1.00    |
| 108-67-8    | 1,3,5-Trimethylbenzene   |           | 54.9   | ug/kg | 0.300   | 1.00    |
| 106-43-4    | 4-Chlorotoluene  |           | 51.6   | ug/kg | 0.300   | 1.00    |
| 98-06-6     | tert-Butylbenzene  |           | 47.4   | ug/kg | 0.300   | 1.00    |
| 95-63-6     | 1,2,4-Trimethylbenzene   |           | 52.4   | ug/kg | 0.300   | 1.00    |
| 135-98-8    | sec-Butylbenzene   |           | 51.3   | ug/kg | 0.300   | 1.00    |
| 99-87-6     | 4-Isopropyltoluene   |           | 50.9   | ug/kg | 0.300   | 1.00    |
| 541-73-1    | 1,3-Dichlorobenzene  |           | 45.1   | ug/kg | 0.300   | 1.00    |
| 106-46-7    | 1,4-Dichlorobenzene  |           | 44.5   | ug/kg | 0.300   | 1.00    |
| 104-51-8    | n-Butylbenzene   |           | 54.5   | ug/kg | 0.300   | 1.00    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane  |           | 47.1   | ug/kg | 0.300   | 1.00    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane<br><i>Trichlorotrifluoroethane</i> | U         | 5.00   | ug/kg | 1.60    | 5.00    |
| 630-20-6    | 1,1,1,2-Tetrachloroethane  |           | 48.9   | ug/kg | 0.300   | 1.00    |
| 95-50-1     | 1,2-Dichlorobenzene  |           | 44.6   | ug/kg | 0.300   | 1.00    |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V703LL.D  
Acq On : 31 Jan 2010 12:15 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202037687|946008|1|VOA|1|VOA8260BS|  
Misc : LCS 5g N/A SOIL MIX[A]  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 08:48:38 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT   | QIon     | Response  | Conc    | Units |           |
|-------------------------------|--------|--------|----------|----------|-----------|---------|-------|-----------|
| Internal Standards            |        |        |          |          |           |         |       | Dev (Min) |
| 1) Fluorobenzene              | 10.375 | 10.375 | 1.000    | 96       | 1860482   | 50.00   | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547 | 13.547 | 1.000    | 117      | 1273384   | 50.00   | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.959 | 15.962 | 1.000    | 152      | 641523    | 50.00   | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.375 | 10.375 | 1.000    | 96       | 1860482   | 50.00   | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547 | 13.547 | 1.000    | 117      | 1273384   | 50.00   | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.959 | 15.962 | 1.000    | 152      | 641523    | 50.00   | ug/L  | 0.00      |
| System Monitoring Compounds   |        |        |          |          |           |         |       | Dev (Min) |
| 29) 1,2-Dichloroethane-d4     | 10.021 | 10.021 | 0.966    | 65       | 457956    | 52.96   | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range  | 68 - 131 | Recovery | = 105.92% |         |       |           |
| 43) Toluene-d8                | 12.016 | 12.016 | 0.887    | 98       | 1709272   | 49.22   | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range  | 75 - 129 | Recovery | = 98.44%  |         |       |           |
| 61) Bromofluorobenzene        | 14.739 | 14.739 | 0.924    | 95       | 637912    | 52.11   | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range  | 68 - 133 | Recovery | = 104.22% |         |       |           |
| * Target Compounds            |        |        |          |          |           |         |       |           |
| Target Compounds              | R.T.   | Exp RT | Rel RT   | QIon     | Response  | Conc    | Units | QValue    |
| 2) Dichlorodifluoromethane    | 4.678  | 4.689  | 0.451    | 85       | 156317    | 39.02   | ug/L  | 99        |
| 3) Chloromethane              | 5.061  | 5.051  | 0.488    | 50       | 475628    | 51.97   | ug/L  | 98        |
| 4) Vinyl chloride             | 5.283  | 5.283  | 0.509    | 62       | 448458    | 54.90   | ug/L  | 99        |
| 5) Bromomethane               | 5.867  | 5.877  | 0.565    | 94       | 286111    | 49.29   | ug/L  | 99        |
| 6) Chloroethane               | 6.008  | 6.018  | 0.579    | 64       | 257715    | 46.83   | ug/L  | 100       |
| 7) Trichlorofluoromethane     | 6.390  | 6.391  | 0.616    | 101      | 404345    | 50.29   | ug/L  | 99        |
| 8) Ethyl ether                | 6.733  | 6.733  | 0.649    | 59       | 342619    | 50.33   | ug/L  | 98        |
| 9) Acetone                    | 7.100  | 7.100  | 0.684    | 43       | 1587156   | 227.56  | ug/L  | 95        |
| 10) 1,1-Dichloroethylene      | 7.121  | 7.125  | 0.686    | 61       | 503316    | 58.02   | ug/L  | 97        |
| 11) Iodomethane               | 7.365  | 7.373  | 0.710    | 142      | 2196110   | 211.44  | ug/L  | 93        |
| 12) Acetonitrile              | 7.454  | 7.450  | 0.718    | 41       | 1576121   | 1367.95 | ug/L  | 99        |
| 13) Methyl acetate            | 7.493  | 7.493  | 0.722    | 43       | 1893666   | 271.46  | ug/L  | 98        |
| 14) Carbon disulfide          | 7.507  | 7.511  | 0.724    | 76       | 5238310   | 258.32  | ug/L  | 100       |
| 15) Methylene chloride        | 7.691  | 7.691  | 0.741    | 84       | 350760    | 44.20   | ug/L  | 94        |
| 16) tert-Butyl methyl ether   | 7.981  | 7.984  | 0.769    | 73       | 684499    | 44.56   | ug/L  | 99        |
| 17) trans-1,2-Dichloroethy... | 8.030  | 8.030  | 0.774    | 61       | 509418    | 52.93   | ug/L  | 96        |
| 18) Vinyl acetate             | 8.455  | 8.458  | 0.815    | 43       | 5561891   | 323.59  | ug/L  | 98        |
| 19) 1,1-Dichloroethane        | 8.508  | 8.511  | 0.820    | 63       | 632667    | 51.82   | ug/L  | 99        |
| 20) 2-Butanone                | 9.073  | 9.077  | 0.875    | 43       | 1880881   | 235.44  | ug/L  | 97        |
| 21) cis-1,2-Dichloroethylene  | 9.144  | 9.144  | 0.881    | 61       | 573626    | 52.51   | ug/L  | 96        |
| 22) 2,2-Dichloropropane       | 9.169  | 9.173  | 0.884    | 77       | 302764    | 49.42   | ug/L  | 93        |
| 23) Bromochloromethane        | 9.417  | 9.417  | 0.908    | 128      | 158239    | 43.06   | ug/L  | # 85      |
| 24) Chloroform                | 9.452  | 9.452  | 0.911    | 83       | 567009    | 50.68   | ug/L  | 100       |
| 25) 1,1,1-Trichloroethane     | 9.731  | 9.735  | 0.938    | 97       | 383465    | 49.11   | ug/L  | 97        |
| 26) Cyclohexane               | 9.830  | 9.830  | 0.948    | 56       | 592633    | 52.26   | ug/L  | 99        |
| 27) 1,1-Dichloropropene       | 9.887  | 9.887  | 0.953    | 75       | 448461    | 52.41   | ug/L  | 90        |
| 28) Carbon tetrachloride      | 9.929  | 9.929  | 0.957    | 117      | 341234    | 49.67   | ug/L  | 99        |
| 30) 1,2-Dichloroethane        | 10.103 | 10.103 | 0.974    | 62       | 502589    | 55.18   | ug/L  | 100       |
| 31) Benzene                   | 10.124 | 10.127 | 0.976    | 78       | 1405429   | 48.65   | ug/L  | 98        |
| 32) Cyclohexene               | 10.248 | 10.248 | 0.988    | 67       | 676420    | 50.49   | ug/L  | 96        |
| 33) n-Butyl alcohol           | 10.456 | 10.460 | 1.008    | 56       | 1520923   | 5579.92 | ug/L  | 96        |
| 34) Trichloroethylene         | 10.764 | 10.768 | 1.037    | 95       | 328320    | 49.03   | ug/L  | 95        |
| 35) 1,2-Dichloropropane       | 11.008 | 11.004 | 1.061    | 63       | 398575    | 53.25   | ug/L  | 100       |
| 36) Methylcyclohexane         | 11.019 | 11.019 | 1.062    | 83       | 560671    | 47.50   | ug/L  | 96        |
| 37) Dibromomethane            | 11.142 | 11.146 | 1.074    | 93       | 191470    | 48.71   | ug/L  | 89        |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V703LL.D  
Acq On : 31 Jan 2010 12:15 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202037687|946008|1|VOA|1|VOA8260BS|  
Misc : LCS 5g N/A SOIL MIX[A]  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 08:48:38 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc   | Units  |     |
|-------------------------------|--------|--------|--------|------|----------|--------|--------|-----|
| 38) Bromodichloromethane      | 11.252 | 11.256 | 1.085  | 83   | 425481   | 52.89  | ug/L   | 100 |
| 39) 2-Chloroethylvinyl ether  | 11.464 | 11.468 | 1.105  | 63   | 1035074  | 249.41 | ug/L   | 99  |
| 40) cis-1,3-Dichloropropylene | 11.701 | 11.705 | 1.128  | 75   | 537398   | 51.29  | ug/L   | 91  |
| 42) 4-Methyl-2-pentanone      | 11.786 | 11.786 | 0.870  | 58   | 970953   | 288.14 | ug/L   | 92  |
| 44) Toluene                   | 12.090 | 12.090 | 0.892  | 91   | 1494663  | 49.01  | ug/L   | 99  |
| 45) trans-1,3-Dichloroprop... | 12.239 | 12.239 | 0.903  | 75   | 498348   | 54.88  | ug/L   | 91  |
| 46) 1,1,2-Trichloroethane     | 12.461 | 12.465 | 0.920  | 83   | 249077   | 49.06  | ug/L   | 99  |
| 47) 2-Hexanone                | 12.631 | 12.631 | 0.932  | 43   | 2639206  | 264.49 | ug/L   | 97  |
| 48) 1,3-Dichloropropane       | 12.652 | 12.656 | 0.934  | 76   | 557555   | 51.89  | ug/L   | 97  |
| 49) Tetrachloroethylene       | 12.691 | 12.691 | 0.937  | 164  | 247444   | 43.50  | ug/L   | 94  |
| 50) Dibromochloromethane      | 12.928 | 12.928 | 0.954  | 129  | 292840   | 48.10  | ug/L   | 100 |
| 51) 1,2-Dibromoethane         | 13.094 | 13.094 | 0.967  | 107  | 272912   | 47.96  | ug/L   | 100 |
| 52) Chlorobenzene             | 13.579 | 13.579 | 1.002  | 112  | 898041   | 46.40  | ug/L   | 96  |
| 53) 1,1,1,2-Tetrachloroethane | 13.632 | 13.636 | 1.006  | 131  | 305969   | 48.91  | ug/L   | 98  |
| 54) Ethylbenzene              | 13.635 | 13.639 | 1.007  | 91   | 1666881  | 51.85  | ug/L   | 97  |
| 55) m,p-Xylenes               | 13.745 | 13.749 | 1.015  | 106  | 1286872  | 99.44  | ug/L   | 93  |
| 56) o-Xylene                  | 14.180 | 14.184 | 1.047  | 106  | 629253   | 50.71  | ug/L   | 92  |
| 57) Styrene                   | 14.184 | 14.184 | 1.047  | 104  | 1046638  | 53.73  | ug/L   | 93  |
| 59) Bromoform                 | 14.445 | 14.445 | 0.905  | 173  | 171804   | 47.76  | ug/L   | 100 |
| 60) Isopropylbenzene          | 14.537 | 14.537 | 0.911  | 105  | 1521409  | 52.30  | ug/L   | 98  |
| 62) 1,1,2,2-Tetrachloroethane | 14.809 | 14.810 | 0.928  | 83   | 386040   | 52.04  | ug/L   | 100 |
| 63) 1,2,3-Trichloropropane    | 14.901 | 14.898 | 0.934  | 110  | 99637    | 49.87  | ug/L   | 98  |
| 64) Bromobenzene              | 14.951 | 14.951 | 0.937  | 156  | 345315   | 45.50  | ug/L   | 87  |
| 65) n-Propylbenzene           | 14.962 | 14.965 | 0.938  | 91   | 1916968  | 54.93  | ug/L   | 97  |
| 66) 1,3,5-Trimethylbenzene    | 15.114 | 15.114 | 0.947  | 105  | 1308045  | 54.92  | ug/L   | 97  |
| 67) 2-Chlorotoluene           | 15.117 | 15.117 | 0.947  | 126  | 372171   | 51.03  | ug/L # | 85  |
| 68) 4-Chlorotoluene           | 15.216 | 15.216 | 0.953  | 91   | 1117117  | 51.58  | ug/L   | 95  |
| 69) tert-Butylbenzene         | 15.488 | 15.489 | 0.971  | 134  | 265994   | 47.44  | ug/L # | 87  |
| 70) 1,2,4-Trimethylbenzene    | 15.527 | 15.527 | 0.973  | 105  | 1281349  | 52.37  | ug/L   | 96  |
| 71) sec-Butylbenzene          | 15.711 | 15.711 | 0.984  | 105  | 1642820  | 51.27  | ug/L   | 98  |
| 72) 4-Isopropyltoluene        | 15.832 | 15.832 | 0.992  | 119  | 1282602  | 50.92  | ug/L   | 97  |
| 73) 1,3-Dichlorobenzene       | 15.902 | 15.902 | 0.996  | 146  | 663566   | 45.06  | ug/L   | 98  |
| 74) 1,4-Dichlorobenzene       | 15.987 | 15.991 | 1.002  | 146  | 680803   | 44.47  | ug/L   | 98  |
| 75) n-Butylbenzene            | 16.277 | 16.277 | 1.020  | 91   | 1322266  | 54.45  | ug/L   | 97  |
| 76) 1,2-Dichlorobenzene       | 16.419 | 16.422 | 1.029  | 146  | 625338   | 44.64  | ug/L   | 97  |
| 77) 1,2-Dibromo-3-chloropr... | 17.293 | 17.293 | 1.084  | 157  | 63788    | 47.08  | ug/L   | 91  |
| 78) 1,2,4-Trichlorobenzene    | 18.371 | 18.371 | 1.151  | 180  | 436395   | 45.06  | ug/L   | 99  |
| 79) Hexachlorobutadiene       | 18.548 | 18.548 | 1.162  | 225  | 234495   | 43.21  | ug/L   | 98  |
| 80) Naphthalene               | 18.762 | 18.762 | 1.176  | 128  | 1095763  | 51.40  | ug/L   | 100 |
| 81) 1,2,3-Trichlorobenzene    | 19.116 | 19.116 | 1.198  | 180  | 396744   | 47.60  | ug/L   | 99  |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D.   |        |     |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D.   |        |     |
| 85) Acrolein                  | 6.924  | 6.924  | 0.667  |      | 0m       | N.D.   | d      |     |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D.   |        |     |
| 87) Isopropyl Alcohol         | 7.146  | 7.175  | 0.689  |      | 0m       | N.D.   | d      |     |
| 88) Allyl chloride            | 7.454  | 7.546  | 0.718  |      | 0m       | N.D.   | d      |     |
| 89) tert-Butyl Alcohol        | 7.698  | 7.673  | 0.742  |      | 0m       | N.D.   | d      |     |
| 90) Acrylonitrile             | 7.974  | 7.928  | 0.769  |      | 0m       | N.D.   | d      |     |
| 91) Isopropyl ether           | 8.451  | 8.483  | 0.815  |      | 0m       | N.D.   | d      |     |
| 92) 2-Chloro-1,3-butadiene    | 8.617  | 8.617  | 0.831  |      | 0m       | N.D.   | d      |     |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D.   |        |     |
| 94) Ethyl acetate             | 9.073  | 9.088  | 0.875  |      | 0m       | N.D.   | d      |     |



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V703LL.D  
Acq On : 31 Jan 2010 12:15 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202037687|946008|1|VOA|1|VOA8260BS|  
Misc : LCS 5g N/A SOIL MIX[A]  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 08:48:38 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|--------|--------|--------|------|----------|------|-------|
| 95) Propionitrile              | 9.073  | 9.148  | 0.875  |      | 0m       | N.D. | d     |
| 96) Methacrylonitrile          | 9.268  | 9.332  | 0.893  |      | 0m       | N.D. | d     |
| 97) Tetrahydrofuran            | 9.455  | 9.466  | 0.911  |      | 0m       | N.D. | d     |
| 98) Isobutyl alcohol           | 9.650  | 9.770  | 0.930  |      | 0m       | N.D. | d     |
| 99) Methyl tert-amyl ether     | 10.124 | 10.138 | 0.976  |      | 0m       | N.D. | d     |
| 100) Methyl methacrylate       | 11.015 | 10.969 | 1.062  |      | 0m       | N.D. | d     |
| 101) 1,4-Dioxane               | 11.146 | 11.089 | 1.074  |      | 0m       | N.D. | d     |
| 102) 2-Nitropropane            | 11.666 | 11.443 | 1.124  |      | 0m       | N.D. | d     |
| 104) Ethyl methacrylate        | 12.242 | 12.235 | 0.904  |      | 0m       | N.D. | d     |
| 106) 1-Chlorohexane            | 0.000  | 13.438 | 0.000  |      | 0        | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 14.537 | 14.573 | 0.911  |      | 0m       | N.D. | d     |
| 108) Cyclohexanone             | 14.700 | 14.693 | 0.921  |      | 0m       | N.D. | d     |
| 109) trans-1,4-Dichloro-2-b... | 14.855 | 14.856 | 0.931  |      | 0m       | N.D. | d     |
| 110) Pentachloroethane         | 15.559 | 15.559 | 0.975  |      | 0m       | N.D. | d     |
| 111) Benzyl chloride           | 16.097 | 16.100 | 1.009  |      | 0m       | N.D. | d     |
| 112) bis(2-Chloroisopropyl)... | 16.546 | 16.497 | 1.037  |      | 0m       | N.D. | d     |

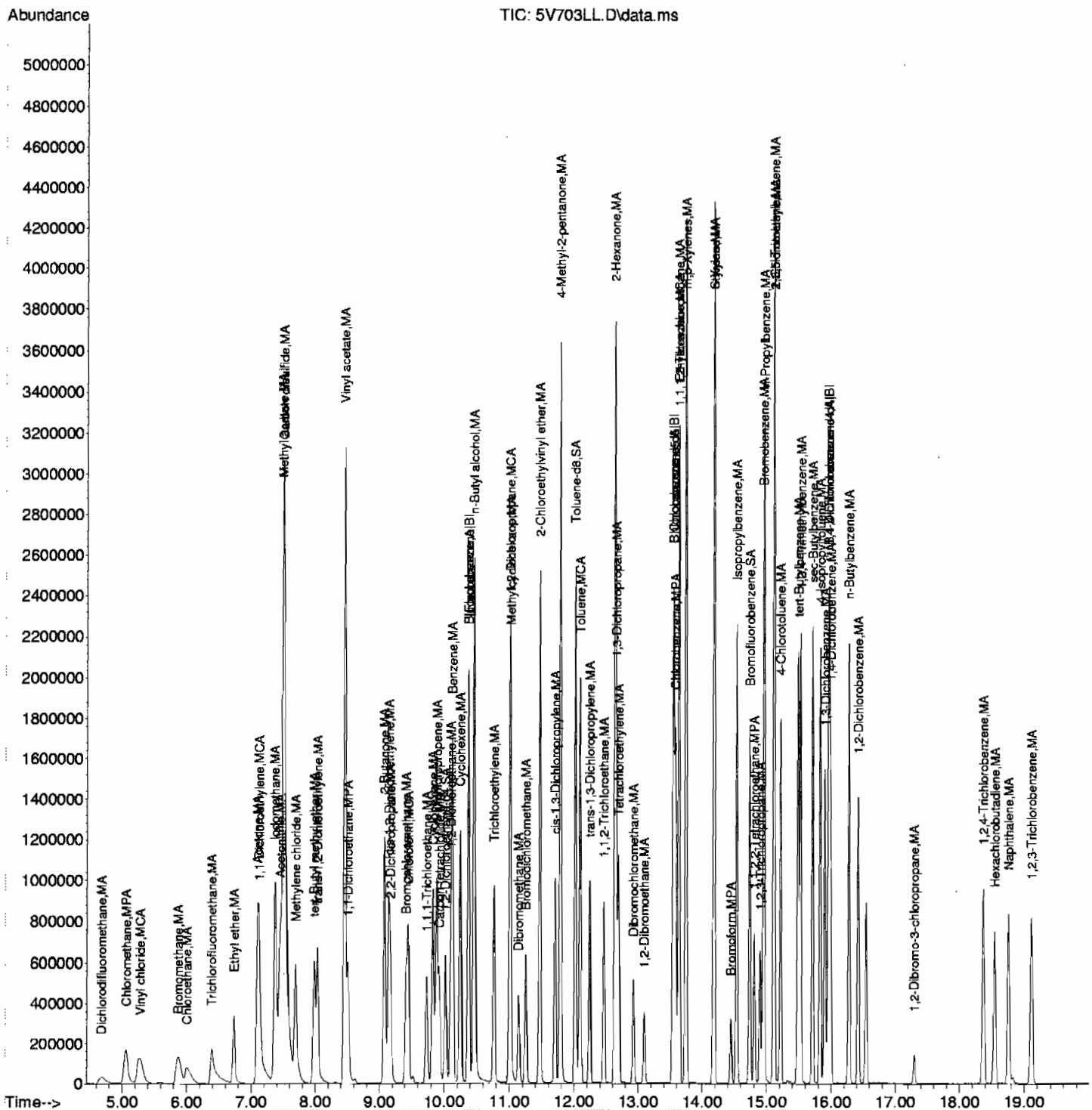
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V703LL.D  
Acq On : 31 Jan 2010 12:15 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202037687|946008|1|VOA|1|VOA8260BS|  
Misc : LCS 5g N/A SOIL MIX[A]  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 08:48:38 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :



**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324

Lab Sample ID: 1202037688

Client Sample: QC for batch 946006

Client ID: LCS for batch 946006

Batch ID: 946008

Run Date: 01/31/2010 12:41

Prep Date: 01/31/2009 08:00

Data File: 013110V5SV704SL.D

Client: LANL010

Method: SW846 8260B

Inst: VOA5.I

Analyst: DXK1

Aliquot: 5 g

Column: DB-624

Matrix: SOIL

Project: QC

SOP Ref: GL-OA-E-038

Dilution: 1

Purge Vol: 5 mL

Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     | U         | 1.00   | ug/kg | 0.340   | 1.00    |
| 74-87-3    | Chloromethane               | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-01-4    | Vinyl chloride              | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-83-9    | Bromomethane                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-00-3    | Chloroethane                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-69-4    | Trichlorofluoromethane      | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 67-64-1    | Acetone                     | U         | 5.00   | ug/kg | 1.66    | 5.00    |
| 75-35-4    | 1,1-Dichloroethylene        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-88-4    | Iodomethane                 | U         | 5.00   | ug/kg | 1.60    | 5.00    |
| 75-09-2    | Methylene chloride          | U         | 5.00   | ug/kg | 2.00    | 5.00    |
| 75-15-0    | Carbon disulfide            | U         | 5.00   | ug/kg | 1.25    | 5.00    |
| 156-60-5   | trans-1,2-Dichloroethylene  | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-34-3    | 1,1-Dichloroethane          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 78-93-3    | 2-Butanone                  | U         | 5.00   | ug/kg | 1.50    | 5.00    |
| 156-59-2   | cis-1,2-Dichloroethylene    | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 594-20-7   | 2,2-Dichloropropane         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 67-66-3    | Chloroform                  | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-97-5    | Bromochloromethane          | U         | 1.00   | ug/kg | 0.330   | 1.00    |
| 71-55-6    | 1,1,1-Trichloroethane       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 563-58-6   | 1,1-Dichloropropene         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 56-23-5    | Carbon tetrachloride        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 107-06-2   | 1,2-Dichloroethane          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 71-43-2    | Benzene                     | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 79-01-6    | Trichloroethylene           | U         | 1.00   | ug/kg | 0.330   | 1.00    |
| 78-87-5    | 1,2-Dichloropropane         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-27-4    | Bromodichloromethane        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 74-95-3    | Dibromomethane              | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-10-1   | 4-Methyl-2-pentanone        | U         | 5.00   | ug/kg | 1.25    | 5.00    |
| 10061-01-5 | cis-1,3-Dichloropropylene   | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-88-3   | Toluene                     | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 10061-02-6 | trans-1,3-Dichloropropylene | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 79-00-5    | 1,1,2-Trichloroethane       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 591-78-6   | 2-Hexanone                  | U         | 5.00   | ug/kg | 1.50    | 5.00    |
| 142-28-9   | 1,3-Dichloropropane         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 127-18-4   | Tetrachloroethylene         | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 124-48-1   | Dibromochloromethane        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 106-93-4   | 1,2-Dibromoethane           | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-90-7   | Chlorobenzene               | U         | 1.00   | ug/kg | 0.300   | 1.00    |

**Volatile  
Certificate of Analysis  
Sample Summary**

Page 2 of 2

SDG Number: 10-1324  
Lab Sample ID: 1202037688  
Client Sample: QC for batch 946006  
Client ID: LCS for batch 946006  
Batch ID: 946008  
Run Date: 01/31/2010 12:41  
Prep Date: 01/31/2009 08:00  
Data File: 013110V55V704SL.D

Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: SOIL  
Project: QC  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 179601-23-1 | m,p-Xylenes                           | U         | 2.00   | ug/kg | 0.300   | 2.00    |
| 95-47-6     | o-Xylene                              | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 100-42-5    | Styrene                               | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 75-25-2     | Bromoform                             | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 96-18-4     | 1,2,3-Trichloropropane                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-86-1    | Bromobenzene                          | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 103-65-1    | n-Propylbenzene                       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 95-49-8     | 2-Chlorotoluene                       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 98-82-8     | Isopropylbenzene                      | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 108-67-8    | 1,3,5-Trimethylbenzene                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 106-43-4    | 4-Chlorotoluene                       | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 98-06-6     | tert-Butylbenzene                     | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 95-63-6     | 1,2,4-Trimethylbenzene                | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 135-98-8    | sec-Butylbenzene                      | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 99-87-6     | 4-Isopropyltoluene                    | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 541-73-1    | 1,3-Dichlorobenzene                   | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 106-46-7    | 1,4-Dichlorobenzene                   | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 104-51-8    | n-Butylbenzene                        | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane |           | 325    | ug/kg | 1.60    | 5.00    |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             | U         | 1.00   | ug/kg | 0.300   | 1.00    |
| 95-50-1     | 1,2-Dichlorobenzene                   | U         | 1.00   | ug/kg | 0.300   | 1.00    |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V704SL.D  
Acq On : 31 Jan 2010 12:41 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202037688|946008|1|VOA|1|VOA8260BS|  
Misc : LCS 5g N/A SOIL MIX[B]  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 01 08:55:21 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT         | Rel RT   | QIon | Response | Conc  | Units |           |
|-------------------------------|--------|----------------|----------|------|----------|-------|-------|-----------|
| Internal Standards            |        |                |          |      |          |       |       | Dev (Min) |
| 1) Fluorobenzene              | 10.375 | 10.375         | 1.000    | 96   | 1846900  | 50.00 | ug/L  | 0.00      |
| 41) Chlorobenzene-d5          | 13.547 | 13.547         | 1.000    | 117  | 1231006  | 50.00 | ug/L  | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.962 | 15.962         | 1.000    | 152  | 587419   | 50.00 | ug/L  | 0.00      |
| 82) B Fluorobenzene           | 10.375 | 10.375         | 1.000    | 96   | 1846900  | 50.00 | ug/L  | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547 | 13.547         | 1.000    | 117  | 1231006  | 50.00 | ug/L  | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.962 | 15.962         | 1.000    | 152  | 587419   | 50.00 | ug/L  | 0.00      |
| System Monitoring Compounds   |        |                |          |      |          |       |       | Dev (Min) |
| 29) 1,2-Dichloroethane-d4     | 10.021 | 10.021         | 0.966    | 65   | 471662   | 54.95 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 131 | Recovery | =    | 109.90%  |       |       |           |
| 43) Toluene-d8                | 12.016 | 12.016         | 0.887    | 98   | 1675476  | 49.91 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 75 - 129 | Recovery | =    | 99.82%   |       |       |           |
| 61) Bromofluorobenzene        | 14.739 | 14.739         | 0.923    | 95   | 638128   | 56.93 | ug/L  | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 133 | Recovery | =    | 113.86%  |       |       |           |
| Target Compounds              |        |                |          |      |          |       |       | QValue    |
| 2) Dichlorodifluoromethane    | 0.000  | 4.689          | 0.000    |      | 0        | N.D.  |       |           |
| 3) Chloromethane              | 5.041  | 5.051          | 0.486    |      | 0m       | N.D.  | d     |           |
| 4) Vinyl chloride             | 5.303  | 5.283          | 0.511    |      | 0m       | N.D.  | d     |           |
| 5) Bromomethane               | 0.000  | 5.877          | 0.000    |      | 0        | N.D.  |       |           |
| 6) Chloroethane               | 0.000  | 6.018          | 0.000    |      | 0        | N.D.  |       |           |
| 7) Trichlorofluoromethane     | 0.000  | 6.391          | 0.000    |      | 0        | N.D.  |       |           |
| 8) Ethyl ether                | 6.733  | 6.733          | 0.649    |      | 0m       | N.D.  | d     |           |
| 9) Acetone                    | 7.100  | 7.100          | 0.684    |      | 0m       | N.D.  | d     |           |
| 10) 1,1-Dichloroethylene      | 7.111  | 7.125          | 0.685    |      | 0m       | N.D.  | d     |           |
| 11) Iodomethane               | 7.369  | 7.373          | 0.710    |      | 0m       | N.D.  | d     |           |
| 12) Acetonitrile              | 7.447  | 7.450          | 0.718    |      | 0m       | N.D.  | d     |           |
| 13) Methyl acetate            | 7.503  | 7.493          | 0.723    |      | 0m       | N.D.  | d     |           |
| 14) Carbon disulfide          | 7.549  | 7.511          | 0.728    |      | 0m       | N.D.  | d     |           |
| 15) Methylene chloride        | 7.694  | 7.691          | 0.742    |      | 0m       | N.D.  | d     |           |
| 16) tert-Butyl methyl ether   | 7.977  | 7.984          | 0.769    |      | 0m       | N.D.  | d     |           |
| 17) trans-1,2-Dichloroethy... | 8.030  | 8.030          | 0.774    |      | 0m       | N.D.  | d     |           |
| 18) Vinyl acetate             | 8.614  | 8.458          | 0.830    |      | 0m       | N.D.  | d     |           |
| 19) 1,1-Dichloroethane        | 8.511  | 8.511          | 0.820    |      | 0m       | N.D.  | d     |           |
| 20) 2-Butanone                | 9.091  | 9.077          | 0.876    |      | 0m       | N.D.  | d     |           |
| 21) cis-1,2-Dichloroethylene  | 9.091  | 9.144          | 0.876    |      | 0m       | N.D.  | d     |           |
| 22) 2,2-Dichloropropane       | 9.176  | 9.173          | 0.884    |      | 0m       | N.D.  | d     |           |
| 23) Bromochloromethane        | 0.000  | 9.417          | 0.000    |      | 0        | N.D.  |       |           |
| 24) Chloroform                | 9.456  | 9.452          | 0.911    |      | 0m       | N.D.  | d     |           |
| 25) 1,1,1-Trichloroethane     | 9.738  | 9.735          | 0.939    |      | 0m       | N.D.  | d     |           |
| 26) Cyclohexane               | 9.774  | 9.830          | 0.942    |      | 0m       | N.D.  | d     |           |
| 27) 1,1-Dichloropropene       | 9.880  | 9.887          | 0.952    |      | 0m       | N.D.  | d     |           |
| 28) Carbon tetrachloride      | 9.933  | 9.929          | 0.957    |      | 0m       | N.D.  | d     |           |
| 30) 1,2-Dichloroethane        | 10.103 | 10.103         | 0.974    |      | 0m       | N.D.  | d     |           |
| 31) Benzene                   | 10.124 | 10.127         | 0.976    |      | 0m       | N.D.  | d     |           |
| 32) Cyclohexene               | 10.255 | 10.248         | 0.988    |      | 0m       | N.D.  | d     |           |
| 33) n-Butyl alcohol           | 10.467 | 10.460         | 1.009    |      | 0m       | N.D.  | d     |           |
| 34) Trichloroethylene         | 10.771 | 10.768         | 1.038    |      | 0m       | N.D.  | d     |           |
| 35) 1,2-Dichloropropane       | 11.008 | 11.004         | 1.061    |      | 0m       | N.D.  | d     |           |
| 36) Methylcyclohexane         | 11.015 | 11.019         | 1.062    |      | 0m       | N.D.  | d     |           |
| 37) Dibromomethane            | 0.000  | 11.146         | 0.000    |      | 0        | N.D.  |       |           |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V704SL.D  
Acq On : 31 Jan 2010 12:41 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202037688|946008|1|VOA|1|VOA8260BS|  
Misc : LCS 5g N/A SOIL MIX[B]  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 01 08:55:21 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc        | Units |
|-------------------------------|--------|--------|--------|------|----------|-------------|-------|
| 38) Bromodichloromethane      | 11.259 | 11.256 | 1.085  |      | 0m       | N.D.        | d     |
| 39) 2-Chloroethylvinyl ether  | 11.475 | 11.468 | 1.106  |      | 0m       | N.D.        | d     |
| 40) cis-1,3-Dichloropropylene | 11.698 | 11.705 | 1.127  |      | 0m       | N.D.        | d     |
| 42) 4-Methyl-2-pentanone      | 11.782 | 11.786 | 0.870  |      | 0m       | N.D.        | d     |
| 44) Toluene                   | 12.094 | 12.090 | 0.893  |      | 0m       | N.D.        | d     |
| 45) trans-1,3-Dichloroprop... | 12.242 | 12.239 | 0.904  |      | 0m       | N.D.        | d     |
| 46) 1,1,2-Trichloroethane     | 12.461 | 12.465 | 0.920  |      | 0m       | N.D.        | d     |
| 47) 2-Hexanone                | 12.635 | 12.631 | 0.933  |      | 0m       | N.D.        | d     |
| 48) 1,3-Dichloropropane       | 12.649 | 12.656 | 0.934  |      | 0m       | N.D.        | d     |
| 49) Tetrachloroethylene       | 12.691 | 12.691 | 0.937  |      | 0m       | N.D.        | d     |
| 50) Dibromochloromethane      | 12.935 | 12.928 | 0.955  |      | 0m       | N.D.        | d     |
| 51) 1,2-Dibromoethane         | 13.098 | 13.094 | 0.967  |      | 0m       | N.D.        | d     |
| 52) Chlorobenzene             | 13.582 | 13.579 | 1.003  |      | 0m       | N.D.        | d     |
| 53) 1,1,1,2-Tetrachloroethane | 13.632 | 13.636 | 1.006  |      | 0m       | N.D.        | d     |
| 54) Ethylbenzene              | 13.639 | 13.639 | 1.007  |      | 0m       | N.D.        | d     |
| 55) m,p-Xylenes               | 13.749 | 13.749 | 1.015  |      | 0m       | N.D.        | d     |
| 56) o-Xylene                  | 14.184 | 14.184 | 1.047  |      | 0m       | N.D.        | d     |
| 57) Styrene                   | 14.187 | 14.184 | 1.047  |      | 0m       | N.D.        | d     |
| 59) Bromoform                 | 0.000  | 14.445 | 0.000  |      | 0        | N.D.        |       |
| 60) Isopropylbenzene          | 14.541 | 14.537 | 0.911  |      | 0m       | N.D.        | d     |
| 62) 1,1,2,2-Tetrachloroethane | 14.803 | 14.810 | 0.927  |      | 0m       | N.D.        | d     |
| 63) 1,2,3-Trichloropropane    | 0.000  | 14.898 | 0.000  |      | 0        | N.D.        |       |
| 64) Bromobenzene              | 14.955 | 14.951 | 0.937  |      | 0m       | N.D.        | d     |
| 65) n-Propylbenzene           | 14.965 | 14.965 | 0.938  |      | 0m       | N.D.        | d     |
| 66) 1,3,5-Trimethylbenzene    | 15.110 | 15.114 | 0.947  |      | 0m       | N.D.        | d     |
| 67) 2-Chlorotoluene           | 15.117 | 15.117 | 0.947  |      | 0m       | N.D.        | d     |
| 68) 4-Chlorotoluene           | 15.216 | 15.216 | 0.953  |      | 0m       | N.D.        | d     |
| 69) tert-Butylbenzene         | 15.481 | 15.489 | 0.970  |      | 0m       | N.D.        | d     |
| 70) 1,2,4-Trimethylbenzene    | 15.527 | 15.527 | 0.973  |      | 0m       | N.D.        | d     |
| 71) sec-Butylbenzene          | 15.708 | 15.711 | 0.984  |      | 0m       | N.D.        | d     |
| 72) 4-Isopropyltoluene        | 15.832 | 15.832 | 0.992  |      | 0m       | N.D.        | d     |
| 73) 1,3-Dichlorobenzene       | 15.909 | 15.902 | 0.997  |      | 0m       | N.D.        | d     |
| 74) 1,4-Dichlorobenzene       | 15.987 | 15.991 | 1.002  |      | 0m       | N.D.        | d     |
| 75) n-Butylbenzene            | 16.277 | 16.277 | 1.020  |      | 0m       | N.D.        | d     |
| 76) 1,2-Dichlorobenzene       | 16.419 | 16.422 | 1.029  |      | 0m       | N.D.        | d     |
| 77) 1,2-Dibromo-3-chloropr... | 0.000  | 17.293 | 0.000  |      | 0        | N.D.        |       |
| 78) 1,2,4-Trichlorobenzene    | 18.371 | 18.371 | 1.151  |      | 0m       | N.D.        | d     |
| 79) Hexachlorobutadiene       | 18.555 | 18.548 | 1.162  |      | 0m       | N.D.        | d     |
| 80) Naphthalene               | 18.769 | 18.762 | 1.176  |      | 0m       | N.D.        | d     |
| 81) 1,2,3-Trichlorobenzene    | 19.116 | 19.116 | 1.198  |      | 0m       | N.D.        | d     |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D.        |       |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D.        |       |
| 85) Acrolein                  | 6.924  | 6.924  | 0.667  | 56   | 225398   | 228.94 ug/L | 87    |
| 86) Trichlorotrifluoroethane  | 7.086  | 7.079  | 0.683  | 85   | 458713   | 325.10 ug/L | 87    |
| 87) Isopropyl Alcohol         | 7.337  | 7.175  | 0.707  | 45   | 249      | N.D.        |       |
| 88) Allyl chloride            | 7.549  | 7.546  | 0.728  | 41   | 3334391  | 284.96 ug/L | 94    |
| 89) tert-Butyl Alcohol        | 7.666  | 7.673  | 0.739  | 59   | 116      | N.D.        |       |
| 90) Acrylonitrile             | 7.931  | 7.928  | 0.764  | 53   | 764421   | 274.09 ug/L | 99    |
| 91) Isopropyl ether           | 8.487  | 8.483  | 0.818  | 45   | 298      | N.D.        |       |
| 92) 2-Chloro-1,3-butadiene    | 8.621  | 8.617  | 0.831  | 53   | 549517   | 60.73 ug/L  | 95    |
| 93) Ethyl tert-butyl ether    | 9.091  | 8.890  | 0.876  | 59   | 1184     | N.D.        |       |
| 94) Ethyl acetate             | 9.091  | 9.088  | 0.876  | 43   | 2376127  | 279.86 ug/L | 98    |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V704SL.D  
Acq On : 31 Jan 2010 12:41 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202037688|946008|1|VOA|1|VOA8260BS|  
Misc : LCS 5g N/A SOIL MIX[B]  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 01 08:55:21 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.   | Exp RT | Rel RT | QIon | Response | Conc    | Units |     |
|--------------------------------|--------|--------|--------|------|----------|---------|-------|-----|
| 95) Propionitrile              | 9.155  | 9.148  | 0.882  | 54   | 307039   | 294.22  | ug/L  | 100 |
| 96) Methacrylonitrile          | 9.332  | 9.332  | 0.899  | 41   | 1530082  | 299.82  | ug/L  | 98  |
| 97) Tetrahydrofuran            | 9.466  | 9.466  | 0.912  | 42   | 787907   | 294.66  | ug/L  | 98  |
| 98) Isobutyl alcohol           | 9.770  | 9.770  | 0.942  | 41   | 1018523  | 3270.83 | ug/L  | 98  |
| 99) Methyl tert-amyl ether     | 0.000  | 10.138 | 0.000  |      | 0        | N.D.    |       |     |
| 100) Methyl methacrylate       | 10.973 | 10.969 | 1.058  | 69   | 1381395  | 293.52  | ug/L  | 92  |
| 101) 1,4-Dioxane               | 11.089 | 11.089 | 1.069  | 88   | 194686   | 2858.46 | ug/L  | 98  |
| 102) 2-Nitropropane            | 11.446 | 11.443 | 1.103  | 43   | 723452   | 293.03  | ug/L  | 99  |
| 104) Ethyl methacrylate        | 12.235 | 12.235 | 0.903  | 69   | 2711172  | 327.26  | ug/L  | 94  |
| 106) 1-Chlorohexane            | 0.000  | 13.438 | 0.000  |      | 0        | N.D.    |       |     |
| 107) cis-1,4-Dichloro-2-butene | 14.573 | 14.573 | 0.913  | 53   | 876111   | 393.65  | ug/L  | 97  |
| 108) Cyclohexanone             | 14.689 | 14.693 | 0.920  | 42   | 478621   | 729.58  | ug/L  | 91  |
| 109) trans-1,4-Dichloro-2-b... | 14.856 | 14.856 | 0.931  | 53   | 837163   | 392.54  | ug/L  | 90  |
| 110) Pentachloroethane         | 15.559 | 15.559 | 0.975  | 167  | 940528   | 402.33  | ug/L  | 92  |
| 111) Benzyl chloride           | 16.100 | 16.100 | 1.009  | 91   | 3688889  | 313.24  | ug/L  | 97  |
| 112) bis(2-Chloroisopropyl)... | 16.496 | 16.497 | 1.033  | 45   | 1309938  | 334.64  | ug/L  | 95  |

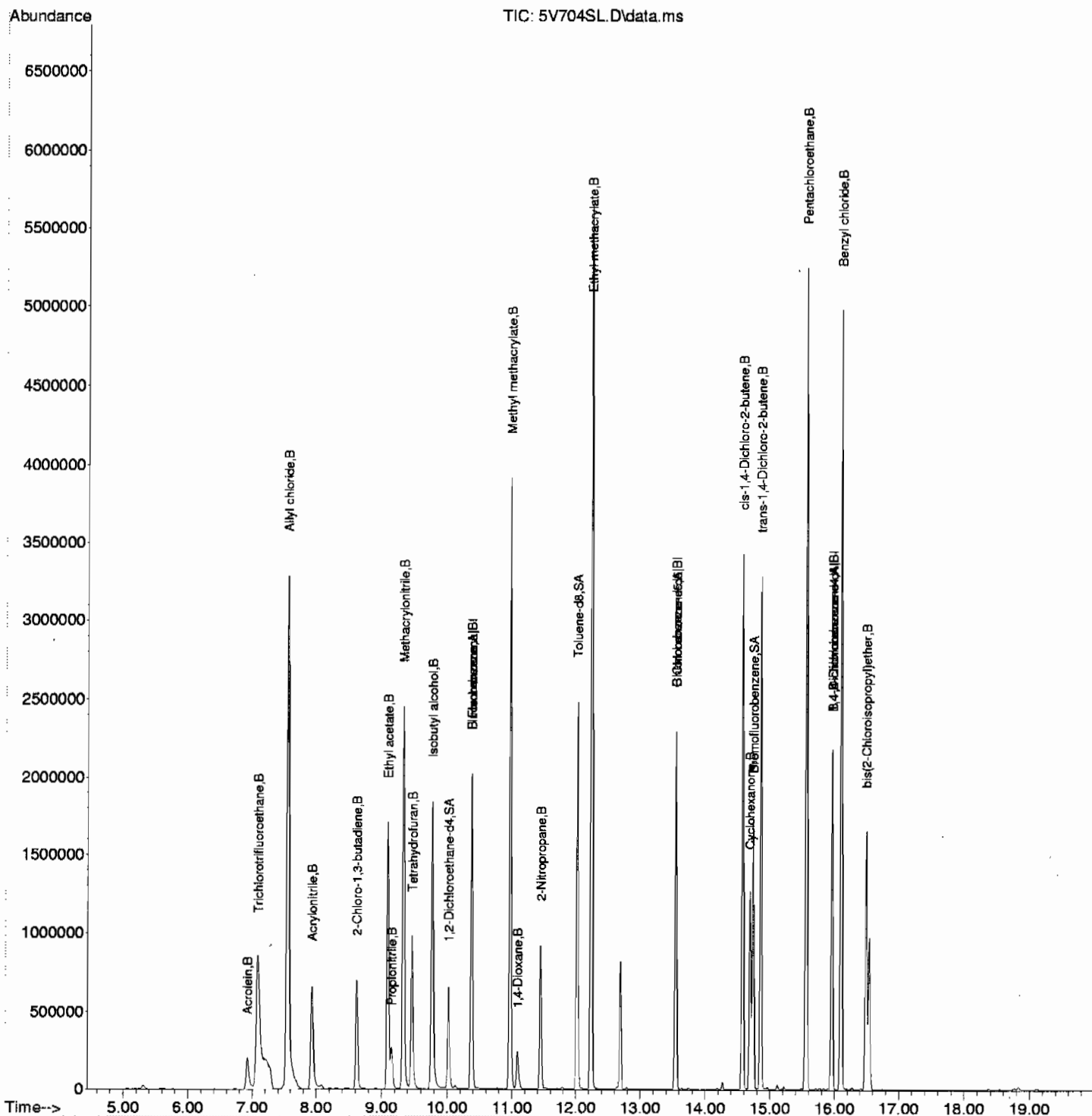
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\013110V5\  
Data File : 5V704SL.D  
Acq On : 31 Jan 2010 12:41 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202037688|946008|1|VOA|1|VOA8260BS|  
Misc : LCS 5g N/A SOIL MIX[B]  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 01 08:55:21 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :





**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 2

SDG Number: 10-1324  
 Lab Sample ID: 1202026236  
 Client Sample: QC for batch 946006  
 Client ID: RE15-10-8410PS  
 Batch ID: 946008  
 Run Date: 01/28/2010 20:41  
 Prep Date: 01/28/2009 11:03  
 Data File: 012810V55V427.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 24.9  
 Project: QC  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.    | Parmname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     |           | 49.4   | ug/kg | 0.453   | 1.33    |
| 74-87-3    | Chloromethane               |           | 67.3   | ug/kg | 0.400   | 1.33    |
| 75-01-4    | Vinyl chloride              |           | 69.8   | ug/kg | 0.400   | 1.33    |
| 74-83-9    | Bromomethane                |           | 38.8   | ug/kg | 0.400   | 1.33    |
| 75-00-3    | Chloroethane                |           | 58.0   | ug/kg | 0.400   | 1.33    |
| 75-69-4    | Trichlorofluoromethane      |           | 55.9   | ug/kg | 0.400   | 1.33    |
| 67-64-1    | Acetone                     |           | 72.6   | ug/kg | 2.21    | 6.66    |
| 75-35-4    | 1,1-Dichloroethylene        |           | 60.1   | ug/kg | 0.400   | 1.33    |
| 74-88-4    | Iodomethane                 |           | 134    | ug/kg | 2.13    | 6.66    |
| 75-09-2    | Methylene chloride          |           | 51.9   | ug/kg | 2.66    | 6.66    |
| 75-15-0    | Carbon disulfide            |           | 235    | ug/kg | 1.66    | 6.66    |
| 156-60-5   | trans-1,2-Dichloroethylene  |           | 48.3   | ug/kg | 0.400   | 1.33    |
| 75-34-3    | 1,1-Dichloroethane          |           | 55.4   | ug/kg | 0.400   | 1.33    |
| 78-93-3    | 2-Butanone                  |           | 44.1   | ug/kg | 2.00    | 6.66    |
| 156-59-2   | cis-1,2-Dichloroethylene    |           | 46.2   | ug/kg | 0.400   | 1.33    |
| 594-20-7   | 2,2-Dichloropropane         |           | 50.7   | ug/kg | 0.400   | 1.33    |
| 67-66-3    | Chloroform                  |           | 50.3   | ug/kg | 0.400   | 1.33    |
| 74-97-5    | Bromochloromethane          |           | 38.7   | ug/kg | 0.440   | 1.33    |
| 71-55-6    | 1,1,1-Trichloroethane       |           | 52.1   | ug/kg | 0.400   | 1.33    |
| 563-58-6   | 1,1-Dichloropropene         |           | 46.8   | ug/kg | 0.400   | 1.33    |
| 56-23-5    | Carbon tetrachloride        |           | 49.1   | ug/kg | 0.400   | 1.33    |
| 107-06-2   | 1,2-Dichloroethane          |           | 45.7   | ug/kg | 0.400   | 1.33    |
| 71-43-2    | Benzene                     |           | 45.0   | ug/kg | 0.400   | 1.33    |
| 79-01-6    | Trichloroethylene           |           | 38.3   | ug/kg | 0.440   | 1.33    |
| 78-87-5    | 1,2-Dichloropropane         |           | 49.9   | ug/kg | 0.400   | 1.33    |
| 75-27-4    | Bromodichloromethane        |           | 39.7   | ug/kg | 0.400   | 1.33    |
| 74-95-3    | Dibromomethane              |           | 33.2   | ug/kg | 0.400   | 1.33    |
| 108-10-1   | 4-Methyl-2-pentanone        |           | 132    | ug/kg | 1.66    | 6.66    |
| 10061-01-5 | cis-1,3-Dichloropropylene   |           | 18.5   | ug/kg | 0.400   | 1.33    |
| 108-88-3   | Toluene                     |           | 52.5   | ug/kg | 0.400   | 1.33    |
| 10061-02-6 | trans-1,3-Dichloropropylene |           | 24.7   | ug/kg | 0.400   | 1.33    |
| 79-00-5    | 1,1,2-Trichloroethane       |           | 47.6   | ug/kg | 0.400   | 1.33    |
| 591-78-6   | 2-Hexanone                  |           | 17.6   | ug/kg | 2.00    | 6.66    |
| 142-28-9   | 1,3-Dichloropropane         |           | 43.7   | ug/kg | 0.400   | 1.33    |
| 127-18-4   | Tetrachloroethylene         |           | 43.8   | ug/kg | 0.400   | 1.33    |
| 124-48-1   | Dibromochloromethane        |           | 34.5   | ug/kg | 0.400   | 1.33    |
| 106-93-4   | 1,2-Dibromoethane           |           | 29.5   | ug/kg | 0.400   | 1.33    |
| 108-90-7   | Chlorobenzene               |           | 30.2   | ug/kg | 0.400   | 1.33    |

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

Page 2 of 2

SDG Number: 10-1324  
 Lab Sample ID: 1202026236  
 Client Sample: QC for batch 946006  
 Client ID: RE15-10-8410PS  
 Batch ID: 946008  
 Run Date: 01/28/2010 20:41  
 Prep Date: 01/28/2009 11:03  
 Data File: 012810V5\5V427.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 24.9  
 Project: QC  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          |           | 45.3   | ug/kg | 0.400   | 1.33    |
| 179601-23-1 | m,p-Xylenes                           |           | 75.1   | ug/kg | 0.400   | 2.66    |
| 95-47-6     | o-Xylene                              |           | 38.8   | ug/kg | 0.400   | 1.33    |
| 100-42-5    | Styrene                               |           | 20.4   | ug/kg | 0.400   | 1.33    |
| 75-25-2     | Bromoforn                             |           | 38.5   | ug/kg | 0.400   | 1.33    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             |           | 67.6   | ug/kg | 0.400   | 1.33    |
| 96-18-4     | 1,2,3-Trichloropropane                |           | 55.6   | ug/kg | 0.400   | 1.33    |
| 108-86-1    | Bromobenzene                          |           | 32.8   | ug/kg | 0.400   | 1.33    |
| 103-65-1    | n-Propylbenzene                       |           | 64.2   | ug/kg | 0.400   | 1.33    |
| 95-49-8     | 2-Chlorotoluene                       |           | 46.7   | ug/kg | 0.400   | 1.33    |
| 98-82-8     | Isopropylbenzene                      |           | 75.9   | ug/kg | 0.400   | 1.33    |
| 108-67-8    | 1,3,5-Trimethylbenzene                |           | 59.2   | ug/kg | 0.400   | 1.33    |
| 106-43-4    | 4-Chlorotoluene                       |           | 37.4   | ug/kg | 0.400   | 1.33    |
| 98-06-6     | tert-Butylbenzene                     |           | 64.1   | ug/kg | 0.400   | 1.33    |
| 95-63-6     | 1,2,4-Trimethylbenzene                |           | 46.8   | ug/kg | 0.400   | 1.33    |
| 135-98-8    | sec-Butylbenzene                      |           | 59.5   | ug/kg | 0.400   | 1.33    |
| 99-87-6     | 4-Isopropyltoluene                    |           | 29.7   | ug/kg | 0.400   | 1.33    |
| 541-73-1    | 1,3-Dichlorobenzene                   |           | 22.8   | ug/kg | 0.400   | 1.33    |
| 106-46-7    | 1,4-Dichlorobenzene                   |           | 20.9   | ug/kg | 0.400   | 1.33    |
| 104-51-8    | n-Butylbenzene                        |           | 40.7   | ug/kg | 0.400   | 1.33    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           |           | 23.4   | ug/kg | 0.400   | 1.33    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 6.66   | ug/kg | 2.13    | 6.66    |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             |           | 45.5   | ug/kg | 0.400   | 1.33    |
| 95-50-1     | 1,2-Dichlorobenzene                   |           | 20.2   | ug/kg | 0.400   | 1.33    |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V427.D  
Acq On : 28 Jan 2010 8:41 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202026236|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL MIX[A] MS245114002  
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 29 09:06:50 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.     | Exp RT | Rel RT   | QIon | Response | Conc   | Units  | Dev (Min) |
|-------------------------------|----------|--------|----------|------|----------|--------|--------|-----------|
| Internal Standards            |          |        |          |      |          |        |        |           |
| 1) Fluorobenzene              | 10.375   | 10.375 | 1.000    | 96   | 1615730  | 50.00  | ug/L   | 0.00      |
| 41) Chlorobenzene-d5          | 13.547   | 13.547 | 1.000    | 117  | 796872   | 50.00  | ug/L   | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.959   | 15.962 | 1.000    | 152  | 236699   | 50.00  | ug/L   | 0.00      |
| 82) B Fluorobenzene           | 10.375   | 10.375 | 1.000    | 96   | 1615730  | 50.00  | ug/L   | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547   | 13.547 | 1.000    | 117  | 796872   | 50.00  | ug/L   | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.959   | 15.962 | 1.000    | 152  | 236699   | 50.00  | ug/L   | 0.00      |
| System Monitoring Compounds   |          |        |          |      |          |        |        |           |
| 29) 1,2-Dichloroethane-d4     | 10.021   | 10.021 | 0.966    | 65   | 395535   | 52.67  | ug/L   | 0.00      |
| Spiked Amount 50.000          | Range 68 | - 131  | Recovery | =    | 105.34%  |        |        |           |
| 43) Toluene-d8                | 12.016   | 12.016 | 0.887    | 98   | 1328811  | 61.14  | ug/L   | 0.00      |
| Spiked Amount 50.000          | Range 75 | - 129  | Recovery | =    | 122.28%  |        |        |           |
| 61) Bromofluorobenzene        | 14.739   | 14.739 | 0.924    | 95   | 458614   | 101.54 | ug/L   | 0.00      |
| Spiked Amount 50.000          | Range 68 | - 133  | Recovery | =    | 203.08%# |        |        |           |
| Target Compounds              |          |        |          |      |          |        |        |           |
| 2) Dichlorodifluoromethane    | 4.699    | 4.689  | 0.453    | 85   | 128987   | 37.08  | ug/L   | 100       |
| 3) Chloromethane              | 5.071    | 5.051  | 0.489    | 50   | 401681   | 50.54  | ug/L   | 99        |
| 4) Vinyl chloride             | 5.263    | 5.283  | 0.507    | 62   | 371558   | 52.38  | ug/L   | 99        |
| 5) Bromomethane               | 5.877    | 5.877  | 0.566    | 94   | 146764   | 29.12  | ug/L   | 100       |
| 6) Chloroethane               | 6.008    | 6.018  | 0.579    | 64   | 208199   | 43.56  | ug/L   | 99        |
| 7) Trichlorofluoromethane     | 6.390    | 6.391  | 0.616    | 101  | 293083   | 41.97  | ug/L   | 99        |
| 8) Ethyl ether                | 6.733    | 6.733  | 0.649    | 59   | 253392   | 42.86  | ug/L   | 84        |
| 9) Acetone                    | 7.104    | 7.100  | 0.685    | 43   | 330337   | 54.54  | ug/L   | 91        |
| 10) 1,1-Dichloroethylene      | 7.125    | 7.125  | 0.687    | 61   | 340133   | 45.15  | ug/L   | 96        |
| 11) Iodomethane               | 7.369    | 7.373  | 0.710    | 142  | 908979   | 100.77 | ug/L   | 94        |
| 12) Acetonitrile              | 7.450    | 7.450  | 0.718    | 41   | 622173   | 621.80 | ug/L   | 98        |
| 13) Methyl acetate            | 7.496    | 7.493  | 0.723    | 43   | 113392   | 18.72  | ug/L   | 97        |
| 14) Carbon disulfide          | 7.507    | 7.511  | 0.724    | 76   | 3102064  | 176.14 | ug/L   | 99        |
| 15) Methylene chloride        | 7.691    | 7.691  | 0.741    | 84   | 268331   | 38.94  | ug/L   | 93        |
| 16) tert-Butyl methyl ether   | 7.984    | 7.984  | 0.770    | 73   | 573882   | 43.02  | ug/L   | 100       |
| 17) trans-1,2-Dichloroethy... | 8.034    | 8.030  | 0.774    | 61   | 303331   | 36.29  | ug/L   | 95        |
| 18) Vinyl acetate             | 8.494    | 8.458  | 0.819    | 43   | 231      | N.D.   |        |           |
| 19) 1,1-Dichloroethane        | 8.511    | 8.511  | 0.820    | 63   | 441095   | 41.60  | ug/L   | 99        |
| 20) 2-Butanone                | 9.081    | 9.077  | 0.875    | 43   | 229864   | 33.13  | ug/L   | 99        |
| 21) cis-1,2-Dichloroethylene  | 9.144    | 9.144  | 0.881    | 61   | 328909   | 34.67  | ug/L   | 95        |
| 22) 2,2-Dichloropropane       | 9.173    | 9.173  | 0.884    | 77   | 202538   | 38.07  | ug/L   | 79        |
| 23) Bromochloromethane        | 9.424    | 9.417  | 0.908    | 128  | 92646    | 29.03  | ug/L # | 83        |
| 24) Chloroform                | 9.452    | 9.452  | 0.911    | 83   | 367020   | 37.77  | ug/L   | 99        |
| 25) 1,1,1-Trichloroethane     | 9.731    | 9.735  | 0.938    | 97   | 265475   | 39.15  | ug/L   | 97        |
| 26) Cyclohexane               | 9.830    | 9.830  | 0.948    | 56   | 391531   | 39.76  | ug/L   | 97        |
| 27) 1,1-Dichloropropene       | 9.887    | 9.887  | 0.953    | 75   | 260847   | 35.10  | ug/L   | 88        |
| 28) Carbon tetrachloride      | 9.926    | 9.929  | 0.957    | 117  | 219917   | 36.86  | ug/L   | 99        |
| 30) 1,2-Dichloroethane        | 10.106   | 10.103 | 0.974    | 62   | 271198   | 34.29  | ug/L   | 99        |
| 31) Benzene                   | 10.127   | 10.127 | 0.976    | 78   | 848471   | 33.82  | ug/L   | 97        |
| 32) Cyclohexene               | 10.248   | 10.248 | 0.988    | 67   | 456951   | 39.28  | ug/L   | 96        |
| 33) n-Butyl alcohol           | 10.463   | 10.460 | 1.009    | 56   | 57477    | 336.23 | ug/L   | 88        |
| 34) Trichloroethylene         | 10.767   | 10.768 | 1.038    | 95   | 167027   | 28.72  | ug/L   | 94        |
| 35) 1,2-Dichloropropane       | 11.008   | 11.004 | 1.061    | 63   | 243339   | 37.44  | ug/L   | 99        |
| 36) Methylcyclohexane         | 11.019   | 11.019 | 1.062    | 83   | 311887   | 30.42  | ug/L   | 97        |
| 37) Dibromomethane            | 11.146   | 11.146 | 1.074    | 93   | 84994    | 24.90  | ug/L   | 90        |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V427.D  
Acq On : 28 Jan 2010 8:41 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202026236|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL MIX[A] MS245114002  
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 29 09:06:50 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc  | Units  |     |
|-------------------------------|--------|--------|--------|------|----------|-------|--------|-----|
| 38) Bromodichloromethane      | 11.252 | 11.256 | 1.085  | 83   | 208075   | 29.78 | ug/L   | 99  |
| 39) 2-Chloroethylvinyl ether  | 11.690 | 11.468 | 1.127  | 63   | 125      | N.D.  |        |     |
| 40) cis-1,3-Dichloropropylene | 11.701 | 11.705 | 1.128  | 75   | 126372   | 13.89 | ug/L   | 87  |
| 42) 4-Methyl-2-pentanone      | 11.786 | 11.786 | 0.870  | 58   | 208339   | 98.80 | ug/L   | 87  |
| 44) Toluene                   | 12.090 | 12.090 | 0.892  | 91   | 751485   | 39.38 | ug/L   | 99  |
| 45) trans-1,3-Dichloroprop... | 12.242 | 12.239 | 0.904  | 75   | 105339   | 18.54 | ug/L   | 89  |
| 46) 1,1,2-Trichloroethane     | 12.461 | 12.465 | 0.920  | 83   | 113581   | 35.75 | ug/L   | 98  |
| 47) 2-Hexanone                | 12.635 | 12.631 | 0.933  | 43   | 82588    | 13.23 | ug/L   | 92  |
| 48) 1,3-Dichloropropane       | 12.656 | 12.656 | 0.934  | 76   | 220477   | 32.79 | ug/L # | 53  |
| 49) Tetrachloroethylene       | 12.688 | 12.691 | 0.937  | 164  | 117141   | 32.91 | ug/L   | 95  |
| 50) Dibromochloromethane      | 12.928 | 12.928 | 0.954  | 129  | 98707    | 25.91 | ug/L   | 100 |
| 51) 1,2-Dibromoethane         | 13.094 | 13.094 | 0.967  | 107  | 78901    | 22.16 | ug/L   | 100 |
| 52) Chlorobenzene             | 13.579 | 13.579 | 1.002  | 112  | 274468   | 22.66 | ug/L   | 94  |
| 53) 1,1,1,2-Tetrachloroethane | 13.635 | 13.636 | 1.007  | 131  | 133779   | 34.18 | ug/L   | 97  |
| 54) Ethylbenzene              | 13.639 | 13.639 | 1.007  | 91   | 683529   | 33.98 | ug/L   | 96  |
| 55) m,p-Xylenes               | 13.745 | 13.749 | 1.015  | 106  | 456783   | 56.40 | ug/L   | 90  |
| 56) o-Xylene                  | 14.184 | 14.184 | 1.047  | 106  | 226367   | 29.15 | ug/L   | 92  |
| 57) Styrene                   | 14.184 | 14.184 | 1.047  | 104  | 187125   | 15.35 | ug/L   | 83  |
| 59) Bromoform                 | 14.445 | 14.445 | 0.905  | 173  | 38409    | 28.94 | ug/L   | 98  |
| 60) Isopropylbenzene          | 14.537 | 14.537 | 0.911  | 105  | 611266   | 56.96 | ug/L   | 97  |
| 62) 1,1,2,2-Tetrachloroethane | 14.810 | 14.810 | 0.928  | 83   | 138877   | 50.74 | ug/L   | 88  |
| 63) 1,2,3-Trichloropropane    | 14.901 | 14.898 | 0.934  | 110  | 30783    | 41.76 | ug/L   | 90  |
| 64) Bromobenzene              | 14.951 | 14.951 | 0.937  | 156  | 68983    | 24.64 | ug/L # | 82  |
| 65) n-Propylbenzene           | 14.962 | 14.965 | 0.938  | 91   | 621015   | 48.23 | ug/L   | 97  |
| 66) 1,3,5-Trimethylbenzene    | 15.114 | 15.114 | 0.947  | 105  | 390450   | 44.43 | ug/L   | 97  |
| 67) 2-Chlorotoluene           | 15.117 | 15.117 | 0.947  | 126  | 94334    | 35.06 | ug/L # | 82  |
| 68) 4-Chlorotoluene           | 15.216 | 15.216 | 0.953  | 91   | 224229   | 28.06 | ug/L   | 96  |
| 69) tert-Butylbenzene         | 15.485 | 15.489 | 0.970  | 134  | 99605    | 48.15 | ug/L   | 96  |
| 70) 1,2,4-Trimethylbenzene    | 15.527 | 15.527 | 0.973  | 105  | 317045   | 35.12 | ug/L   | 95  |
| 71) sec-Butylbenzene          | 15.711 | 15.711 | 0.984  | 105  | 527784   | 44.64 | ug/L   | 97  |
| 72) 4-Isopropyltoluene        | 15.832 | 15.832 | 0.992  | 119  | 206925   | 22.27 | ug/L   | 96  |
| 73) 1,3-Dichlorobenzene       | 15.906 | 15.902 | 0.997  | 146  | 93214    | 17.15 | ug/L   | 97  |
| 74) 1,4-Dichlorobenzene       | 15.987 | 15.991 | 1.002  | 146  | 88544    | 15.67 | ug/L   | 96  |
| 75) n-Butylbenzene            | 16.277 | 16.277 | 1.020  | 91   | 273757   | 30.55 | ug/L   | 98  |
| 76) 1,2-Dichlorobenzene       | 16.419 | 16.422 | 1.029  | 146  | 78550    | 15.20 | ug/L   | 97  |
| 77) 1,2-Dibromo-3-chloropr... | 17.301 | 17.293 | 1.084  | 157  | 8786     | 17.58 | ug/L   | 84  |
| 78) 1,2,4-Trichlorobenzene    | 18.371 | 18.371 | 1.151  | 180  | 21149    | 5.92  | ug/L   | 96  |
| 79) Hexachlorobutadiene       | 18.548 | 18.548 | 1.162  | 225  | 37490    | 18.73 | ug/L   | 98  |
| 80) Naphthalene               | 18.762 | 18.762 | 1.176  | 128  | 33865    | 4.31  | ug/L   | 99  |
| 81) 1,2,3-Trichlorobenzene    | 19.116 | 19.116 | 1.198  | 180  | 17346    | 5.64  | ug/L   | 97  |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D.  |        |     |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D.  |        |     |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D.  |        |     |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D.  |        |     |
| 87) Isopropyl Alcohol         | 7.376  | 7.175  | 0.711  |      | 0m       | N.D.  | d      |     |
| 88) Allyl chloride            | 7.450  | 7.546  | 0.718  |      | 0m       | N.D.  | d      |     |
| 89) tert-Butyl Alcohol        | 7.694  | 7.673  | 0.742  |      | 0m       | N.D.  | d      |     |
| 90) Acrylonitrile             | 7.984  | 7.928  | 0.770  |      | 0m       | N.D.  | d      |     |
| 91) Isopropyl ether           | 8.490  | 8.483  | 0.818  |      | 0m       | N.D.  | d      |     |
| 92) 2-Chloro-1,3-butadiene    | 0.000  | 8.617  | 0.000  |      | 0        | N.D.  |        |     |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D.  |        |     |
| 94) Ethyl acetate             | 9.081  | 9.088  | 0.875  |      | 0m       | N.D.  | d      |     |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V427.D  
Acq On : 28 Jan 2010 8:41 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202026236|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL MIX[A] MS245114002  
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 29 09:06:50 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|--------|--------|--------|------|----------|------|-------|
| 95) Propionitrile              | 0.000  | 9.148  | 0.000  |      | 0        | N.D. |       |
| 96) Methacrylonitrile          | 9.165  | 9.332  | 0.883  |      | 0m       | N.D. | d     |
| 97) Tetrahydrofuran            | 9.448  | 9.466  | 0.911  |      | 0m       | N.D. | d     |
| 98) Isobutyl alcohol           | 9.767  | 9.770  | 0.941  |      | 0m       | N.D. | d     |
| 99) Methyl tert-amyl ether     | 10.127 | 10.138 | 0.976  |      | 0m       | N.D. | d     |
| 100) Methyl methacrylate       | 11.022 | 10.969 | 1.062  |      | 0m       | N.D. | d     |
| 101) 1,4-Dioxane               | 0.000  | 11.089 | 0.000  |      | 0        | N.D. |       |
| 102) 2-Nitropropane            | 11.659 | 11.443 | 1.124  |      | 0m       | N.D. | d     |
| 104) Ethyl methacrylate        | 0.000  | 12.235 | 0.000  |      | 0        | N.D. |       |
| 106) 1-Chlorohexane            | 13.342 | 13.438 | 0.836  |      | 0m       | N.D. | d     |
| 107) cis-1,4-Dichloro-2-butene | 14.548 | 14.573 | 0.912  |      | 0m       | N.D. | d     |
| 108) Cyclohexanone             | 14.781 | 14.693 | 0.926  |      | 0m       | N.D. | d     |
| 109) trans-1,4-Dichloro-2-b... | 14.898 | 14.856 | 0.934  |      | 0m       | N.D. | d     |
| 110) Pentachloroethane         | 0.000  | 15.559 | 0.000  |      | 0        | N.D. |       |
| 111) Benzyl chloride           | 16.093 | 16.100 | 1.008  |      | 0m       | N.D. | d     |
| 112) bis(2-Chloroisopropyl)... | 16.542 | 16.497 | 1.037  |      | 0m       | N.D. | d     |

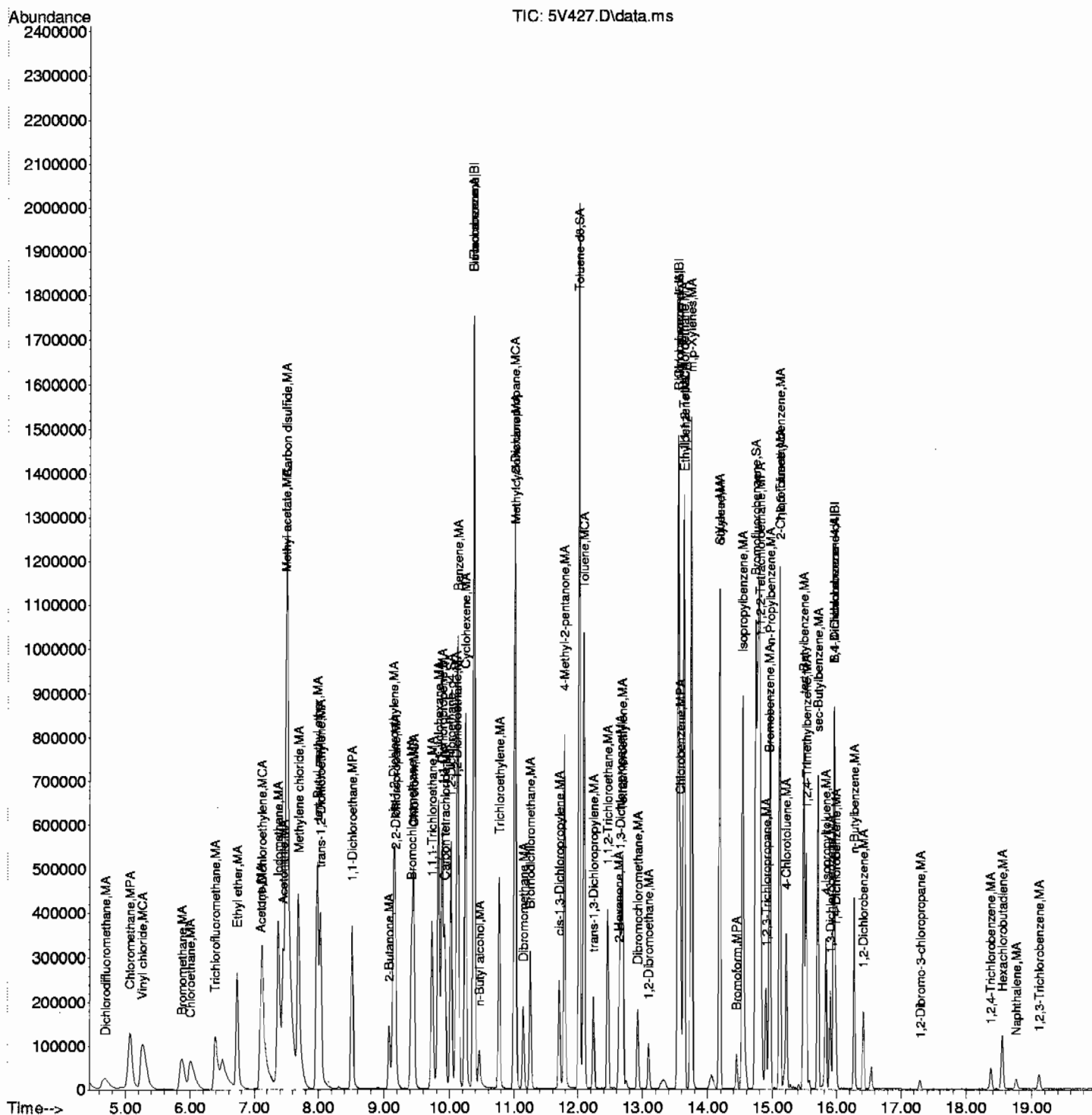
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V427.D  
Acq On : 28 Jan 2010 8:41 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202026236|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL MIX[A] MS245114002  
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 29 09:06:50 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :



**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
 Lab Sample ID: 1202026237  
 Client Sample: QC for batch 946006  
 Client ID: RE15-10-8410PSD  
 Batch ID: 946008  
 Run Date: 01/28/2010 21:07  
 Prep Date: 01/28/2009 11:04  
 Data File: 012810V55V428.D

Date Collected: 01/14/2010 12:00  
 Date Received: 01/20/2010 08:45  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: DXK1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 24.9  
 Project: QC  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

| CAS No.    | Parname                     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-----------------------------|-----------|--------|-------|---------|---------|
| 75-71-8    | Dichlorodifluoromethane     |           | 46.6   | ug/kg | 0.453   | 1.33    |
| 74-87-3    | Chloromethane               |           | 65.8   | ug/kg | 0.400   | 1.33    |
| 75-01-4    | Vinyl chloride              |           | 61.4   | ug/kg | 0.400   | 1.33    |
| 74-83-9    | Bromomethane                |           | 30.7   | ug/kg | 0.400   | 1.33    |
| 75-00-3    | Chloroethane                |           | 53.1   | ug/kg | 0.400   | 1.33    |
| 75-69-4    | Trichlorofluoromethane      |           | 49.7   | ug/kg | 0.400   | 1.33    |
| 67-64-1    | Acetone                     |           | 73.2   | ug/kg | 2.21    | 6.66    |
| 75-35-4    | 1,1-Dichloroethylene        |           | 49.0   | ug/kg | 0.400   | 1.33    |
| 74-88-4    | Iodomethane                 |           | 92.9   | ug/kg | 2.13    | 6.66    |
| 75-09-2    | Methylene chloride          |           | 45.5   | ug/kg | 2.66    | 6.66    |
| 75-15-0    | Carbon disulfide            |           | 168    | ug/kg | 1.66    | 6.66    |
| 156-60-5   | trans-1,2-Dichloroethylene  |           | 37.6   | ug/kg | 0.400   | 1.33    |
| 75-34-3    | 1,1-Dichloroethane          |           | 48.8   | ug/kg | 0.400   | 1.33    |
| 78-93-3    | 2-Butanone                  |           | 42.2   | ug/kg | 2.00    | 6.66    |
| 156-59-2   | cis-1,2-Dichloroethylene    |           | 37.1   | ug/kg | 0.400   | 1.33    |
| 594-20-7   | 2,2-Dichloropropane         |           | 44.7   | ug/kg | 0.400   | 1.33    |
| 67-66-3    | Chloroform                  |           | 43.2   | ug/kg | 0.400   | 1.33    |
| 74-97-5    | Bromochloromethane          |           | 33.2   | ug/kg | 0.440   | 1.33    |
| 71-55-6    | 1,1,1-Trichloroethane       |           | 45.7   | ug/kg | 0.400   | 1.33    |
| 563-58-6   | 1,1-Dichloropropene         |           | 34.3   | ug/kg | 0.400   | 1.33    |
| 56-23-5    | Carbon tetrachloride        |           | 40.0   | ug/kg | 0.400   | 1.33    |
| 107-06-2   | 1,2-Dichloroethane          |           | 40.7   | ug/kg | 0.400   | 1.33    |
| 71-43-2    | Benzene                     |           | 37.0   | ug/kg | 0.400   | 1.33    |
| 79-01-6    | Trichloroethylene           |           | 28.9   | ug/kg | 0.440   | 1.33    |
| 78-87-5    | 1,2-Dichloropropane         |           | 43.0   | ug/kg | 0.400   | 1.33    |
| 75-27-4    | Bromodichloromethane        |           | 34.6   | ug/kg | 0.400   | 1.33    |
| 74-95-3    | Dibromomethane              |           | 28.9   | ug/kg | 0.400   | 1.33    |
| 108-10-1   | 4-Methyl-2-pentanone        |           | 85.9   | ug/kg | 1.66    | 6.66    |
| 10061-01-5 | cis-1,3-Dichloropropylene   |           | 13.3   | ug/kg | 0.400   | 1.33    |
| 108-88-3   | Toluene                     |           | 35.1   | ug/kg | 0.400   | 1.33    |
| 10061-02-6 | trans-1,3-Dichloropropylene |           | 17.4   | ug/kg | 0.400   | 1.33    |
| 79-00-5    | 1,1,2-Trichloroethane       |           | 39.7   | ug/kg | 0.400   | 1.33    |
| 591-78-6   | 2-Hexanone                  |           | 13.1   | ug/kg | 2.00    | 6.66    |
| 142-28-9   | 1,3-Dichloropropane         |           | 36.2   | ug/kg | 0.400   | 1.33    |
| 127-18-4   | Tetrachloroethylene         |           | 27.4   | ug/kg | 0.400   | 1.33    |
| 124-48-1   | Dibromochloromethane        |           | 28.2   | ug/kg | 0.400   | 1.33    |
| 106-93-4   | 1,2-Dibromoethane           |           | 24.4   | ug/kg | 0.400   | 1.33    |
| 108-90-7   | Chlorobenzene               |           | 20.7   | ug/kg | 0.400   | 1.33    |

Volatile  
Certificate of Analysis  
Sample Summary

Page 2 of 2

SDG Number: 10-1324  
Lab Sample ID: 1202026237  
Client Sample: QC for batch 946006  
Client ID: RE15-10-8410PSD  
Batch ID: 946008  
Run Date: 01/28/2010 21:07  
Prep Date: 01/28/2009 11:04  
Data File: 012810V5SV428.D

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: DXK1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
% Moisture: 24.9  
Project: QC  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

| CAS No.     | Parmname                              | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-------------|---------------------------------------|-----------|--------|-------|---------|---------|
| 100-41-4    | Ethylbenzene                          |           | 29.1   | ug/kg | 0.400   | 1.33    |
| 179601-23-1 | m,p-Xylenes                           |           | 48.1   | ug/kg | 0.400   | 2.66    |
| 95-47-6     | o-Xylene                              |           | 25.8   | ug/kg | 0.400   | 1.33    |
| 100-42-5    | Styrene                               |           | 13.9   | ug/kg | 0.400   | 1.33    |
| 75-25-2     | Bromoform                             |           | 27.4   | ug/kg | 0.400   | 1.33    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane             |           | 42.7   | ug/kg | 0.400   | 1.33    |
| 96-18-4     | 1,2,3-Trichloropropane                |           | 42.2   | ug/kg | 0.400   | 1.33    |
| 108-86-1    | Bromobenzene                          |           | 19.3   | ug/kg | 0.400   | 1.33    |
| 103-65-1    | n-Propylbenzene                       |           | 30.3   | ug/kg | 0.400   | 1.33    |
| 95-49-8     | 2-Chlorotoluene                       |           | 24.8   | ug/kg | 0.400   | 1.33    |
| 98-82-8     | Isopropylbenzene                      |           | 39.3   | ug/kg | 0.400   | 1.33    |
| 108-67-8    | 1,3,5-Trimethylbenzene                |           | 29.9   | ug/kg | 0.400   | 1.33    |
| 106-43-4    | 4-Chlorotoluene                       |           | 20.6   | ug/kg | 0.400   | 1.33    |
| 98-06-6     | tert-Butylbenzene                     |           | 31.4   | ug/kg | 0.400   | 1.33    |
| 95-63-6     | 1,2,4-Trimethylbenzene                |           | 24.4   | ug/kg | 0.400   | 1.33    |
| 135-98-8    | sec-Butylbenzene                      |           | 27.4   | ug/kg | 0.400   | 1.33    |
| 99-87-6     | 4-Isopropyltoluene                    |           | 9.90   | ug/kg | 0.400   | 1.33    |
| 541-73-1    | 1,3-Dichlorobenzene                   |           | 13.6   | ug/kg | 0.400   | 1.33    |
| 106-46-7    | 1,4-Dichlorobenzene                   |           | 12.6   | ug/kg | 0.400   | 1.33    |
| 104-51-8    | n-Butylbenzene                        |           | 17.2   | ug/kg | 0.400   | 1.33    |
| 96-12-8     | 1,2-Dibromo-3-chloropropane           |           | 19.8   | ug/kg | 0.400   | 1.33    |
| 76-13-1     | 1,1,2-Trichloro-1,2,2-Trifluoroethane | U         | 6.66   | ug/kg | 2.13    | 6.66    |
|             | <i>Trichlorotrifluoroethane</i>       |           |        |       |         |         |
| 630-20-6    | 1,1,1,2-Tetrachloroethane             |           | 34.9   | ug/kg | 0.400   | 1.33    |
| 95-50-1     | 1,2-Dichlorobenzene                   |           | 13.5   | ug/kg | 0.400   | 1.33    |



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V428.D  
Acq On : 28 Jan 2010 9:07 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202026237|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL MIX[A] MSD245114002  
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 29 09:06:52 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT         | Rel RT   | QIon | Response | Conc   | Units  |           |
|-------------------------------|--------|----------------|----------|------|----------|--------|--------|-----------|
| Internal Standards            |        |                |          |      |          |        |        | Dev (Min) |
| 1) Fluorobenzene              | 10.375 | 10.375         | 1.000    | 96   | 1545754  | 50.00  | ug/L   | 0.00      |
| 41) Chlorobenzene-d5          | 13.547 | 13.547         | 1.000    | 117  | 851135   | 50.00  | ug/L   | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 15.959 | 15.962         | 1.000    | 152  | 304834   | 50.00  | ug/L   | 0.00      |
| 82) B Fluorobenzene           | 10.375 | 10.375         | 1.000    | 96   | 1545754  | 50.00  | ug/L   | 0.00      |
| 103) B Chlorobenzene-d5       | 13.547 | 13.547         | 1.000    | 117  | 851135   | 50.00  | ug/L   | 0.00      |
| 105) B 1,4-Dichlorobenzene-d4 | 15.959 | 15.962         | 1.000    | 152  | 304834   | 50.00  | ug/L   | 0.00      |
| System Monitoring Compounds   |        |                |          |      |          |        |        | Dev (Min) |
| 29) 1,2-Dichloroethane-d4     | 10.021 | 10.021         | 0.966    | 65   | 401450   | 55.88  | ug/L   | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 131 | Recovery | =    | 111.76%  |        |        |           |
| 43) Toluene-d8                | 12.016 | 12.016         | 0.887    | 98   | 1280642  | 55.17  | ug/L   | 0.00      |
| Spiked Amount                 | 50.000 | Range 75 - 129 | Recovery | =    | 110.34%  |        |        |           |
| 61) Bromofluorobenzene        | 14.739 | 14.739         | 0.924    | 95   | 357043   | 61.38  | ug/L   | 0.00      |
| Spiked Amount                 | 50.000 | Range 68 - 133 | Recovery | =    | 122.76%  |        |        |           |
| Target Compounds              |        |                |          |      |          |        |        | QValue    |
| 2) Dichlorodifluoromethane    | 4.699  | 4.689          | 0.453    | 85   | 116457   | 35.01  | ug/L   | 99        |
| 3) Chloromethane              | 5.081  | 5.051          | 0.490    | 50   | 375548   | 49.39  | ug/L   | 99        |
| 4) Vinyl chloride             | 5.262  | 5.283          | 0.507    | 62   | 313095   | 46.13  | ug/L   | 100       |
| 5) Bromomethane               | 5.877  | 5.877          | 0.566    | 94   | 111193   | 23.06  | ug/L   | 98        |
| 6) Chloroethane               | 6.018  | 6.018          | 0.580    | 64   | 182184   | 39.85  | ug/L   | 98        |
| 7) Trichlorofluoromethane     | 6.400  | 6.391          | 0.617    | 101  | 249002   | 37.28  | ug/L   | 99        |
| 8) Ethyl ether                | 6.733  | 6.733          | 0.649    | 59   | 229891   | 40.64  | ug/L   | 84        |
| 9) Acetone                    | 7.104  | 7.100          | 0.685    | 43   | 318553   | 54.97  | ug/L   | 90        |
| 10) 1,1-Dichloroethylene      | 7.125  | 7.125          | 0.687    | 61   | 265150   | 36.79  | ug/L   | 97        |
| 11) Iodomethane               | 7.376  | 7.373          | 0.711    | 142  | 601889   | 69.75  | ug/L   | 94        |
| 12) Acetonitrile              | 7.450  | 7.450          | 0.718    | 41   | 666831   | 696.60 | ug/L   | 97        |
| 13) Methyl acetate            | 7.500  | 7.493          | 0.723    | 43   | 102439   | 17.67  | ug/L   | 95        |
| 14) Carbon disulfide          | 7.510  | 7.511          | 0.724    | 76   | 2124032  | 126.07 | ug/L   | 100       |
| 15) Methylene chloride        | 7.691  | 7.691          | 0.741    | 84   | 225277   | 34.17  | ug/L   | 94        |
| 16) tert-Butyl methyl ether   | 7.984  | 7.984          | 0.770    | 73   | 516597   | 40.48  | ug/L   | 99        |
| 17) trans-1,2-Dichloroethy... | 8.034  | 8.030          | 0.774    | 61   | 225685   | 28.22  | ug/L   | 93        |
| 18) Vinyl acetate             | 8.310  | 8.458          | 0.801    | 43   | 713      | N.D.   |        |           |
| 19) 1,1-Dichloroethane        | 8.511  | 8.511          | 0.820    | 63   | 371452   | 36.62  | ug/L   | 99        |
| 20) 2-Butanone                | 9.081  | 9.077          | 0.875    | 43   | 210362   | 31.69  | ug/L   | 93        |
| 21) cis-1,2-Dichloroethylene  | 9.144  | 9.144          | 0.881    | 61   | 252542   | 27.83  | ug/L   | 94        |
| 22) 2,2-Dichloropropane       | 9.173  | 9.173          | 0.884    | 77   | 170758   | 33.55  | ug/L   | 80        |
| 23) Bromochloromethane        | 9.417  | 9.417          | 0.908    | 128  | 76072    | 24.92  | ug/L # | 82        |
| 24) Chloroform                | 9.452  | 9.452          | 0.911    | 83   | 301873   | 32.47  | ug/L   | 99        |
| 25) 1,1,1-Trichloroethane     | 9.731  | 9.735          | 0.938    | 97   | 222568   | 34.31  | ug/L   | 97        |
| 26) Cyclohexane               | 9.830  | 9.830          | 0.948    | 56   | 277123   | 29.41  | ug/L   | 95        |
| 27) 1,1-Dichloropropene       | 9.887  | 9.887          | 0.953    | 75   | 183199   | 25.77  | ug/L   | 88        |
| 28) Carbon tetrachloride      | 9.929  | 9.929          | 0.957    | 117  | 171470   | 30.04  | ug/L   | 99        |
| 30) 1,2-Dichloroethane        | 10.103 | 10.103         | 0.974    | 62   | 231334   | 30.57  | ug/L   | 100       |
| 31) Benzene                   | 10.127 | 10.127         | 0.976    | 78   | 666914   | 27.79  | ug/L   | 98        |
| 32) Cyclohexene               | 10.248 | 10.248         | 0.988    | 67   | 355206   | 31.91  | ug/L   | 98        |
| 33) n-Butyl alcohol           | 10.460 | 10.460         | 1.008    | 56   | 42341    | 281.36 | ug/L   | 84        |
| 34) Trichloroethylene         | 10.767 | 10.768         | 1.038    | 95   | 120829   | 21.72  | ug/L   | 94        |
| 35) 1,2-Dichloropropane       | 11.004 | 11.004         | 1.061    | 63   | 200595   | 32.26  | ug/L   | 98        |
| 36) Methylcyclohexane         | 11.019 | 11.019         | 1.062    | 83   | 186939   | 19.06  | ug/L   | 97        |
| 37) Dibromomethane            | 11.146 | 11.146         | 1.074    | 93   | 70956    | 21.73  | ug/L   | 90        |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V428.D  
Acq On : 28 Jan 2010 9:07 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202026237|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL MIX[A] MSD245114002  
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 29 09:06:52 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                      | R.T.   | Exp RT | Rel RT | QIon | Response | Conc  | Units  |     |
|-------------------------------|--------|--------|--------|------|----------|-------|--------|-----|
| 38) Bromodichloromethane      | 11.255 | 11.256 | 1.085  | 83   | 173762   | 26.00 | ug/L   | 99  |
| 39) 2-Chloroethylvinyl ether  | 0.000  | 11.468 | 0.000  |      | 0        | N.D.  |        |     |
| 40) cis-1,3-Dichloropropylene | 11.705 | 11.705 | 1.128  | 75   | 86981    | 9.99  | ug/L   | 90  |
| 42) 4-Methyl-2-pentanone      | 11.786 | 11.786 | 0.870  | 58   | 145229   | 64.48 | ug/L   | 88  |
| 44) Toluene                   | 12.090 | 12.090 | 0.892  | 91   | 537100   | 26.35 | ug/L   | 99  |
| 45) trans-1,3-Dichloroprop... | 12.242 | 12.239 | 0.904  | 75   | 79192    | 13.05 | ug/L   | 88  |
| 46) 1,1,2-Trichloroethane     | 12.461 | 12.465 | 0.920  | 83   | 101175   | 29.82 | ug/L   | 98  |
| 47) 2-Hexanone                | 12.638 | 12.631 | 0.933  | 43   | 65336    | 9.80  | ug/L   | 91  |
| 48) 1,3-Dichloropropane       | 12.656 | 12.656 | 0.934  | 76   | 195417   | 27.21 | ug/L # | 51  |
| 49) Tetrachloroethylene       | 12.691 | 12.691 | 0.937  | 164  | 78116    | 20.54 | ug/L   | 93  |
| 50) Dibromochloromethane      | 12.928 | 12.928 | 0.954  | 129  | 86254    | 21.19 | ug/L   | 99  |
| 51) 1,2-Dibromoethane         | 13.094 | 13.094 | 0.967  | 107  | 69592    | 18.30 | ug/L   | 96  |
| 52) Chlorobenzene             | 13.582 | 13.579 | 1.003  | 112  | 200618   | 15.51 | ug/L   | 93  |
| 53) 1,1,1,2-Tetrachloroethane | 13.632 | 13.636 | 1.006  | 131  | 109445   | 26.18 | ug/L   | 100 |
| 54) Ethylbenzene              | 13.639 | 13.639 | 1.007  | 91   | 468951   | 21.82 | ug/L   | 98  |
| 55) m,p-Xylenes               | 13.749 | 13.749 | 1.015  | 106  | 312305   | 36.11 | ug/L   | 93  |
| 56) o-Xylene                  | 14.184 | 14.184 | 1.047  | 106  | 160850   | 19.39 | ug/L   | 90  |
| 57) Styrene                   | 14.184 | 14.184 | 1.047  | 104  | 135373   | 10.40 | ug/L   | 83  |
| 59) Bromoform                 | 14.442 | 14.445 | 0.905  | 173  | 35114    | 20.54 | ug/L   | 98  |
| 60) Isopropylbenzene          | 14.537 | 14.537 | 0.911  | 105  | 408301   | 29.54 | ug/L   | 97  |
| 62) 1,1,2,2-Tetrachloroethane | 14.810 | 14.810 | 0.928  | 83   | 113116   | 32.09 | ug/L   | 97  |
| 63) 1,2,3-Trichloropropane    | 14.901 | 14.898 | 0.934  | 110  | 30080    | 31.69 | ug/L   | 94  |
| 64) Bromobenzene              | 14.954 | 14.951 | 0.937  | 156  | 52193    | 14.47 | ug/L # | 82  |
| 65) n-Propylbenzene           | 14.965 | 14.965 | 0.938  | 91   | 377187   | 22.75 | ug/L   | 96  |
| 66) 1,3,5-Trimethylbenzene    | 15.114 | 15.114 | 0.947  | 105  | 254080   | 22.45 | ug/L   | 97  |
| 67) 2-Chlorotoluene           | 15.114 | 15.117 | 0.947  | 126  | 64568    | 18.63 | ug/L # | 81  |
| 68) 4-Chlorotoluene           | 15.216 | 15.216 | 0.953  | 91   | 159476   | 15.50 | ug/L   | 93  |
| 69) tert-Butylbenzene         | 15.485 | 15.489 | 0.970  | 134  | 62877    | 23.60 | ug/L   | 91  |
| 70) 1,2,4-Trimethylbenzene    | 15.527 | 15.527 | 0.973  | 105  | 213068   | 18.33 | ug/L   | 95  |
| 71) sec-Butylbenzene          | 15.711 | 15.711 | 0.984  | 105  | 313403   | 20.58 | ug/L   | 97  |
| 72) 4-Isopropyltoluene        | 15.832 | 15.832 | 0.992  | 119  | 88960    | 7.43  | ug/L   | 94  |
| 73) 1,3-Dichlorobenzene       | 15.906 | 15.902 | 0.997  | 146  | 71209    | 10.18 | ug/L   | 97  |
| 74) 1,4-Dichlorobenzene       | 15.991 | 15.991 | 1.002  | 146  | 68960    | 9.48  | ug/L   | 96  |
| 75) n-Butylbenzene            | 16.277 | 16.277 | 1.020  | 91   | 148907   | 12.90 | ug/L   | 97  |
| 76) 1,2-Dichlorobenzene       | 16.422 | 16.422 | 1.029  | 146  | 67512    | 10.14 | ug/L   | 98  |
| 77) 1,2-Dibromo-3-chloropr... | 17.293 | 17.293 | 1.084  | 157  | 9581     | 14.88 | ug/L   | 87  |
| 78) 1,2,4-Trichlorobenzene    | 18.371 | 18.371 | 1.151  | 180  | 17992    | 3.91  | ug/L   | 96  |
| 79) Hexachlorobutadiene       | 18.548 | 18.548 | 1.162  | 225  | 22692    | 8.80  | ug/L   | 99  |
| 80) Naphthalene               | 18.762 | 18.762 | 1.176  | 128  | 34508    | 3.41  | ug/L   | 98  |
| 81) 1,2,3-Trichlorobenzene    | 19.116 | 19.116 | 1.198  | 180  | 15756    | 3.98  | ug/L   | 99  |
| 83) Chlorotrifluoroethylene   | 0.000  | 4.608  | 0.000  |      | 0        | N.D.  |        |     |
| 84) 2-Chloro-1,1,1-trifluo... | 0.000  | 5.414  | 0.000  |      | 0        | N.D.  |        |     |
| 85) Acrolein                  | 0.000  | 6.924  | 0.000  |      | 0        | N.D.  |        |     |
| 86) Trichlorotrifluoroethane  | 0.000  | 7.079  | 0.000  |      | 0        | N.D.  |        |     |
| 87) Isopropyl Alcohol         | 7.372  | 7.175  | 0.711  |      | 0m       | N.D.  | d      |     |
| 88) Allyl chloride            | 7.450  | 7.546  | 0.718  |      | 0m       | N.D.  | d      |     |
| 89) tert-Butyl Alcohol        | 7.705  | 7.673  | 0.743  |      | 0m       | N.D.  | d      |     |
| 90) Acrylonitrile             | 7.995  | 7.928  | 0.771  |      | 0m       | N.D.  | d      |     |
| 91) Isopropyl ether           | 8.483  | 8.483  | 0.818  |      | 0m       | N.D.  | d      |     |
| 92) 2-Chloro-1,3-butadiene    | 0.000  | 8.617  | 0.000  |      | 0        | N.D.  |        |     |
| 93) Ethyl tert-butyl ether    | 0.000  | 8.890  | 0.000  |      | 0        | N.D.  |        |     |
| 94) Ethyl acetate             | 9.081  | 9.088  | 0.875  |      | 0m       | N.D.  | d      |     |

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V428.D  
Acq On : 28 Jan 2010 9:07 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202026237|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL MIX[A] MSD245114002  
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 29 09:06:52 2010  
Quant Method : C:\msdchem\1\METHODS\VOA5-8260-010810.M  
Quant Title : Volatile Organics 8260B  
QLast Update : Mon Jan 11 08:56:29 2010  
Response via : Initial Calibration  
Integrator: RTE

SubList :

| Compound                       | R.T.   | Exp RT | Rel RT | QIon | Response | Conc | Units |
|--------------------------------|--------|--------|--------|------|----------|------|-------|
| 95) Propionitrile              | 0.000  | 9.148  | 0.000  |      | 0        | N.D. |       |
| 96) Methacrylonitrile          | 9.169  | 9.332  | 0.884  |      | 0m       | N.D. | d     |
| 97) Tetrahydrofuran            | 9.463  | 9.466  | 0.912  |      | 0m       | N.D. | d     |
| 98) Isobutyl alcohol           | 9.830  | 9.770  | 0.948  |      | 0m       | N.D. | d     |
| 99) Methyl tert-amyl ether     | 10.124 | 10.138 | 0.976  |      | 0m       | N.D. | d     |
| 100) Methyl methacrylate       | 11.019 | 10.969 | 1.062  |      | 0m       | N.D. | d     |
| 101) 1,4-Dioxane               | 0.000  | 11.089 | 0.000  |      | 0        | N.D. |       |
| 102) 2-Nitropropane            | 0.000  | 11.443 | 0.000  |      | 0        | N.D. |       |
| 104) Ethyl methacrylate        | 12.140 | 12.235 | 0.896  |      | 0m       | N.D. | d     |
| 106) 1-Chlorohexane            | 0.000  | 13.438 | 0.000  |      | 0        | N.D. |       |
| 107) cis-1,4-Dichloro-2-butene | 14.558 | 14.573 | 0.912  |      | 0m       | N.D. | d     |
| 108) Cyclohexanone             | 14.799 | 14.693 | 0.927  |      | 0m       | N.D. | d     |
| 109) trans-1,4-Dichloro-2-b... | 14.891 | 14.856 | 0.933  |      | 0m       | N.D. | d     |
| 110) Pentachloroethane         | 0.000  | 15.559 | 0.000  |      | 0        | N.D. |       |
| 111) Benzyl chloride           | 16.083 | 16.100 | 1.008  |      | 0m       | N.D. | d     |
| 112) bis(2-Chloroisopropyl)... | 16.542 | 16.497 | 1.037  |      | 0m       | N.D. | d     |

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Data Path : C:\msdchem\1\DATA\012810V5\  
Data File : 5V428.D  
Acq On : 28 Jan 2010 9:07 pm  
Operator : DXK1  
InstName : VOA5  
Sample : |1202026237|946008|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0g N/A SOIL MIX[A] MSD245114002  
ALS Vial : 28 Sample Multiplier: 1

SubList :

# Miscellaneous

Date: 1/8/2010 Method 8260/624 Operator: DXK1  
REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
Daily Instrument Readings: \_\_\_\_\_  
Multiplier Voltage: 1529

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 1/8/2010  
Daily Standard Volume Added for Purge (ul) MS/ Bk/ ICV LCS BFB  
Solution ID# see 011110v5  
ICV-A 1 1  
IS UVM091216-09  
SS UVM091117-02  
ICV-B W5VM100108-18  
BFB UVM091117-02  
Purge Amount  
5 Water Purge Vol: n/a  
Soil Purge Wt: n/a  
Mid level ext. MeOH Vol: n/a  
Methanol Lot #: n/a  
Heated Purge: X

Sequence Number: 010810v5

| Analysis Date | Time  | Data File | Lab Sample ID | Client   | Batch # | Wt.(g) or Vol.(ml/ul) | Dil. | Factor | pH  | AS Slot # | Matrix | Analyst | CI test (Y/N) | Acceptance (ble(O/X)) | Comments                    |
|---------------|-------|-----------|---------------|----------|---------|-----------------------|------|--------|-----|-----------|--------|---------|---------------|-----------------------|-----------------------------|
| 8 Jan 2010    | 11:05 | 5S501.D   | UVM091117-02  | GEL      | BFB     | 5mL                   | 1    | 1      | N/A | 1         | W      | DXK1    | N/A           | X                     |                             |
| 8 Jan 2010    | 11:30 | 5S502.D   | W5VM100108-01 | GEL      | CCV     | 5mL                   | 1    | 1      | N/A | 2         | W      | DXK1    | N/A           | X                     | UVM100106-07A+UVM091217-07A |
| 8 Jan 2010    | 11:56 | 5S503.D   | W5VM100108-02 | GEL      | CCV     | 5mL                   | 1    | 1      | N/A | 3         | W      | DXK1    | N/A           | X                     | UVM091214-01F+UVM100105-01  |
| 8 Jan 2010    | 12:22 | 5S504.D   | W5VM100108-03 | GEL      | CCV     | 5mL                   | 1    | 1      | N/A | 4         | W      | DXK1    | N/A           | X                     | UVM091216-06                |
| 8 Jan 2010    | 13:05 | 5S505.D   | UVM091117-02  | GEL      | BFB     | 5mL                   | 1    | 1      | N/A | 1         | W      | DXK1    | N/A           | O                     |                             |
| 8 Jan 2010    | 13:40 | 5S506.D   | W5VM100108-01 | VSTD001  | ICAL    | 5mL                   | 1    | 1      | N/A | 2         | W      | DXK1    | N/A           | O                     | UVM100106-02A+UVM091217-02A |
| 8 Jan 2010    | 14:05 | 5S507.D   | W5VM100108-02 | VSTD002  | ICAL    | 5mL                   | 1    | 1      | N/A | 3         | W      | DXK1    | N/A           | O                     | UVM100106-03A+UVM091217-03A |
| 8 Jan 2010    | 14:31 | 5S508.D   | W5VM100108-03 | VSTD005  | ICAL    | 5mL                   | 1    | 1      | N/A | 4         | W      | DXK1    | N/A           | O                     | UVM100106-04A+UVM091217-04A |
| 8 Jan 2010    | 14:57 | 5S509.D   | W5VM100108-04 | VSTD010  | ICAL    | 5mL                   | 1    | 1      | N/A | 5         | W      | DXK1    | N/A           | O                     | UVM100106-05A+UVM091217-05A |
| 8 Jan 2010    | 15:23 | 5S511.D   | W5VM100108-05 | VSTD020  | ICAL    | 5mL                   | 1    | 1      | N/A | 7         | W      | DXK1    | N/A           | O                     | UVM100106-06A+UVM091217-06A |
| 8 Jan 2010    | 15:49 | 5S512.D   | W5VM100108-06 | VSTD050  | ICAL    | 5mL                   | 1    | 1      | N/A | 7         | W      | DXK1    | N/A           | O                     | UVM100106-07A+UVM091217-07A |
| 8 Jan 2010    | 16:14 | 5S513.D   | W5VM100108-07 | VSTD100  | ICAL    | 5mL                   | 1    | 1      | N/A | 8         | W      | DXK1    | N/A           | O                     | UVM100106-08A+UVM091217-08A |
| 8 Jan 2010    | 16:40 | 5S514.D   | RINSE         | GEL      | BLANK   | 5mL                   | 1    | 1      | N/A | 9         | W      | DXK1    | N/A           | X                     | rinse                       |
| 8 Jan 2010    | 17:06 | 5S515.D   | W5VM100108-08 | VSTD0005 | ICAL    | 5mL                   | 1    | 1      | N/A | 10        | W      | DXK1    | N/A           | O                     | UVM100106-01A+UVM091217-01A |
| 8 Jan 2010    | 17:32 | 5S516.D   | W5VM100108-09 | ICV      | ICAL    | 5mL                   | 1    | 1      | N/A | 11        | W      | DXK1    | N/A           | O                     | UVM091214-01F+UVM100105-01  |
| 8 Jan 2010    | 17:58 | 5S517.D   | W5VM100108-10 | ICV      | ICAL    | 5mL                   | 1    | 1      | N/A | 12        | W      | DXK1    | N/A           | O                     | UVM091215-01C+UVM100105-01  |
| 8 Jan 2010    | 18:24 | 5S518.D   | W5VM100108-11 | ICAL     | ICAL    | 5mL                   | 1    | 1      | N/A | 13        | W      | DXK1    | N/A           | O                     | UVM091216-01+UVM091209-01C  |
| 8 Jan 2010    | 18:50 | 5S519.D   | W5VM100108-12 | ICAL     | ICAL    | 5mL                   | 1    | 1      | N/A | 14        | W      | DXK1    | N/A           | O                     | UVM091216-02+UVM091209-02C  |
| 8 Jan 2010    | 19:16 | 5S520.D   | W5VM100108-13 | ICAL     | ICAL    | 5mL                   | 1    | 1      | N/A | 15        | W      | DXK1    | N/A           | O                     | UVM091216-03+UVM091209-03C  |
| 8 Jan 2010    | 19:42 | 5S521.D   | W5VM100108-14 | ICAL     | ICAL    | 5mL                   | 1    | 1      | N/A | 16        | W      | DXK1    | N/A           | O                     | UVM091216-04+UVM091209-04C  |
| 8 Jan 2010    | 20:07 | 5S522.D   | W5VM100108-15 | ICAL     | ICAL    | 5mL                   | 1    | 1      | N/A | 17        | W      | DXK1    | N/A           | O                     | UVM091216-05+UVM091209-05C  |
| 8 Jan 2010    | 20:33 | 5S523.D   | W5VM100108-16 | ICAL     | ICAL    | 5mL                   | 1    | 1      | N/A | 18        | W      | DXK1    | N/A           | O                     | UVM091216-06+UVM091209-06C  |
| 8 Jan 2010    | 20:59 | 5S524.D   | W5VM100108-17 | ICAL     | ICAL    | 5mL                   | 1    | 1      | N/A | 19        | W      | DXK1    | N/A           | O                     | UVM091216-07+UVM091209-07C  |
| 8 Jan 2010    | 21:25 | 5S525.D   | RINSE         | GEL      | BLANK   | 5mL                   | 1    | 1      | N/A | 20        | W      | DXK1    | N/A           | X                     | rinse                       |
| 8 Jan 2010    | 21:50 | 5S526.D   | W5VM100108-18 | ICV      | ICAL    | 5mL                   | 1    | 1      | N/A | 21        | W      | DXK1    | N/A           | O                     | UVM091216-08A               |
| 8 Jan 2010    | 22:16 | 5S527.D   | RINSE         | GEL      | BLANK   | 5mL                   | 1    | 1      | N/A | 22        | W      | DXK1    | N/A           | X                     | rinse                       |

Date: 1/11/2010 Method 8260/624 Operator: DXK1  
REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
Daily Instrument Readings: \_\_\_\_\_  
Multiplier Voltage: 1529

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 1/11/2010  
(See pg. 6 for ICAL Std. Sci. Ids)  
NaHSO4 lot # n/a  
CI test lot # 81710  
Sequence Number: 011110v5

| Daily Standard | Solution ID#     | Volume Added for Purge (ul) | MS/ Bk/ | CCV | LCS | BFB |
|----------------|------------------|-----------------------------|---------|-----|-----|-----|
| IS             | W5VM100111-01    | 5+5                         |         |     |     |     |
| SS             | UVM091216-09     | 1                           |         |     |     |     |
| LCS            | W5VM100111-01/02 | 1                           |         |     | 5+5 |     |
| BFB            | UVM091117-02     |                             |         |     |     | 1   |
| SHORT          | W5VM100111-03/04 | 5                           |         |     |     |     |
|                | n/a              | n/a                         |         |     |     | n/a |

Purge Amount  
5 Water Purge Vol:  
5 Soil Purge Wt.  
n/a Mid level ext. MeOH Vol:  
n/a ul  
n/a Methanol Lot #  
X Heated Purge

| Analysis Date | Time  | Data File | Lab Sample ID | Client | Batch #     | Wt.(g) or Vol.(ml/ul) | Dil. | Factor | pH | AS Slot # | Matrix | Analyst | CI test (Y/N) | Accepta ble(O/X) | Comments                   |
|---------------|-------|-----------|---------------|--------|-------------|-----------------------|------|--------|----|-----------|--------|---------|---------------|------------------|----------------------------|
| 1/11/2010     | 9:48  | 5T101.D   | RINSE         | GEL    | BLANK       | 5mL                   | 1    | N/A    | 1  | 1         | w      | DXK1    | N/A           | X                | rinse                      |
| 1/11/2010     | 10:13 | 5T102.D   | UVM091117-02  | GEL    | BFB         | 5mL                   | 1    | N/A    | 2  | 2         | w      | DXK1    | N/A           | O                |                            |
| 1/11/2010     | 10:39 | 5T103.D   | W5VM100111-01 | GEL    | ICV/CCV/LCS | 5mL                   | 1    | N/A    | 3  | 3         | w      | DXK1    | N/A           | O                | UVM091214-01F+IVM100105-01 |
| 1/11/2010     | 11:05 | 5T104.D   | W5VM100111-02 | GEL    | LCS         | 5g                    | 1    | N/A    | 4  | 4         | s      | DXK1    | N/A           | O                | UVM091214-01F+IVM100105-02 |
| 1/11/2010     | 11:31 | 5T105.D   | W5VM100111-03 | GEL    | CCV         | 5mL                   | 1    | N/A    | 5  | 5         | w      | DXK1    | N/A           | O                | UVM091216-06               |
| 1/11/2010     | 11:57 | 5T106.D   | W5VM100111-04 | GEL    | LCS         | 5g                    | 1    | N/A    | 6  | 6         | s      | DXK1    | N/A           | O                | UVM091216-08A              |
| 1/11/2010     | 12:22 | 5T107.D   | 12020---      | GEL    | BLANK       | 5mL                   | 1    | N/A    | 7  | 7         | w      | DXK1    | N/A           | O                |                            |
| 1/11/2010     | 12:48 | 5T108.D   | 12020---      | GEL    | BLANK       | 5g                    | 1    | N/A    | 8  | 8         | s      | DXK1    | N/A           | O                |                            |
| 1/11/2010     | 14:45 | 5T109.D   | 243902001     | COAN   | 940469      | 5mL                   | 1    | pH2    | 9  | 9         | w      | DXK1    | N             | O                | OR, see 5t118              |
| 1/11/2010     | 15:10 | 5T110.D   | 244146001     | WSRS   | 940469      | 5mL                   | 1    | pH2    | 10 | 10        | w      | DXK1    | N             | O                | OR, see 5t119              |
| 1/11/2010     | 15:36 | 5T111.D   | 244010001     | STOL   | 940468      | 5mL                   | 1    | pH2    | 11 | 11        | w      | DXK1    | N             | X                | CO (through rest of batch) |
| 1/11/2010     | 16:02 | 5T112.D   | 1202012674    | STOL   | 940468      | 5mL                   | 1    | pH2    | 12 | 12        | w      | DXK1    | N             | X                | DUP244010001               |
| 1/11/2010     | 16:28 | 5T113.D   | 244010002     | STOL   | 940468      | 5mL                   | 1    | pH2    | 13 | 13        | w      | DXK1    | N             | X                |                            |
| 1/11/2010     | 16:54 | 5T114.D   | 244010003     | STOL   | 940468      | 5mL                   | 1    | pH2    | 14 | 14        | w      | DXK1    | N             | X                |                            |
| 1/11/2010     | 17:20 | 5T115.D   | 244010005     | STOL   | 940468      | 5mL                   | 1    | pH2    | 15 | 15        | w      | DXK1    | N             | X                |                            |
| 1/11/2010     | 17:46 | 5T116.D   | 244010006     | STOL   | 940468      | 5mL                   | 1    | pH2    | 16 | 16        | w      | DXK1    | N             | X                |                            |
| 1/11/2010     | 18:11 | 5T117.D   | 244017003     | BOSH   | 940468      | 5mL                   | 1    | pH2    | 17 | 17        | w      | DXK1    | N             | X                |                            |
| 1/11/2010     | 18:38 | 5T118.D   | 243902001     | COAN   | 940469      | 2.5mL                 | 2    | pH2    | 18 | 18        | w      | DXK1    | N             | O                | DL for 5t109               |
| 1/11/2010     | 19:03 | 5T119.D   | 244146001     | WSRS   | 940469      | 50uL                  | 100  | pH2    | 19 | 19        | w      | DXK1    | N             | O                | DL for 5t110               |
| 1/11/2010     | 19:29 | 5T120.D   | 1202012677    | WSRS   | 940469      | 50uL                  | 100  | pH2    | 20 | 20        | w      | DXK1    | N             | O                | MIX[A] MS244146001         |
| 1/11/2010     | 19:55 | 5T121.D   | 1202012678    | WSRS   | 940469      | 50uL                  | 100  | pH2    | 21 | 21        | w      | DXK1    | N             | O                | MIX[A] MS244146001         |
| 1/11/2010     | 20:21 | 5T122.D   | 1202012675    | STOL   | 940468      | 5mL                   | 1    | pH2    | 22 | 22        | w      | DXK1    | N             | X                | MIX[A] MS244010001         |
| 1/11/2010     | 20:47 | 5T123.D   | 1202012675    | STOL   | 940468      | 5mL                   | 1    | pH2    | 23 | 23        | w      | DXK1    | N             | X                | MIX[A] MS244010001         |
| 1/11/2010     | 21:13 | 5T124.D   | RINSE         | GEL    | BLANK       | 5mL                   | 1    | N/A    | 24 | 24        | w      | DXK1    | N/A           | X                | rinse                      |
| 1/11/2010     | 21:38 | 5T125.D   | RINSE         | GEL    | BLANK       | 5mL                   | 1    | N/A    | 25 | 25        | w      | DXK1    | N/A           | X                | rinse                      |
| 1/11/2010     | 22:04 | 5T126.D   | RINSE         | GEL    | BLANK       | 5mL                   | 1    | N/A    | 26 | 26        | w      | DXK1    | N/A           | X                | rinse                      |
| 1/11/2010     | 22:30 | 5T127.D   | 154734-A      | O2SI   | SCREEN      | 5mL                   | 1    | N/A    | 27 | 27        | w      | DXK1    | N/A           | X                | BISULFATE                  |
| 1/11/2010     | 22:56 | 5T128.D   | 154734-B      | O2SI   | SCREEN      | 5mL                   | 1    | N/A    | 28 | 28        | w      | DXK1    | N/A           | X                | BISULFATE                  |

Date: 1/28/2010 Method 8260/624 Operator: DXK1  
REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
Daily Instrument Readings: \_\_\_\_\_  
Multiplier Voltage: 1600

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 1/8/2010  
(See pg. 6 for ICAL Std. Sds)  
NaHSO4 lot # n/a  
Cl test lot # 81710  
Sequence Number: 012810v5

Daily Standard Volume Added for Purge (ul) MS/MS/ BFB  
Solution ID# CCV W5VM100128-02 5+5  
IS UVM100114-01 1 1 1  
SS UVM091216-10 1 1 1  
LCS/MS W5VM100128-02 5+5  
BFB UVM091216-10 1  
SHORT W5VM100128-03 n/a n/a n/a

Purge Amount  
5 Water Purge Vol:  
5.0 Soil Purge Wt.  
x Mid level ext. MeOH Vol:  
100 ul  
CZ937 Methanol Lot #  
X Heated Purge

| Analysis Date | Time  | Data File | Lab Sample ID | Client | Batch # | Wt.(g) or Vol.(ml/ul) | Dil. | Factor | pH  | AS Slot # | Matrix Analyst | Cl test (Y/N) | Acceptance ble(O/X) | Comments |
|---------------|-------|-----------|---------------|--------|---------|-----------------------|------|--------|-----|-----------|----------------|---------------|---------------------|----------|
| 1/28/2010     | 9:18  | 5V401.D   | UVM091216-10  | GEL    | BFB     | 5mL                   | 1    | 1      | N/A | 1         | W              | DXK1          | N/A                 | O        |
| 1/28/2010     | 9:44  | 5V402.D   | W5VM100128-01 | GEL    | CCV     | 5mL                   | 1    | 1      | N/A | 2         | W              | DXK1          | N/A                 | X        |
| 1/28/2010     | 10:10 | 5V403.D   | W5VM100128-02 | GEL    | CCV/LCS | 5g                    | 1    | 1      | N/A | 3         | W              | DXK1          | N/A                 | O        |
| 1/28/2010     | 10:36 | 5V404.D   | W5VM100128-03 | GEL    | CCV/LCS | 5g                    | 1    | 1      | N/A | 4         | W              | DXK1          | N/A                 | O        |
| 1/28/2010     | 11:02 | 5V405.D   | 12020---      | BLANK  | BLANK   | 5g                    | 1    | 1      | N/A | 5         | S              | DXK1          | N/A                 | O        |
| 1/28/2010     | 11:28 | 5V406.D   | 245114001     | LANL   | 946008  | 5.0g                  | 1    | 1      | N/A | 6         | S              | DXK1          | N/A                 | O        |
| 1/28/2010     | 11:53 | 5V407.D   | 245114002     | LANL   | 946008  | 5.0g                  | 1    | 1      | N/A | 7         | S              | DXK1          | N/A                 | O        |
| 1/28/2010     | 12:19 | 5V408.D   | 245114003     | LANL   | 946008  | 5.0g                  | 1    | 1      | N/A | 8         | S              | DXK1          | N/A                 | O        |
| 1/28/2010     | 12:45 | 5V409.D   | 245114004     | LANL   | 946008  | 5.0g                  | 1    | 1      | N/A | 9         | S              | DXK1          | N/A                 | X        |
| 1/28/2010     | 13:23 | 5V410.D   | 245114005     | LANL   | 946008  | 5.0g                  | 1    | 1      | N/A | 10        | S              | DXK1          | N/A                 | X        |
| 1/28/2010     | 13:49 | 5V411.D   | 245114006     | LANL   | 946008  | 5.0g                  | 1    | 1      | N/A | 11        | S              | DXK1          | N/A                 | X        |
| 1/28/2010     | 14:14 | 5V412.D   | 245114007     | LANL   | 946008  | 5.0g                  | 1    | 1      | N/A | 12        | S              | DXK1          | N/A                 | O        |
| 1/28/2010     | 14:40 | 5V413.D   | 245114008     | LANL   | 946008  | 5.0g                  | 1    | 1      | N/A | 13        | S              | DXK1          | N/A                 | O        |
| 1/28/2010     | 15:06 | 5V414.D   | 245114009     | LANL   | 946008  | 5.0g                  | 1    | 1      | N/A | 14        | S              | DXK1          | N/A                 | O        |
| 1/28/2010     | 15:32 | 5V415.D   | 245114010     | LANL   | 946008  | 5.0g                  | 1    | 1      | N/A | 15        | S              | DXK1          | N/A                 | O        |
| 1/28/2010     | 15:58 | 5V416.D   | 245114011     | LANL   | 946008  | 5.0g                  | 1    | 1      | N/A | 16        | S              | DXK1          | N/A                 | O        |
| 1/28/2010     | 16:23 | 5V417.D   | 245114012     | LANL   | 946008  | 5.0g                  | 1    | 1      | N/A | 17        | S              | DXK1          | N/A                 | O        |
| 1/28/2010     | 16:49 | 5V418.D   | 245114013     | LANL   | 946008  | 5.0g                  | 1    | 1      | N/A | 18        | S              | DXK1          | N/A                 | O        |
| 1/28/2010     | 17:15 | 5V419.D   | 245114014     | LANL   | 946008  | 5.0g                  | 1    | 1      | N/A | 19        | S              | DXK1          | N/A                 | O        |
| 1/28/2010     | 17:41 | 5V420.D   | 245114015     | LANL   | 946008  | 5.0g                  | 1    | 1      | N/A | 20        | S              | DXK1          | N/A                 | O        |
| 1/28/2010     | 18:06 | 5V421.D   | 12020---      | HB     | HB      | 100uL                 | 50   | 1      | N/A | 21        | S              | DXK1          | N/A                 | O        |
| 1/28/2010     | 18:32 | 5V422.D   | 245116013     | LANL   | 946084  | 5.0g                  | 1    | 1      | N/A | 22        | S              | DXK1          | N/A                 | O        |
| 1/28/2010     | 18:58 | 5V423.D   | 245116014     | LANL   | 946084  | 5.0g                  | 1    | 1      | N/A | 23        | S              | DXK1          | N/A                 | X        |
| 1/28/2010     | 19:24 | 5V424.D   | 245116015     | LANL   | 946084  | 5.0g                  | 1    | 1      | N/A | 24        | S              | DXK1          | N/A                 | X        |
| 1/28/2010     | 19:50 | 5V425.D   | 245116016     | LANL   | 946084  | 5.0g                  | 1    | 1      | N/A | 25        | S              | DXK1          | N/A                 | O        |
| 1/28/2010     | 20:15 | 5V426.D   | 245114003     | LANL   | 946008  | 100uL                 | 50   | 1      | N/A | 26        | S              | DXK1          | N/A                 | O        |
| 1/28/2010     | 20:41 | 5V427.D   | 1202026236    | LANL   | 946008  | 5.0g                  | 1    | 1      | N/A | 27        | S              | DXK1          | N/A                 | O        |
| 1/28/2010     | 21:07 | 5V428.D   | 1202026237    | LANL   | 946008  | 5.0g                  | 1    | 1      | N/A | 28        | S              | DXK1          | N/A                 | O        |



Date: 1/31/2010 Method 8260/624 Operator: DXK1  
REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
Daily Instrument Readings: \_\_\_\_\_  
Multiplier Voltage: 1600

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 1/8/2010  
Daily Standard Volume Added for Purge (ul) MS/MS/ BFB  
Solution ID# Blk/ CCV LCS BFB  
CCV W5VM100131-02 5+5  
IS UVM100114-01 1 1 1  
SS UVM091216-10 1 1 1  
LCS/MS W5VM100131-02 5+5  
BFB UVM091216-10 1  
SHORT W5VM100131-03 5 5 1  
n/a n/a n/a  
Purge Amount  
5 Water Purge Vol:  
5.0 Soil Purge Wt.  
n/a Mid level ext. MeOH Vol:  
n/a ul  
n/a Methanol Lot #  
X Heated Purge

Sequence Number: 013110v5

| Analysis Date | Time  | Data File | Lab Sample ID | Client | Batch # | Wt.(g) or Vol.(ml/ul) | Dil. Factor | pH  | AS Slot # | Matrix w or s | Analyst | Ci test (Y/N) | Acceptance ble(O/X) | Comments                      |
|---------------|-------|-----------|---------------|--------|---------|-----------------------|-------------|-----|-----------|---------------|---------|---------------|---------------------|-------------------------------|
| 1/31/2010     | 11:23 | 5V701.D   | UVM091216-10  | GEL    | BFB     | 5mL                   | 1           | N/A | 1         | w             | DXK1    | N/A           | O                   |                               |
| 1/31/2010     | 11:49 | 5V702.D   | W5VM100131-01 | GEL    | CCV     | 5g                    | 1           | N/A | 2         | s             | DXK1    | N/A           | X                   | MIX[A]                        |
| 1/31/2010     | 12:15 | 5V703.D   | W5VM100131-02 | GEL    | CCV/LCS | 5g                    | 1           | N/A | 3         | s             | DXK1    | N/A           | O                   | UVM091214-01J+IVM100129-01    |
| 1/31/2010     | 12:41 | 5V704.D   | W5VM100131-03 | GEL    | CCV     | 5g                    | 1           | N/A | 4         | s             | DXK1    | N/A           | O                   | UVM100118-08A                 |
| 1/31/2010     | 13:07 | 5V705.D   | 12020---      | BLANK  | BLANK   | 5g                    | 1           | N/A | 5         | s             | DXK1    | N/A           | O                   |                               |
| 1/31/2010     | 13:33 | 5V706.D   | 245106011     | LANL   | 945552  | 5.0g                  | 1           | N/A | 6         | s             | DXK1    | N/A           | X                   | IS low SS high / report 5v314 |
| 1/31/2010     | 13:59 | 5V707.D   | 245106012     | LANL   | 945552  | 5.0g                  | 1           | N/A | 7         | s             | DXK1    | N/A           | X                   | IS low SS high / report 5v315 |
| 1/31/2010     | 14:25 | 5V708.D   | 245106013     | LANL   | 945552  | 5.0g                  | 1           | N/A | 8         | s             | DXK1    | N/A           | X                   | IS low / report 5v316         |
| 1/31/2010     | 14:51 | 5V709.D   | 245106015     | LANL   | 945552  | 5.0g                  | 1           | N/A | 9         | s             | DXK1    | N/A           | X                   | IS low / report 5v318         |
| 1/31/2010     | 15:17 | 5V710.D   | 245106016     | LANL   | 945552  | 5.0g                  | 1           | N/A | 10        | s             | DXK1    | N/A           | X                   | IS low SS high / report 5v319 |
| 1/31/2010     | 15:43 | 5V711.D   | 245114004     | LANL   | 946008  | 5.0g                  | 1           | N/A | 11        | s             | DXK1    | N/A           | X                   | IS low SS high / report 5v409 |
| 1/31/2010     | 16:08 | 5V712.D   | 245114005     | LANL   | 946008  | 5.0g                  | 1           | N/A | 12        | s             | DXK1    | N/A           | X                   | IS low SS high / report 5v410 |
| 1/31/2010     | 16:34 | 5V713.D   | 245114006     | LANL   | 946008  | 5.0g                  | 1           | N/A | 13        | s             | DXK1    | N/A           | O                   |                               |
| 1/31/2010     | 17:00 | 5V714.D   | 245114010     | LANL   | 946008  | 5.0g                  | 1           | N/A | 14        | s             | DXK1    | N/A           | X                   | IS low SS high / report 5v415 |
| 1/31/2010     | 17:26 | 5V715.D   | 245387007     | LANL   | 946584  | 5.0g                  | 1           | N/A | 15        | s             | DXK1    | N/A           | O                   |                               |
| 1/31/2010     | 17:52 | 5V716.D   | 245387011     | LANL   | 946584  | 5.0g                  | 1           | N/A | 16        | s             | DXK1    | N/A           | O                   | IS low / confirmed by 5v443   |
| 1/31/2010     | 18:18 | 5V717.D   | 245114003     | LANL   | 946008  | 5.0g                  | 1           | N/A | 17        | s             | DXK1    | N/A           | X                   | IS low / report 5v408         |
| 1/31/2010     | 18:44 | 5V718.D   | 1202027524    | LANL   | 946584  | 5.0g                  | 1           | N/A | 18        | s             | DXK1    | N/A           | O                   | SOIL MIX[A] MS245387001       |
| 1/31/2010     | 19:10 | 5V719.D   | 1202027525    | LANL   | 946584  | 5.0g                  | 1           | N/A | 19        | s             | DXK1    | N/A           | O                   | SOIL MIX[A] MSD245387001      |
| 1/31/2010     | 19:36 | 5V720.D   | RINSE         | GEL    | RINSE   | 5mL                   | 1           | N/A | 20        | w             | DXK1    | N/A           | X                   | rinse                         |

### DATA EXCEPTION REPORT

|                                      |                                      |  |                             |
|--------------------------------------|--------------------------------------|--|-----------------------------|
| <b>Mo. Day Yr.</b><br>10-FEB-10      | <b>Division:</b><br>Industrial       | <b>Quality Criteria:</b><br>Specifications | <b>Type:</b><br>Process     |
| <b>Instrument Type:</b><br>VOA GC/MS | <b>Test / Method:</b><br>SW846 8260B | <b>Matrix Type:</b><br>Solid               | <b>Client Code:</b><br>LANL |
| <b>Batch ID:</b><br>946008           | <b>Sample Numbers:</b><br>See Below  |  |                             |

**Potentially affected work order(s)(SDG):245114(10-1324)**

**Application Issues:**

Failed Recovery for Surrogate or Tracer

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Sample Analyzed out of Holding

Other

Failed Recovery for MSD/PSD

**Specification and Requirements  
Exception Description:**

1. QC samples 1202026236 (MS) and 1202026237 (MSD) did not pass spike recoveries. The calculated RPD's were not all within the acceptance limits.
2. Sample 245114006 was analyzed out of holding.
3. Samples 245114002, 245114004 and 1202026236 (MS) did not pass surrogate recoveries.
4. Samples 245114002, 245114003, 245114006, 245114010, 1202026236 (MS) and 1202026237 (MSD) did not have acceptable internal standard responses.

**DER Disposition:**

1. The MS and MSD recovered in a similar manner. It is believed matrix interference has been demonstrated.
2. The sample was initially analyzed within holding and did not pass surrogate recoveries and/or internal standard responses. The sample was re-analyzed outside the recommended holding time but within two times the holding time. The re-analysis results are reported.
3. Surrogate recoveries were not within the acceptance limit. Sample re-analysis and/or spike analysis confirmed the results. It is believed matrix interference has been demonstrated. The initial results are reported.
4. Internal standard responses were not within the acceptance limit. Sample re-analysis and/or spike analysis confirmed the results. It is believed matrix interference has been demonstrated. The initial results are reported.

**Originator's Name:**

David Kingsbury 10-FEB-10

**Data Validator/Group Leader:**

Erin Haubert 11-FEB-10

# **GC/MS Semivolatile Analysis**

**Semi-Volatile Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1324**

**Method/Analysis Information**

|                          |   |
|--------------------------|---|
| <b>Procedure:</b>        | <b>Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry</b> |
| Analytical Method:       | SW846 8270C   |
| Prep Method:             | SW846 3550B   |
| Analytical Batch Number: | 944874  |
| Prep Batch Number:       | 944873  |

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

| <b>Sample ID</b> | <b>Client ID</b>                                     |
|------------------|--|
| 245114002        | RE15-10-8410   |
| 245114003        | RE15-10-8411   |
| 245114004        | RE15-10-8412   |
| 245114005        | RE15-10-8441   |
| 245114006        | RE15-10-8413   |
| 245114007        | RE15-10-8425   |
| 245114008        | RE15-10-8422   |
| 245114009        | RE15-10-8417   |
| 245114010        | RE15-10-8423   |
| 245114011        | RE15-10-8416   |
| 245114012        | RE15-10-8418   |
| 245114013        | RE15-10-8424   |
| 245114014        | RE15-10-8421   |
| 245114015        | RE15-10-8420   |
| 1202023496       | Method Blank (MB)                                    |
| 1202023497       | Laboratory Control Sample (LCS)                      |
| 1202023498       | 245114002(RE15-10-8410) Matrix Spike (MS)            |
| 1202023499       | 245114002(RE15-10-8410) 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-009 REV# 23.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

### **Calibration Information**

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms. Toluene diisocyanate rapidly hydrolyzes in water (half-life less than 30 minutes). Therefore, recoveries of this compound from aqueous matrices should not be expected. In addition, in solid matrices, toluene diisocyanate often reacts with alcohols and amines to produce urethane and ureas and consequently cannot usually coexist in a solution containing these materials.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inverted in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

### **Initial Calibration**

All initial calibration requirements have been met for this sample delivery group (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

### **CCV Requirements**

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

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

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

The MB analyzed with this SDG met the acceptance criteria.

#### **Surrogate Recoveries**

All the surrogate recoveries were within the established acceptance criteria for this SDG.

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

The LCS spike recoveries met the acceptance limits.

#### **QC Sample Designation**

Sample 245114002 (RE15-10-8410) was selected for analysis as the matrix spike and matrix spike duplicate.

**Matrix Spike (MS) Recovery Statement**

Multiple MS(1202023498) spike recoveries were not within the acceptance limits. Please see the QC Summary for specific values. Since the MSD(1202023499) displayed a similar percent recovery pattern, the failures were attributed to matrix interference and the data were reported.

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

Multiple MSD(1202023499) spike recoveries were not within the acceptance limits. Please see the QC Summary for specific values. Since the MS(1202023498) displayed a similar percent recovery pattern, the failures were attributed to sample matrix interference and the data were reported.

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

Some MS/MSD RPD values exceeded their established acceptance limit. Please see the QC Summary for specific values. The failures were attributed to sample matrix interference and the data were reported.

**Internal Standard (ISTD) Acceptance**

The internal standard responses were outside of the acceptance criteria for the following sample: 245114010 (RE15-10-8423). The sample was re-analyzed and the failures were confirmed. The first analysis data were reported. The re-analysis raw data are in the Miscellaneous Section.

The internal standard responses were outside of the acceptance criteria for the following samples: 245114006 (RE15-10-8413), 245114008 (RE15-10-8422), 245114009 (RE15-10-8417), 245114011 (RE15-10-8416) and 245114012 (RE15-10-8418). The samples were re-analyzed and the failures were not confirmed. The re-analysis data were reported.

The internal standard response for Perylene-d12 was below the acceptance criteria for the MSD(1202023499). The MS(1202023498) and associated parent displayed a similarly low (but passing) internal standard recovery for Perylene-d12. Therefore, the failure was attributed to matrix interference and the data were reported.

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

All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or 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 except for confirmations and/or dilutions.

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

The following DER was generated for this SDG: 785953. It is located in the Miscellaneous Section of the data report.

**Manual Integrations**

Some initial calibration standards, continuing calibration standards, and/or samples may require manual

integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

#### **Additional Comments**

Additional comments were not required for this SDG.

#### **Electronic Package Comment**

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually 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. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. 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.

#### **System Configuration**

The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

| <b>Instrument ID</b> | <b>Instrument</b>    | <b>System Configuration</b> | <b>Column ID</b> | <b>Column Description</b>                         |
|----------------------|----------------------|-----------------------------|------------------|---|
| MSD3.I               | HP Mass Spectrometer | HP7890A/HP5975C             | DB-5MS           | 25m x 0.2mm, 0.33um (5% Phenylmethylpolysiloxane) |

#### **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.

Reviewer: Alan R. Ruchey Date: 2-15-10



# Roadmap for LANL 10-1324 SVOA

This roadmap was analyzed by jen00986 on 02-02-2010, 13:59.

This roadmap was reviewed by bar00895 on 02-02-2010, 15:18.

Sample

| exclude                             | manual | datafile                          | supid     | injdte      | injtime | sublist     | clientid     | dilution | batchid | comment                                     |
|-------------------------------------|--------|-----------------------------------|-----------|-------------|---------|-------------|--------------|----------|---------|---|
| <input type="checkbox"/>            | N      | /chem/MSD3.i/s012710.b/s3a2714.d  | 245114002 | 27-JAN-2010 | 14:35   | 10-1324.sub | RE15-10-8410 | 1        | 944874  | USE   |
| <input type="checkbox"/>            | N      | /chem/MSD3.i/s012710.b/s3a2717.d  | 245114003 | 27-JAN-2010 | 15:52   | 10-1324.sub | RE15-10-8411 | 1        | 944874  | USE   |
| <input type="checkbox"/>            | N      | /chem/MSD3.i/s012710.b/s3a2718.d  | 245114004 | 27-JAN-2010 | 16:18   | 10-1324.sub | RE15-10-8412 | 1        | 944874  | USE   |
| <input type="checkbox"/>            | N      | /chem/MSD3.i/s012710.b/s3a2719.d  | 245114005 | 27-JAN-2010 | 16:44   | 10-1324.sub | RE15-10-8441 | 1        | 944874  | USE   |
| <input checked="" type="checkbox"/> | N      | /chem/MSD3.i/s012710.b/s3a2723.d  | 245114006 | 27-JAN-2010 | 18:27   | 10-1324.sub | RE15-10-8413 | 1        | 944874  | DUSE; ISID LOW; SEE RR S3A2835              |
| <input type="checkbox"/>            | N      | /chem/MSD3.i/s012710.b/s3a2724.d  | 245114007 | 27-JAN-2010 | 18:53   | 10-1324.sub | RE15-10-8425 | 1        | 944874  | USE   |
| <input checked="" type="checkbox"/> | N      | /chem/MSD3.i/s012710.b/s3a2725.d  | 245114008 | 27-JAN-2010 | 19:19   | 10-1324.sub | RE15-10-8422 | 1        | 944874  | DUSE; ISID LOW; SEE RR S3A2836              |
| <input checked="" type="checkbox"/> | N      | /chem/MSD3.i/s012710.b/s3a2726.d  | 245114009 | 27-JAN-2010 | 19:44   | 10-1324.sub | RE15-10-8417 | 1        | 944874  | DUSE; ISID LOW; SEE RR S3A2837              |
| <input type="checkbox"/>            | N      | /chem/MSD3.i/s012710.b/s3a2777.d  | 245114010 | 27-JAN-2010 | 20:10   | 10-1324.sub | RE15-10-8423 | 1        | 944874  | USE; ISID LOW; SEE RR S3A2914               |
| <input type="checkbox"/>            | N      | /chem/MSD3.i/s012810a.b/s3a2835.d | 245114006 | 29-JAN-2010 | 00:54   | 10-1324.sub | RE15-10-8413 | 1        | 944874  | USE; RR OF S3A2723                          |
| <input type="checkbox"/>            | N      | /chem/MSD3.i/s012810a.b/s3a2836.d | 245114008 | 29-JAN-2010 | 01:19   | 10-1324.sub | RE15-10-8422 | 1        | 944874  | USE; RR OF S3A2725                          |
| <input type="checkbox"/>            | N      | /chem/MSD3.i/s012810a.b/s3a2837.d | 245114009 | 29-JAN-2010 | 01:44   | 10-1324.sub | RE15-10-8417 | 1        | 944874  | USE; RR OF S3A2726                          |
| <input checked="" type="checkbox"/> | N      | /chem/MSD3.i/s012810a.b/s3a2838.d | 245114010 | 29-JAN-2010 | 02:09   | 10-1324.sub | RE15-10-8423 | 1        | 944874  | DUSE; RR OF S3A2727; SURR HIGH; SEE S3A2914 |
| <input checked="" type="checkbox"/> | N      | /chem/MSD3.i/s012810a.b/s3a2839.d | 245114011 | 29-JAN-2010 | 02:34   | 10-1324.sub | RE15-10-8416 | 1        | 944874  | DUSE; SURR HIGH; NO HITS; SEE S3A2915       |
| <input type="checkbox"/>            | N      | /chem/MSD3.i/s012810a.b/s3a2840.d | 245114012 | 29-JAN-2010 | 02:59   | 10-1324.sub | RE15-10-8418 | 1        | 944874  | USE   |
| <input type="checkbox"/>            | N      | /chem/MSD3.i/s012810a.b/s3a2841.d | 245114013 | 29-JAN-2010 | 03:24   | 10-1324.sub | RE15-10-8424 | 1        | 944874  | USE   |
| <input type="checkbox"/>            | N      | /chem/MSD3.i/s012810a.b/s3a2842.d | 245114014 | 29-JAN-2010 | 03:49   | 10-1324.sub | RE15-10-8421 | 1        | 944874  | USE   |
| <input type="checkbox"/>            | N      | /chem/MSD3.i/s012810a.b/s3a2843.d | 245114015 | 29-JAN-2010 | 04:14   | 10-1324.sub | RE15-10-8420 | 1        | 944874  | USE   |
| <input checked="" type="checkbox"/> | N      | /chem/MSD3.i/s012910a.b/s3a2914.d | 245114010 | 29-JAN-2010 | 17:11   | 10-1324.sub | RE15-10-8423 | 1        | 944874  | DUSE; fail istd-confirms s3a2914            |
| <input type="checkbox"/>            | N      | /chem/MSD3.i/s012910a.b/s3a2915.d | 245114011 | 29-JAN-2010 | 17:36   | 10-1324.sub | RE15-10-8416 | 1        | 944874  | USE; pass surr-rr of s3a2839                |

QC Sample

| exclude                  | manual | datafile                          | smid       | sampletype | injdte      | injtime | sublist     | clientid  | dilution | batchid | comment |
|--------------------------|--------|-----------------------------------|------------|------------|-------------|---------|-------------|-----------|----------|---------|---------|
| <input type="checkbox"/> | N      | /chem/MSD3.i/s012610a.b/s3a2610.d | 1202023496 | mb         | 26-JAN-2010 | 13:18   | 10-1324.sub | SBLK01    | 1        | 944874  | USE     |
| <input type="checkbox"/> | N      | /chem/MSD3.i/s012610a.b/s3a2611.d | 1202023497 | lcs        | 26-JAN-2010 | 13:44   | 10-1324.sub | SBLK01LCS | 1        | 944874  | USE     |

|                          |   |                                  |            |     |             |       |             |                 |   |        |               |
|--------------------------|---|----------------------------------|------------|-----|-------------|-------|-------------|-----------------|---|--------|---------------|
| <input type="checkbox"/> | N | /chem/MSD3.i/s012710.b/s3a2715.d | 1202023498 | ms  | 27-JAN 2010 | 15:01 | 10-1324.sub | RE15-10-8410MS  | 1 | 944874 | USE           |
| <input type="checkbox"/> | N | /chem/MSD3.i/s012710.b/s3a2716.d | 1202023499 | msd | 27 JAN-2010 | 15:26 | 10-1324.sub | RE15 10-8410MSD | 1 | 944874 | USE; TSTD LOW |

# **Sample Data Summary**

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114002

Client ID: RE15-10-8410  
Batch ID: 944874  
Run Date: 01/27/2010 14:35  
Prep Date: 01/25/2010 21:06  
Data File: s3a2714.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 24.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                                 | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|--|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine            | U         | 443    | ug/kg | 88.5    | 443     |
| 108-95-2   | Phenol                                   | U         | 443    | ug/kg | 88.5    | 443     |
| 95-57-8    | 2-Chlorophenol                           | U         | 443    | ug/kg | 88.5    | 443     |
| 106-46-7   | 1,4-Dichlorobenzene                      | U         | 443    | ug/kg | 88.5    | 443     |
| 621-64-7   | N-Nitrosodipropylamine                   | U         | 443    | ug/kg | 88.5    | 443     |
| 59-50-7    | 4-Chloro-3-methylphenol                  | U         | 443    | ug/kg | 88.5    | 443     |
| 83-32-9    | Acenaphthene                             | U         | 44.3   | ug/kg | 14.6    | 44.3    |
| 121-14-2   | 2,4-Dinitrotoluene                       | U         | 443    | ug/kg | 44.3    | 443     |
| 100-02-7   | 4-Nitrophenol                            | U         | 443    | ug/kg | 146     | 443     |
| 87-86-5    | Pentachlorophenol                        | U         | 443    | ug/kg | 111     | 443     |
| 129-00-0   | Pyrene                                   | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 110-86-1   | Pyridine                                 | U         | 443    | ug/kg | 88.5    | 443     |
| 62-53-3    | Aniline                                  | U         | 443    | ug/kg | 133     | 443     |
| 111-44-4   | bis(2-Chloroethyl) ether                 | U         | 443    | ug/kg | 88.5    | 443     |
| 541-73-1   | 1,3-Dichlorobenzene                      | U         | 443    | ug/kg | 88.5    | 443     |
| 100-51-6   | Benzyl alcohol                           | U         | 443    | ug/kg | 133     | 443     |
| 95-50-1    | 1,2-Dichlorobenzene                      | U         | 443    | ug/kg | 88.5    | 443     |
| 108-60-1   | bis(2-Chloroisopropyl)ether              | U         | 443    | ug/kg | 88.5    | 443     |
| 95-48-7    | o-Cresol                                 | U         | 443    | ug/kg | 88.5    | 443     |
| 65794-96-9 | m,p-Cresols                              | U         | 443    | ug/kg | 133     | 443     |
| 67-72-1    | Hexachloroethane                         | U         | 443    | ug/kg | 88.5    | 443     |
| 98-95-3    | Nitrobenzene                             | U         | 443    | ug/kg | 88.5    | 443     |
| 78-59-1    | Isophorone                               | U         | 443    | ug/kg | 88.5    | 443     |
| 88-75-5    | 2-Nitrophenol                            | U         | 443    | ug/kg | 88.5    | 443     |
| 105-67-9   | 2,4-Dimethylphenol                       | U         | 443    | ug/kg | 155     | 443     |
| 111-91-1   | bis(2-Chloroethoxy)methane               | U         | 443    | ug/kg | 88.5    | 443     |
| 120-83-2   | 2,4-Dichlorophenol                       | U         | 443    | ug/kg | 88.5    | 443     |
| 65-85-0    | Benzoic acid                             | U         | 885    | ug/kg | 221     | 885     |
| 91-20-3    | Naphthalene                              | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 106-47-8   | 4-Chloroaniline                          | U         | 443    | ug/kg | 88.5    | 443     |
| 87-68-3    | Hexachlorobutadiene                      | U         | 443    | ug/kg | 88.5    | 443     |
| 91-57-6    | 2-Methylnaphthalene                      | U         | 44.3   | ug/kg | 8.85    | 44.3    |
| 77-47-4    | Hexachlorocyclopentadiene                | U         | 443    | ug/kg | 88.5    | 443     |
| 88-06-2    | 2,4,6-Trichlorophenol                    | U         | 443    | ug/kg | 88.5    | 443     |
| 95-95-4    | 2,4,5-Trichlorophenol                    | U         | 443    | ug/kg | 88.5    | 443     |
| 91-58-7    | 2-Chloronaphthalene                      | U         | 44.3   | ug/kg | 14.6    | 44.3    |
| 88-74-4    | 2-Nitroaniline                           | U         | 443    | ug/kg | 88.5    | 443     |
| 99-09-2    | <i>o</i> -Nitroaniline<br>3-Nitroaniline | U         | 443    | ug/kg | 88.5    | 443     |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114002

Client ID: RE15-10-8410  
Batch ID: 944874  
Run Date: 01/27/2010 14:35  
Prep Date: 01/25/2010 21:06  
Data File: s3a2714.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 24.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|-------------------------------|-----------|--------|-------|---------|---------|
| 131-11-3  | <i>m</i> -Nitroaniline        |           |        |       |         |         |
|           | Dimethylphthalate             | U         | 443    | ug/kg | 88.5    | 443     |
| 606-20-2  | 2,6-Dinitrotoluene            | U         | 443    | ug/kg | 44.3    | 443     |
| 208-96-8  | Acenaphthylene                | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 51-28-5   | 2,4-Dinitrophenol             | U         | 885    | ug/kg | 168     | 885     |
| 132-64-9  | Dibenzofuran                  | U         | 443    | ug/kg | 88.5    | 443     |
| 84-66-2   | Diethylphthalate              | U         | 443    | ug/kg | 88.5    | 443     |
| 86-73-7   | Fluorene                      | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 7005-72-3 | 4-Chlorophenylphenylether     | U         | 443    | ug/kg | 88.5    | 443     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol    | U         | 443    | ug/kg | 88.5    | 443     |
| 100-01-6  | 4-Nitroaniline                | U         | 443    | ug/kg | 133     | 443     |
|           | <i>p</i> -Nitroaniline        |           |        |       |         |         |
| 122-39-4  | Diphenylamine                 | U         | 443    | ug/kg | 88.5    | 443     |
| 122-66-7  | Azobenzene                    | U         | 443    | ug/kg | 88.5    | 443     |
|           | <i>1,2</i> -Diphenylhydrazine |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether      | U         | 443    | ug/kg | 88.5    | 443     |
| 118-74-1  | Hexachlorobenzene             | U         | 443    | ug/kg | 88.5    | 443     |
| 85-01-8   | Phenanthrene                  | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 120-12-7  | Anthracene                    | U         | 44.3   | ug/kg | 8.85    | 44.3    |
| 84-74-2   | Di-n-butylphthalate           | U         | 443    | ug/kg | 88.5    | 443     |
| 206-44-0  | Fluoranthene                  | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 85-68-7   | Butylbenzylphthalate          | U         | 443    | ug/kg | 88.5    | 443     |
| 56-55-3   | Benzo(a)anthracene            | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 91-94-1   | 3,3'-Dichlorobenzidine        | U         | 443    | ug/kg | 133     | 443     |
| 218-01-9  | Chrysene                      | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate    | U         | 443    | ug/kg | 88.5    | 443     |
| 117-84-0  | Di-n-octylphthalate           | U         | 443    | ug/kg | 88.5    | 443     |
| 205-99-2  | Benzo(b)fluoranthene          | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 207-08-9  | Benzo(k)fluoranthene          | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 50-32-8   | Benzo(a)pyrene                | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene        | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 53-70-3   | Dibenzo(a,h)anthracene        | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 191-24-2  | Benzo(ghi)perylene            | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 120-82-1  | 1,2,4-Trichlorobenzene        | U         | 443    | ug/kg | 88.5    | 443     |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.12 | 370       | ug/kg |     | J    |
|         | Unknown                               | 2.3  | 314       | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114002

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3I  
Analyst: JLD1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 24.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8410  
Batch ID: 944874  
Run Date: 01/27/2010 14:35  
Prep Date: 01/25/2010 21:06  
Data File: s3a2714.d

| CAS No.  | Parname                                  | Qualifier | Result    | Units | MDL/LOD | PQL/LOQ |
|--|--|-----------|-----------|-------|---------|---------|
| <b>Tentatively Identified Compound Summary</b> |  |           |           |       |         |         |
| CAS No.  | Tentatively Identified Compound (TIC)    | RT        | Estimated | Units | Fit     | Qual    |
|  | Unknown Aldol Condensate                 | 3.4       | 248       | ug/kg |         | JA      |
| 7785-70-8                                      | 1R-.alpha.-Pinene                        | 4.18      | 517       | ug/kg | 98      | NJ      |
|  | Unknown                                  | 4.35      | 302       | ug/kg |         | J       |
|  | Unknown                                  | 4.48      | 382       | ug/kg |         | J       |
|  | Unknown                                  | 5.77      | 329       | ug/kg |         | J       |
| 103-82-2                                       | Benzenecacetic acid                      | 6.33      | 262       | ug/kg | 91      | NJ      |
| 544-63-8                                       | Tetradecanoic acid                       | 9.19      | 286       | ug/kg | 99      | NJ      |
| 57-10-3  | n-Hexadecanoic acid                      | 10.13     | 215       | ug/kg | 98      | NJ      |
| 1000197-14-1                                   | 4b,8-Dimethyl-2-isopropylphenanthrene, 4 | 10.6      | 181       | ug/kg | 98      | NJ      |
|  | Unknown                                  | 11.51     | 307       | ug/kg |         | J       |
|  | Unknown                                  | 11.76     | 467       | ug/kg |         | J       |
|  | Unknown                                  | 11.8      | 562       | ug/kg |         | J       |
| 1235-74-1                                      | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.86     | 307       | ug/kg | 99      | NJ      |
|  | Unknown                                  | 11.89     | 229       | ug/kg |         | J       |
|  | Unknown                                  | 12.22     | 387       | ug/kg |         | J       |
|  | Unknown                                  | 12.35     | 670       | ug/kg |         | J       |
|  | Unknown                                  | 13.25     | 289       | ug/kg |         | J       |
| 309735-29-3                                    | 1,2-Benzisothiazole, 3-(hexahydro-1H-aze | 13.33     | 255       | ug/kg | 91      | NJ      |
|  | Unknown                                  | 15.08     | 776       | ug/kg |         | J       |
| 2883-08-1                                      | Cyclohexane, 1,1'-(2-methyl-1,3-propaned | 15.8      | 890       | ug/kg | 89      | NJ      |
|  | Unknown                                  | 15.89     | 514       | ug/kg |         | J       |
|  | Unknown                                  | 15.94     | 656       | ug/kg |         | J       |
|  | Unknown                                  | 16.82     | 645       | ug/kg |         | J       |
| 1000214-20-7                                   | Stigmasterol, 22,23-dihydro-             | 17.65     | 1970      | ug/kg | 95      | NJ      |
| 1058-61-3                                      | Stigmast-4-en-3-one                      | 18.79     | 1440      | ug/kg | 93      | NJ      |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114003

Client ID: RE15-10-8411  
Batch ID: 944874  
Run Date: 01/27/2010 15:52  
Prep Date: 01/25/2010 21:06  
Data File: s3a2717.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 15.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 392    | ug/kg | 78.4    | 392     |
| 108-95-2   | Phenol                        | U         | 392    | ug/kg | 78.4    | 392     |
| 95-57-8    | 2-Chlorophenol                | U         | 392    | ug/kg | 78.4    | 392     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 392    | ug/kg | 78.4    | 392     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 392    | ug/kg | 78.4    | 392     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 392    | ug/kg | 78.4    | 392     |
| 83-32-9    | Acenaphthene                  | U         | 39.2   | ug/kg | 12.9    | 39.2    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 392    | ug/kg | 39.2    | 392     |
| 100-02-7   | 4-Nitrophenol                 | U         | 392    | ug/kg | 129     | 392     |
| 87-86-5    | Pentachlorophenol             | U         | 392    | ug/kg | 98.0    | 392     |
| 129-00-0   | Pyrene                        | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 110-86-1   | Pyridine                      | U         | 392    | ug/kg | 78.4    | 392     |
| 62-53-3    | Aniline                       | U         | 392    | ug/kg | 118     | 392     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 392    | ug/kg | 78.4    | 392     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 392    | ug/kg | 78.4    | 392     |
| 100-51-6   | Benzyl alcohol                | U         | 392    | ug/kg | 118     | 392     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 392    | ug/kg | 78.4    | 392     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 392    | ug/kg | 78.4    | 392     |
| 95-48-7    | o-Cresol                      | U         | 392    | ug/kg | 78.4    | 392     |
| 65794-96-9 | m,p-Cresols                   | U         | 392    | ug/kg | 118     | 392     |
| 67-72-1    | Hexachloroethane              | U         | 392    | ug/kg | 78.4    | 392     |
| 98-95-3    | Nitrobenzene                  | U         | 392    | ug/kg | 78.4    | 392     |
| 78-59-1    | Isophorone                    | U         | 392    | ug/kg | 78.4    | 392     |
| 88-75-5    | 2-Nitrophenol                 | U         | 392    | ug/kg | 78.4    | 392     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 392    | ug/kg | 137     | 392     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 392    | ug/kg | 78.4    | 392     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 392    | ug/kg | 78.4    | 392     |
| 65-85-0    | Benzoic acid                  | U         | 784    | ug/kg | 196     | 784     |
| 91-20-3    | Naphthalene                   | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 106-47-8   | 4-Chloroaniline               | U         | 392    | ug/kg | 78.4    | 392     |
| 87-68-3    | Hexachlorobutadiene           | U         | 392    | ug/kg | 78.4    | 392     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 39.2   | ug/kg | 7.84    | 39.2    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 392    | ug/kg | 78.4    | 392     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 392    | ug/kg | 78.4    | 392     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 392    | ug/kg | 78.4    | 392     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 39.2   | ug/kg | 12.9    | 39.2    |
| 88-74-4    | 2-Nitroaniline                | U         | 392    | ug/kg | 78.4    | 392     |
| 99-09-2    | <i>o</i> -Nitroaniline        | U         | 392    | ug/kg | 78.4    | 392     |
|            | 3-Nitroaniline                |           |        |       |         |         |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114003

Client ID: RE15-10-8411  
Batch ID: 944874  
Run Date: 01/27/2010 15:52  
Prep Date: 01/25/2010 21:06  
Data File: s3a2717.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 15.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.                      | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------------------------|----------------------------|-----------|--------|-------|---------|---------|
| <i>m-Nitroaniline</i>        |                            |           |        |       |         |         |
| 131-11-3                     | Dimethylphthalate          | U         | 392    | ug/kg | 78.4    | 392     |
| 606-20-2                     | 2,6-Dinitrotoluene         | U         | 392    | ug/kg | 39.2    | 392     |
| 208-96-8                     | Acenaphthylene             | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 51-28-5                      | 2,4-Dinitrophenol          | U         | 784    | ug/kg | 149     | 784     |
| 132-64-9                     | Dibenzofuran               | U         | 392    | ug/kg | 78.4    | 392     |
| 84-66-2                      | Diethylphthalate           | U         | 392    | ug/kg | 78.4    | 392     |
| 86-73-7                      | Fluorene                   | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 7005-72-3                    | 4-Chlorophenylphenylether  | U         | 392    | ug/kg | 78.4    | 392     |
| 534-52-1                     | 2-Methyl-4,6-dinitrophenol | U         | 392    | ug/kg | 78.4    | 392     |
| 100-01-6                     | 4-Nitroaniline             | U         | 392    | ug/kg | 118     | 392     |
| <i>p-Nitroaniline</i>        |                            |           |        |       |         |         |
| 122-39-4                     | Diphenylamine              | U         | 392    | ug/kg | 78.4    | 392     |
| 122-66-7                     | Azobenzene                 | U         | 392    | ug/kg | 78.4    | 392     |
| <i>1,2-Diphenylhydrazine</i> |                            |           |        |       |         |         |
| 101-55-3                     | 4-Bromophenylphenylether   | U         | 392    | ug/kg | 78.4    | 392     |
| 118-74-1                     | Hexachlorobenzene          | U         | 392    | ug/kg | 78.4    | 392     |
| 85-01-8                      | Phenanthrene               | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 120-12-7                     | Anthracene                 | U         | 39.2   | ug/kg | 7.84    | 39.2    |
| 84-74-2                      | Di-n-butylphthalate        | U         | 392    | ug/kg | 78.4    | 392     |
| 206-44-0                     | Fluoranthene               | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 85-68-7                      | Butylbenzylphthalate       | U         | 392    | ug/kg | 78.4    | 392     |
| 56-55-3                      | Benzo(a)anthracene         | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 91-94-1                      | 3,3'-Dichlorobenzidine     | U         | 392    | ug/kg | 118     | 392     |
| 218-01-9                     | Chrysene                   | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 117-81-7                     | bis(2-Ethylhexyl)phthalate | U         | 392    | ug/kg | 78.4    | 392     |
| 117-84-0                     | Di-n-octylphthalate        | U         | 392    | ug/kg | 78.4    | 392     |
| 205-99-2                     | Benzo(b)fluoranthene       | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 207-08-9                     | Benzo(k)fluoranthene       | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 50-32-8                      | Benzo(a)pyrene             | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 193-39-5                     | Indeno(1,2,3-cd)pyrene     | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 53-70-3                      | Dibenzo(a,h)anthracene     | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 191-24-2                     | Benzo(ghi)perylene         | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 120-82-1                     | 1,2,4-Trichlorobenzene     | U         | 392    | ug/kg | 78.4    | 392     |

**Tentatively Identified Compound Summary**

| CAS No.   | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|-----------|---------------------------------------|------|-----------|-------|-----|------|
| 7785-70-8 | 1R-.alpha.-Pinene                     | 4.2  | 15600     | ug/kg | 96  | NJ   |
|           | Unknown                               | 6.06 | 1160      | ug/kg |     | J    |



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114003

Client ID: RE15-10-8411  
Batch ID: 944874  
Run Date: 01/27/2010 15:52  
Prep Date: 01/25/2010 21:06  
Data File: s3a2717.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 15.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.  | Parmname                                 | Qualifier | Result    | Units | MDL/LOD | PQL/LOQ |
|--|--|-----------|-----------|-------|---------|---------|
| <b>Tentatively Identified Compound Summary</b> |  |           |           |       |         |         |
| CAS No.  | Tentatively Identified Compound (TIC)    | RT        | Estimated | Units | Fit     | Qual    |
| 629-74-3                                       | 1-Hexadecyne                             | 10.93     | 2990      | ug/kg | 94      | NJ      |
| 112-80-1                                       | Oleic Acid                               | 10.95     | 2560      | ug/kg | 98      | NJ      |
|  | Unknown                                  | 11.65     | 245       | ug/kg |         | J       |
|  | Unknown                                  | 11.76     | 1140      | ug/kg |         | J       |
|  | Unknown                                  | 11.79     | 253       | ug/kg |         | J       |
|  | Unknown                                  | 11.88     | 238       | ug/kg |         | J       |
|  | Unknown                                  | 11.91     | 325       | ug/kg |         | J       |
|  | Unknown                                  | 12.07     | 445       | ug/kg |         | J       |
|  | Unknown                                  | 12.11     | 446       | ug/kg |         | J       |
|  | Unknown                                  | 12.33     | 3690      | ug/kg |         | J       |
| 1740-19-8                                      | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 12.49     | 2190      | ug/kg | 99      | NJ      |
| 514-10-3                                       | Abietic acid                             | 12.76     | 1640      | ug/kg | 91      | NJ      |
|  | Unknown                                  | 12.79     | 292       | ug/kg |         | J       |
| 848-62-4                                       | Pregnan-20-one, (5.alpha.)-              | 12.83     | 449       | ug/kg | 80      | NJ      |
| 1000268-22-7                                   | Benzaldehyde, 4-methoxy-, (4-bicyclo[2.2 | 12.87     | 860       | ug/kg | 91      | NJ      |
|  | Unknown                                  | 13.01     | 691       | ug/kg |         | J       |
|  | Unknown                                  | 13.14     | 251       | ug/kg |         | J       |
|  | Unknown                                  | 13.31     | 224       | ug/kg |         | J       |
| 34444-37-6                                     | (-)-Nortrachelogenin                     | 16.51     | 3800      | ug/kg | 90      | NJ      |
| 83-46-5  | .beta.-Sitosterol                        | 17.68     | 3150      | ug/kg | 98      | NJ      |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114004

Client ID: RE15-10-8412  
Batch ID: 944874  
Run Date: 01/27/2010 16:18  
Prep Date: 01/25/2010 21:06  
Data File: s3a2718.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 7.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 360    | ug/kg | 72.1    | 360     |
| 108-95-2   | Phenol                        | U         | 360    | ug/kg | 72.1    | 360     |
| 95-57-8    | 2-Chlorophenol                | U         | 360    | ug/kg | 72.1    | 360     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 360    | ug/kg | 72.1    | 360     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 360    | ug/kg | 72.1    | 360     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 360    | ug/kg | 72.1    | 360     |
| 83-32-9    | Acenaphthene                  | U         | 36.0   | ug/kg | 11.9    | 36.0    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 360    | ug/kg | 36.0    | 360     |
| 100-02-7   | 4-Nitrophenol                 | U         | 360    | ug/kg | 119     | 360     |
| 87-86-5    | Pentachlorophenol             | U         | 360    | ug/kg | 90.1    | 360     |
| 129-00-0   | Pyrene                        |           | 114    | ug/kg | 10.8    | 36.0    |
| 110-86-1   | Pyridine                      | U         | 360    | ug/kg | 72.1    | 360     |
| 62-53-3    | Aniline                       | U         | 360    | ug/kg | 108     | 360     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 360    | ug/kg | 72.1    | 360     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 360    | ug/kg | 72.1    | 360     |
| 100-51-6   | Benzyl alcohol                | U         | 360    | ug/kg | 108     | 360     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 360    | ug/kg | 72.1    | 360     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 360    | ug/kg | 72.1    | 360     |
| 95-48-7    | o-Cresol                      | U         | 360    | ug/kg | 72.1    | 360     |
| 65794-96-9 | m,p-Cresols                   | U         | 360    | ug/kg | 108     | 360     |
| 67-72-1    | Hexachloroethane              | U         | 360    | ug/kg | 72.1    | 360     |
| 98-95-3    | Nitrobenzene                  | U         | 360    | ug/kg | 72.1    | 360     |
| 78-59-1    | Isophorone                    | U         | 360    | ug/kg | 72.1    | 360     |
| 88-75-5    | 2-Nitrophenol                 | U         | 360    | ug/kg | 72.1    | 360     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 360    | ug/kg | 126     | 360     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 360    | ug/kg | 72.1    | 360     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 360    | ug/kg | 72.1    | 360     |
| 65-85-0    | Benzoic acid                  | U         | 721    | ug/kg | 180     | 721     |
| 91-20-3    | Naphthalene                   | U         | 36.0   | ug/kg | 10.8    | 36.0    |
| 106-47-8   | 4-Chloroaniline               | U         | 360    | ug/kg | 72.1    | 360     |
| 87-68-3    | Hexachlorobutadiene           | U         | 360    | ug/kg | 72.1    | 360     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 36.0   | ug/kg | 7.21    | 36.0    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 360    | ug/kg | 72.1    | 360     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 360    | ug/kg | 72.1    | 360     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 360    | ug/kg | 72.1    | 360     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 36.0   | ug/kg | 11.9    | 36.0    |
| 88-74-4    | 2-Nitroaniline                | U         | 360    | ug/kg | 72.1    | 360     |
|            | <i>o</i> -Nitroaniline        |           |        |       |         |         |
| 99-09-2    | 3-Nitroaniline                | U         | 360    | ug/kg | 72.1    | 360     |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114004

Client ID: RE15-10-8412  
Batch ID: 944874  
Run Date: 01/27/2010 16:18  
Prep Date: 01/25/2010 21:06  
Data File: s3a2718.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 7.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|------------------------------|-----------|--------|-------|---------|---------|
|           | <i>m-Nitroaniline</i>        |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate            | U         | 360    | ug/kg | 72.1    | 360     |
| 606-20-2  | 2,6-Dinitrotoluene           | U         | 360    | ug/kg | 36.0    | 360     |
| 208-96-8  | Accnaphthylene               | U         | 36.0   | ug/kg | 10.8    | 36.0    |
| 51-28-5   | 2,4-Dinitrophenol            | U         | 721    | ug/kg | 137     | 721     |
| 132-64-9  | Dibenzofuran                 | U         | 360    | ug/kg | 72.1    | 360     |
| 84-66-2   | Diethylphthalate             | U         | 360    | ug/kg | 72.1    | 360     |
| 86-73-7   | Fluorene                     | U         | 36.0   | ug/kg | 10.8    | 36.0    |
| 7005-72-3 | 4-Chlorophenylphenylether    | U         | 360    | ug/kg | 72.1    | 360     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol   | U         | 360    | ug/kg | 72.1    | 360     |
| 100-01-6  | 4-Nitroaniline               | U         | 360    | ug/kg | 108     | 360     |
|           | <i>p-Nitroaniline</i>        |           |        |       |         |         |
| 122-39-4  | Diphenylamine                | U         | 360    | ug/kg | 72.1    | 360     |
| 122-66-7  | Azobenzene                   | U         | 360    | ug/kg | 72.1    | 360     |
|           | <i>1,2-Diphenylhydrazine</i> |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether     | U         | 360    | ug/kg | 72.1    | 360     |
| 118-74-1  | Hexachlorobenzene            | U         | 360    | ug/kg | 72.1    | 360     |
| 85-01-8   | Phenanthrene                 |           | 92.3   | ug/kg | 10.8    | 36.0    |
| 120-12-7  | Anthracene                   | U         | 36.0   | ug/kg | 7.21    | 36.0    |
| 84-74-2   | Di-n-butylphthalate          |           | 3640   | ug/kg | 72.1    | 360     |
| 206-44-0  | Fluoranthene                 |           | 65.5   | ug/kg | 10.8    | 36.0    |
| 85-68-7   | Butylbenzylphthalate         | U         | 360    | ug/kg | 72.1    | 360     |
| 56-55-3   | Benzo(a)anthracene           | J         | 25.2   | ug/kg | 10.8    | 36.0    |
| 91-94-1   | 3,3'-Dichlorobenzidine       | U         | 360    | ug/kg | 108     | 360     |
| 218-01-9  | Chrysene                     |           | 40.2   | ug/kg | 10.8    | 36.0    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate   | U         | 360    | ug/kg | 72.1    | 360     |
| 117-84-0  | Di-n-octylphthalate          | U         | 360    | ug/kg | 72.1    | 360     |
| 205-99-2  | Benzo(b)fluoranthene         |           | 36.2   | ug/kg | 10.8    | 36.0    |
| 207-08-9  | Benzo(k)fluoranthene         | J         | 13.2   | ug/kg | 10.8    | 36.0    |
| 50-32-8   | Benzo(a)pyrene               | J         | 31.3   | ug/kg | 10.8    | 36.0    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene       | U         | 36.0   | ug/kg | 10.8    | 36.0    |
| 53-70-3   | Dibenzo(a,h)anthracene       | U         | 36.0   | ug/kg | 10.8    | 36.0    |
| 191-24-2  | Benzo(ghi)perylene           | U         | 36.0   | ug/kg | 10.8    | 36.0    |
| 120-82-1  | 1,2,4-Trichlorobenzene       | U         | 360    | ug/kg | 72.1    | 360     |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.1  | 1440      | ug/kg |     | J    |
|         | Unknown                               | 2.28 | 178       | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

Page 3 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114004

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 7.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8412  
Batch ID: 944874  
Run Date: 01/27/2010 16:18  
Prep Date: 01/25/2010 21:06  
Data File: s3a2718.d

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |                                       |       |           |       |     |      |
|---|---------------------------------------|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|   | Unknown Aldol Condensate              | 3.4   | 186       | ug/kg |     | JA   |
|   | Unknown                               | 12.01 | 1060      | ug/kg |     | J    |
|   | Unknown                               | 12.05 | 1810      | ug/kg |     | J    |
|   | Unknown                               | 15.18 | 3560      | ug/kg |     | J    |
|   | Unknown                               | 15.51 | 1300      | ug/kg |     | J    |
|   | Unknown                               | 16.03 | 5480      | ug/kg |     | J    |
|   | Unknown                               | 16.17 | 498       | ug/kg |     | J    |
|   | Unknown                               | 16.55 | 174       | ug/kg |     | J    |
|   | Unknown                               | 16.79 | 249       | ug/kg |     | J    |
|   | Unknown                               | 16.81 | 247       | ug/kg |     | J    |
|   | Unknown                               | 17.52 | 244       | ug/kg |     | J    |
|   | Unknown                               | 17.66 | 263       | ug/kg |     | J    |
|   | Unknown                               | 18.03 | 370       | ug/kg |     | J    |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1324  
Lab Sample ID: 245114006

Client ID: RE15-10-8413  
Batch ID: 944874  
Run Date: 01/29/2010 00:54  
Prep Date: 01/25/2010 21:06  
Data File: s3a2835.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.04 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 372    | ug/kg | 74.5    | 372     |
| 108-95-2   | Phenol                        | U         | 372    | ug/kg | 74.5    | 372     |
| 95-57-8    | 2-Chlorophenol                | U         | 372    | ug/kg | 74.5    | 372     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 372    | ug/kg | 74.5    | 372     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 372    | ug/kg | 74.5    | 372     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 372    | ug/kg | 74.5    | 372     |
| 83-32-9    | Acenaphthene                  | U         | 37.2   | ug/kg | 12.3    | 37.2    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 372    | ug/kg | 37.2    | 372     |
| 100-02-7   | 4-Nitrophenol                 | U         | 372    | ug/kg | 123     | 372     |
| 87-86-5    | Pentachlorophenol             | U         | 372    | ug/kg | 93.1    | 372     |
| 129-00-0   | Pyrene                        | J         | 22.2   | ug/kg | 11.2    | 37.2    |
| 110-86-1   | Pyridine                      | U         | 372    | ug/kg | 74.5    | 372     |
| 62-53-3    | Aniline                       | U         | 372    | ug/kg | 112     | 372     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 372    | ug/kg | 74.5    | 372     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 372    | ug/kg | 74.5    | 372     |
| 100-51-6   | Benzyl alcohol                | U         | 372    | ug/kg | 112     | 372     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 372    | ug/kg | 74.5    | 372     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 372    | ug/kg | 74.5    | 372     |
| 95-48-7    | o-Cresol                      | U         | 372    | ug/kg | 74.5    | 372     |
| 65794-96-9 | m,p-Cresols                   | U         | 372    | ug/kg | 112     | 372     |
| 67-72-1    | Hexachloroethane              | U         | 372    | ug/kg | 74.5    | 372     |
| 98-95-3    | Nitrobenzene                  | U         | 372    | ug/kg | 74.5    | 372     |
| 78-59-1    | Isophorone                    | U         | 372    | ug/kg | 74.5    | 372     |
| 88-75-5    | 2-Nitrophenol                 | U         | 372    | ug/kg | 74.5    | 372     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 372    | ug/kg | 130     | 372     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 372    | ug/kg | 74.5    | 372     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 372    | ug/kg | 74.5    | 372     |
| 65-85-0    | Benzoic acid                  | U         | 745    | ug/kg | 186     | 745     |
| 91-20-3    | Naphthalene                   | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 106-47-8   | 4-Chloroaniline               | U         | 372    | ug/kg | 74.5    | 372     |
| 87-68-3    | Hexachlorobutadiene           | U         | 372    | ug/kg | 74.5    | 372     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 37.2   | ug/kg | 74.5    | 37.2    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 372    | ug/kg | 74.5    | 372     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 372    | ug/kg | 74.5    | 372     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 372    | ug/kg | 74.5    | 372     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 37.2   | ug/kg | 12.3    | 37.2    |
| 88-74-4    | 2-Nitroaniline                | U         | 372    | ug/kg | 74.5    | 372     |
| 99-09-2    | <i>o</i> -Nitroaniline        | U         | 372    | ug/kg | 74.5    | 372     |
|            | 3-Nitroaniline                |           |        |       |         |         |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1324  
Lab Sample ID: 245114006

Client ID: RE15-10-8413  
Batch ID: 944874  
Run Date: 01/29/2010 00:54  
Prep Date: 01/25/2010 21:06  
Data File: s3a2835.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.04 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|----------------------------|-----------|--------|-------|---------|---------|
|           | <i>m</i> -Nitroaniline     |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate          | U         | 372    | ug/kg | 74.5    | 372     |
| 606-20-2  | 2,6-Dinitrotoluene         | U         | 372    | ug/kg | 37.2    | 372     |
| 208-96-8  | Acenaphthylene             | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 51-28-5   | 2,4-Dinitrophenol          | U         | 745    | ug/kg | 142     | 745     |
| 132-64-9  | Dibenzofuran               | U         | 372    | ug/kg | 74.5    | 372     |
| 84-66-2   | Diethylphthalate           | U         | 372    | ug/kg | 74.5    | 372     |
| 86-73-7   | Fluorene                   | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 7005-72-3 | 4-Chlorophenylphenylether  | U         | 372    | ug/kg | 74.5    | 372     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol | U         | 372    | ug/kg | 74.5    | 372     |
| 100-01-6  | 4-Nitroaniline             | U         | 372    | ug/kg | 112     | 372     |
|           | <i>p</i> -Nitroaniline     |           |        |       |         |         |
| 122-39-4  | Diphenylamine              | U         | 372    | ug/kg | 74.5    | 372     |
| 122-66-7  | Azobenzene                 | U         | 372    | ug/kg | 74.5    | 372     |
|           | 1,2-Diphenylhydrazine      |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether   | U         | 372    | ug/kg | 74.5    | 372     |
| 118-74-1  | Hexachlorobenzene          | U         | 372    | ug/kg | 74.5    | 372     |
| 85-01-8   | Phenanthrene               | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 120-12-7  | Anthracene                 | U         | 37.2   | ug/kg | 7.45    | 37.2    |
| 84-74-2   | Di-n-butylphthalate        | J         | 353    | ug/kg | 74.5    | 372     |
| 206-44-0  | Fluoranthene               | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 85-68-7   | Butylbenzylphthalate       | U         | 372    | ug/kg | 74.5    | 372     |
| 56-55-3   | Benzo(a)anthracene         | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 91-94-1   | 3,3'-Dichlorobenzidine     | U         | 372    | ug/kg | 112     | 372     |
| 218-01-9  | Chrysene                   | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | U         | 372    | ug/kg | 74.5    | 372     |
| 117-84-0  | Di-n-octylphthalate        | U         | 372    | ug/kg | 74.5    | 372     |
| 205-99-2  | Benzo(b)fluoranthene       | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 207-08-9  | Benzo(k)fluoranthene       | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 50-32-8   | Benzo(a)pyrene             | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene     | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 53-70-3   | Dibenzo(a,h)anthracene     | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 191-24-2  | Benzo(ghi)perylene         | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 120-82-1  | 1,2,4-Trichlorobenzene     | U         | 372    | ug/kg | 74.5    | 372     |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.07 | 5380      | ug/kg |     | J    |
|         | Unknown Aldol Condensate              | 3.32 | 198       | ug/kg |     | JA   |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114006    | Date Received: 01/20/2010 08:45  | %Moisture: 10.6      |
| Client ID: RE15-10-8413     | Client: LANL010                  | Project: LANL01004   |
| Batch ID: 944874            | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Run Date: 01/29/2010 00:54  | Inst: MSD3.I                     | Dilution: 1          |
| Prep Date: 01/25/2010 21:06 | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Data File: s3a2835.d        | Aliquot: 30.04 g                 | Final Volume: 1 mL   |
|                             | Column: J&W DB-5MS               | Level: LOW           |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |  |       | Estimated |       |     |      |
|---|--|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC)    | RT    |           | Units | Fit | Qual |
| 7785-70-8                               | 1R-.alpha.-Pinene                        | 4.1   | 1520      | ug/kg | 97  | NJ   |
| 498-15-7                                | Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy | 4.67  | 901       | ug/kg | 97  | NJ   |
| 138-86-3                                | Limonene                                 | 4.81  | 194       | ug/kg | 95  | NJ   |
|   | Unknown                                  | 10.87 | 234       | ug/kg |     | J    |
|   | Unknown                                  | 11.42 | 307       | ug/kg |     | J    |
|   | Unknown                                  | 11.65 | 683       | ug/kg |     | J    |
| 1235-74-1                               | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.76 | 560       | ug/kg | 99  | NJ   |
|   | Unknown                                  | 11.86 | 158       | ug/kg |     | J    |
|   | Unknown                                  | 11.91 | 163       | ug/kg |     | J    |
| 127-25-3                                | Methyl abietate                          | 11.99 | 753       | ug/kg | 98  | NJ   |
|   | Unknown                                  | 12.1  | 287       | ug/kg |     | J    |
|   | Unknown                                  | 12.13 | 245       | ug/kg |     | J    |
|   | Unknown                                  | 12.17 | 243       | ug/kg |     | J    |
|   | Unknown                                  | 12.22 | 430       | ug/kg |     | J    |
|   | Unknown                                  | 12.33 | 403       | ug/kg |     | J    |
|   | Unknown                                  | 12.38 | 170       | ug/kg |     | J    |
|   | Unknown                                  | 12.41 | 249       | ug/kg |     | J    |
|   | Unknown                                  | 12.59 | 150       | ug/kg |     | J    |
| 309735-29-3                             | 1,2-Benzisothiazole, 3-(hexahydro-1H-az  | 12.69 | 341       | ug/kg | 90  | NJ   |
|   | Unknown                                  | 12.84 | 221       | ug/kg |     | J    |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1324  
Lab Sample ID: 245114011

Client ID: RE15-10-8416  
Batch ID: 944874  
Run Date: 01/29/2010 17:36  
Prep Date: 01/25/2010 21:06  
Data File: s3a2915.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.17 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 367    | ug/kg | 73.3    | 367     |
| 108-95-2   | Phenol                        | U         | 367    | ug/kg | 73.3    | 367     |
| 95-57-8    | 2-Chlorophenol                | U         | 367    | ug/kg | 73.3    | 367     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 367    | ug/kg | 73.3    | 367     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 367    | ug/kg | 73.3    | 367     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 367    | ug/kg | 73.3    | 367     |
| 83-32-9    | Acenaphthene                  | U         | 36.7   | ug/kg | 12.1    | 36.7    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 367    | ug/kg | 36.7    | 367     |
| 100-02-7   | 4-Nitrophenol                 | U         | 367    | ug/kg | 121     | 367     |
| 87-86-5    | Pentachlorophenol             | U         | 367    | ug/kg | 91.6    | 367     |
| 129-00-0   | Pyrene                        | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 110-86-1   | Pyridine                      | U         | 367    | ug/kg | 73.3    | 367     |
| 62-53-3    | Aniline                       | U         | 367    | ug/kg | 110     | 367     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 367    | ug/kg | 73.3    | 367     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 367    | ug/kg | 73.3    | 367     |
| 100-51-6   | Benzyl alcohol                | U         | 367    | ug/kg | 110     | 367     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 367    | ug/kg | 73.3    | 367     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 367    | ug/kg | 73.3    | 367     |
| 95-48-7    | o-Cresol                      | U         | 367    | ug/kg | 73.3    | 367     |
| 65794-96-9 | m,p-Cresols                   | U         | 367    | ug/kg | 110     | 367     |
| 67-72-1    | Hexachloroethane              | U         | 367    | ug/kg | 73.3    | 367     |
| 98-95-3    | Nitrobenzene                  | U         | 367    | ug/kg | 73.3    | 367     |
| 78-59-1    | Isophorone                    | U         | 367    | ug/kg | 73.3    | 367     |
| 88-75-5    | 2-Nitrophenol                 | U         | 367    | ug/kg | 73.3    | 367     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 367    | ug/kg | 128     | 367     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 367    | ug/kg | 73.3    | 367     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 367    | ug/kg | 73.3    | 367     |
| 65-85-0    | Benzoic acid                  | U         | 733    | ug/kg | 183     | 733     |
| 91-20-3    | Naphthalene                   | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 106-47-8   | 4-Chloroaniline               | U         | 367    | ug/kg | 73.3    | 367     |
| 87-68-3    | Hexachlorobutadiene           | U         | 367    | ug/kg | 73.3    | 367     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 36.7   | ug/kg | 7.33    | 36.7    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 367    | ug/kg | 73.3    | 367     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 367    | ug/kg | 73.3    | 367     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 367    | ug/kg | 73.3    | 367     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 36.7   | ug/kg | 12.1    | 36.7    |
| 88-74-4    | 2-Nitroaniline                | U         | 367    | ug/kg | 73.3    | 367     |
| 99-09-2    | o-Nitroaniline                | U         | 367    | ug/kg | 73.3    | 367     |
|            | 3-Nitroaniline                |           |        |       |         |         |



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114011

Client ID: RE15-10-8416  
Batch ID: 944874  
Run Date: 01/29/2010 17:36  
Prep Date: 01/25/2010 21:06  
Data File: s3a2915.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.17 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|----------------------------|-----------|--------|-------|---------|---------|
| 131-11-3  | <i>m</i> -Nitroaniline     |           |        |       |         |         |
|           | Dimethylphthalate          | U         | 367    | ug/kg | 73.3    | 367     |
| 606-20-2  | 2,6-Dinitrotoluene         | U         | 367    | ug/kg | 36.7    | 367     |
| 208-96-8  | Acenaphthylene             | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 51-28-5   | 2,4-Dinitrophenol          | U         | 733    | ug/kg | 139     | 733     |
| 132-64-9  | Dibenzofuran               | U         | 367    | ug/kg | 73.3    | 367     |
| 84-66-2   | Diethylphthalate           | U         | 367    | ug/kg | 73.3    | 367     |
| 86-73-7   | Fluorene                   | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 7005-72-3 | 4-Chlorophenylphenylether  | U         | 367    | ug/kg | 73.3    | 367     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol | U         | 367    | ug/kg | 73.3    | 367     |
| 100-01-6  | 4-Nitroaniline             | U         | 367    | ug/kg | 110     | 367     |
|           | <i>p</i> -Nitroaniline     |           |        |       |         |         |
| 122-39-4  | Diphenylamine              | U         | 367    | ug/kg | 73.3    | 367     |
| 122-66-7  | Azobenzene                 | U         | 367    | ug/kg | 73.3    | 367     |
|           | 1,2-Diphenylhydrazine      |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether   | U         | 367    | ug/kg | 73.3    | 367     |
| 118-74-1  | Hexachlorobenzene          | U         | 367    | ug/kg | 73.3    | 367     |
| 85-01-8   | Phenanthrene               | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 120-12-7  | Anthracene                 | U         | 36.7   | ug/kg | 7.33    | 36.7    |
| 84-74-2   | Di-n-butylphthalate        | U         | 367    | ug/kg | 73.3    | 367     |
| 206-44-0  | Fluoranthene               | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 85-68-7   | Butylbenzylphthalate       | U         | 367    | ug/kg | 73.3    | 367     |
| 56-55-3   | Benzo(a)anthracene         | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 91-94-1   | 3,3'-Dichlorobenzidine     | U         | 367    | ug/kg | 110     | 367     |
| 218-01-9  | Chrysene                   | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | U         | 367    | ug/kg | 73.3    | 367     |
| 117-84-0  | Di-n-octylphthalate        | U         | 367    | ug/kg | 73.3    | 367     |
| 205-99-2  | Benzo(b)fluoranthene       | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 207-08-9  | Benzo(k)fluoranthene       | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 50-32-8   | Benzo(a)pyrene             | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene     | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 53-70-3   | Dibenzo(a,h)anthracene     | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 191-24-2  | Benzo(ghi)perylene         | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 120-82-1  | 1,2,4-Trichlorobenzene     | U         | 367    | ug/kg | 73.3    | 367     |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.04 | 3140      | ug/kg |     | J    |
|         | Unknown                               | 2.2  | 266       | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114011

Client ID: RE15-10-8416  
Batch ID: 944874  
Run Date: 01/29/2010 17:36  
Prep Date: 01/25/2010 21:06  
Data File: s3a2915.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.17 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |  |       | Estimated |       |     |      |
|---|--|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC)    | RT    |           | Units | Fit | Qual |
|   | Unknown Aldol Condensate                 | 3.26  | 182       | ug/kg |     | JA   |
| 498-15-7                                | Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy | 4.59  | 152       | ug/kg | 97  | NJ   |
|   | Unknown                                  | 11.29 | 152       | ug/kg |     | J    |
|   | Unknown                                  | 11.33 | 241       | ug/kg |     | J    |
|   | Unknown                                  | 11.55 | 185       | ug/kg |     | J    |
| 1235-74-1                               | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.67 | 222       | ug/kg | 99  | NJ   |
|   | Unknown                                  | 11.89 | 163       | ug/kg |     | J    |
|   | Unknown                                  | 13.71 | 154       | ug/kg |     | J    |
|   | Unknown                                  | 14.15 | 191       | ug/kg |     | J    |
|   | Unknown                                  | 15.22 | 3090      | ug/kg |     | J    |
|   | Unknown                                  | 15.52 | 152       | ug/kg |     | J    |
|   | Unknown                                  | 16.03 | 3180      | ug/kg |     | J    |
|   | Unknown                                  | 16.17 | 235       | ug/kg |     | J    |
|   | Unknown                                  | 16.49 | 178       | ug/kg |     | J    |
| 83-46-5                                 | .beta.-Sitosterol                        | 17.27 | 733       | ug/kg | 95  | NJ   |
|   | Unknown                                  | 17.36 | 275       | ug/kg |     | J    |
|   | Unknown                                  | 17.37 | 390       | ug/kg |     | J    |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

Page 1 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114009

Client ID: RE15-10-8417  
Batch ID: 944874  
Run Date: 01/29/2010 01:44  
Prep Date: 01/25/2010 21:06  
Data File: s3a2837.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 350    | ug/kg | 70.1    | 350     |
| 108-95-2   | Phenol                        | U         | 350    | ug/kg | 70.1    | 350     |
| 95-57-8    | 2-Chlorophenol                | U         | 350    | ug/kg | 70.1    | 350     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 350    | ug/kg | 70.1    | 350     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 350    | ug/kg | 70.1    | 350     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 350    | ug/kg | 70.1    | 350     |
| 83-32-9    | Acenaphthene                  | U         | 35.0   | ug/kg | 11.6    | 35.0    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 350    | ug/kg | 35.0    | 350     |
| 100-02-7   | 4-Nitrophenol                 | U         | 350    | ug/kg | 116     | 350     |
| 87-86-5    | Pentachlorophenol             | U         | 350    | ug/kg | 87.6    | 350     |
| 129-00-0   | Pyrene                        | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 110-86-1   | Pyridine                      | U         | 350    | ug/kg | 70.1    | 350     |
| 62-53-3    | Aniline                       | U         | 350    | ug/kg | 105     | 350     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 350    | ug/kg | 70.1    | 350     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 350    | ug/kg | 70.1    | 350     |
| 100-51-6   | Benzyl alcohol                | U         | 350    | ug/kg | 105     | 350     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 350    | ug/kg | 70.1    | 350     |
| 108-60-1   | bis(2-Chloroisopropyl) ether  | U         | 350    | ug/kg | 70.1    | 350     |
| 95-48-7    | o-Cresol                      | U         | 350    | ug/kg | 70.1    | 350     |
| 65794-96-9 | m,p-Cresols                   | U         | 350    | ug/kg | 105     | 350     |
| 67-72-1    | Hexachloroethane              | U         | 350    | ug/kg | 70.1    | 350     |
| 98-95-3    | Nitrobenzene                  | U         | 350    | ug/kg | 70.1    | 350     |
| 78-59-1    | Isophorone                    | U         | 350    | ug/kg | 70.1    | 350     |
| 88-75-5    | 2-Nitrophenol                 | U         | 350    | ug/kg | 70.1    | 350     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 350    | ug/kg | 123     | 350     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 350    | ug/kg | 70.1    | 350     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 350    | ug/kg | 70.1    | 350     |
| 65-85-0    | Benzoic acid                  | U         | 701    | ug/kg | 175     | 701     |
| 91-20-3    | Naphthalene                   | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 106-47-8   | 4-Chloroaniline               | U         | 350    | ug/kg | 70.1    | 350     |
| 87-68-3    | Hexachlorobutadiene           | U         | 350    | ug/kg | 70.1    | 350     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 35.0   | ug/kg | 7.01    | 35.0    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 350    | ug/kg | 70.1    | 350     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 350    | ug/kg | 70.1    | 350     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 350    | ug/kg | 70.1    | 350     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 35.0   | ug/kg | 11.6    | 35.0    |
| 88-74-4    | 2-Nitroaniline                | U         | 350    | ug/kg | 70.1    | 350     |
| 99-09-2    | o-Nitroaniline                | U         | 350    | ug/kg | 70.1    | 350     |
|            | 3-Nitroaniline                |           |        |       |         |         |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114009

Client ID: RE15-10-8417  
Batch ID: 944874  
Run Date: 01/29/2010 01:44  
Prep Date: 01/25/2010 21:06  
Data File: s3a2837.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|-------------------------------|-----------|--------|-------|---------|---------|
|           | <i>m</i> -Nitroaniline        |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate             | U         | 350    | ug/kg | 70.1    | 350     |
| 606-20-2  | 2,6-Dinitrotoluene            | U         | 350    | ug/kg | 35.0    | 350     |
| 208-96-8  | Acenaphthylene                | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 51-28-5   | 2,4-Dinitrophenol             | U         | 701    | ug/kg | 133     | 701     |
| 132-64-9  | Dibenzofuran                  | U         | 350    | ug/kg | 70.1    | 350     |
| 84-66-2   | Diethylphthalate              | U         | 350    | ug/kg | 70.1    | 350     |
| 86-73-7   | Fluorene                      | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 7005-72-3 | 4-Chlorophenylphenylether     | U         | 350    | ug/kg | 70.1    | 350     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol    | U         | 350    | ug/kg | 70.1    | 350     |
| 100-01-6  | 4-Nitroaniline                | U         | 350    | ug/kg | 105     | 350     |
|           | <i>p</i> -Nitroaniline        |           |        |       |         |         |
| 122-39-4  | Diphenylamine                 | U         | 350    | ug/kg | 70.1    | 350     |
| 122-66-7  | Azobenzene                    | U         | 350    | ug/kg | 70.1    | 350     |
|           | <i>1,2</i> -Diphenylhydrazine |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether      | U         | 350    | ug/kg | 70.1    | 350     |
| 118-74-1  | Hexachlorobenzene             | U         | 350    | ug/kg | 70.1    | 350     |
| 85-01-8   | Phenanthrene                  | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 120-12-7  | Anthracene                    | U         | 35.0   | ug/kg | 7.01    | 35.0    |
| 84-74-2   | Di-n-butylphthalate           | U         | 350    | ug/kg | 70.1    | 350     |
| 206-44-0  | Fluoranthene                  | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 85-68-7   | Butylbenzylphthalate          | U         | 350    | ug/kg | 70.1    | 350     |
| 56-55-3   | Benzo(a)anthracene            | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 91-94-1   | 3,3'-Dichlorobenzidine        | U         | 350    | ug/kg | 105     | 350     |
| 218-01-9  | Chrysene                      | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate    | U         | 350    | ug/kg | 70.1    | 350     |
| 117-84-0  | Di-n-octylphthalate           | U         | 350    | ug/kg | 70.1    | 350     |
| 205-99-2  | Benzo(b)fluoranthene          | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 207-08-9  | Benzo(k)fluoranthene          | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 50-32-8   | Benzo(a)pyrene                | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene        | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 53-70-3   | Dibenzo(a,h)anthracene        | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 191-24-2  | Benzo(ghi)perylene            | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 120-82-1  | 1,2,4-Trichlorobenzene        | U         | 350    | ug/kg | 70.1    | 350     |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.08 | 4030      | ug/kg |     | J    |
|         | Unknown Aldol Condensate              | 3.33 | 200       | ug/kg |     | JA   |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

Page 3 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114009

Client ID: RE15-10-8417  
Batch ID: 944874  
Run Date: 01/29/2010 01:44  
Prep Date: 01/25/2010 21:06  
Data File: s3a2837.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.  | Parmname                                 | Qualifier | Result    | Units | MDL/LOD | PQL/LOQ |
|--|--|-----------|-----------|-------|---------|---------|
| <b>Tentatively Identified Compound Summary</b> |  |           |           |       |         |         |
| CAS No.  | Tentatively Identified Compound (TIC)    | RT        | Estimated | Units | Fit     | Qual    |
| 7785-70-8                                      | 1R-.alpha.-Pinene                        | 4.1       | 683       | ug/kg | 98      | NJ      |
| 13466-78-9                                     | 3-Carene                                 | 4.66      | 1500      | ug/kg | 97      | NJ      |
|  | Unknown                                  | 11.42     | 279       | ug/kg |         | J       |
|  | Unknown                                  | 11.65     | 180       | ug/kg |         | J       |
| 1235-74-1                                      | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.76     | 208       | ug/kg | 98      | NJ      |
|  | Unknown                                  | 11.82     | 160       | ug/kg |         | J       |
|  | Unknown                                  | 11.98     | 195       | ug/kg |         | J       |
|  | Unknown                                  | 12.96     | 438       | ug/kg |         | J       |
|  | Unknown                                  | 15.65     | 1200      | ug/kg |         | J       |
|  | Unknown                                  | 15.67     | 1460      | ug/kg |         | J       |
|  | Unknown                                  | 16.44     | 2910      | ug/kg |         | J       |
|  | Unknown                                  | 16.56     | 247       | ug/kg |         | J       |
|  | Unknown                                  | 17.65     | 199       | ug/kg |         | J       |
|  | Unknown                                  | 17.78     | 621       | ug/kg |         | J       |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114012

Client ID: RE15-10-8418  
Batch ID: 944874  
Run Date: 01/29/2010 02:59  
Prep Date: 01/25/2010 21:06  
Data File: s3a2840.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.06 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 11.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 375    | ug/kg | 75.0    | 375     |
| 108-95-2   | Phenol                        | U         | 375    | ug/kg | 75.0    | 375     |
| 95-57-8    | 2-Chlorophenol                | U         | 375    | ug/kg | 75.0    | 375     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 375    | ug/kg | 75.0    | 375     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 375    | ug/kg | 75.0    | 375     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 375    | ug/kg | 75.0    | 375     |
| 83-32-9    | Acenaphthene                  | U         | 37.5   | ug/kg | 12.4    | 37.5    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 375    | ug/kg | 37.5    | 375     |
| 100-02-7   | 4-Nitrophenol                 | U         | 375    | ug/kg | 124     | 375     |
| 87-86-5    | Pentachlorophenol             | U         | 375    | ug/kg | 93.7    | 375     |
| 129-00-0   | Pyrene                        | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 110-86-1   | Pyridine                      | U         | 375    | ug/kg | 75.0    | 375     |
| 62-53-3    | Aniline                       | U         | 375    | ug/kg | 112     | 375     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 375    | ug/kg | 75.0    | 375     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 375    | ug/kg | 75.0    | 375     |
| 100-51-6   | Benzyl alcohol                | U         | 375    | ug/kg | 112     | 375     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 375    | ug/kg | 75.0    | 375     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 375    | ug/kg | 75.0    | 375     |
| 95-48-7    | o-Cresol                      | U         | 375    | ug/kg | 75.0    | 375     |
| 65794-96-9 | m,p-Cresols                   | U         | 375    | ug/kg | 112     | 375     |
| 67-72-1    | Hexachloroethane              | U         | 375    | ug/kg | 75.0    | 375     |
| 98-95-3    | Nitrobenzene                  | U         | 375    | ug/kg | 75.0    | 375     |
| 78-59-1    | Isophorone                    | U         | 375    | ug/kg | 75.0    | 375     |
| 88-75-5    | 2-Nitrophenol                 | U         | 375    | ug/kg | 75.0    | 375     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 375    | ug/kg | 131     | 375     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 375    | ug/kg | 75.0    | 375     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 375    | ug/kg | 75.0    | 375     |
| 65-85-0    | Benzoic acid                  | U         | 750    | ug/kg | 187     | 750     |
| 91-20-3    | Naphthalene                   | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 106-47-8   | 4-Chloroaniline               | U         | 375    | ug/kg | 75.0    | 375     |
| 87-68-3    | Hexachlorobutadiene           | U         | 375    | ug/kg | 75.0    | 375     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 37.5   | ug/kg | 7.50    | 37.5    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 375    | ug/kg | 75.0    | 375     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 375    | ug/kg | 75.0    | 375     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 375    | ug/kg | 75.0    | 375     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 37.5   | ug/kg | 12.4    | 37.5    |
| 88-74-4    | 2-Nitroaniline                | U         | 375    | ug/kg | 75.0    | 375     |
| 99-09-2    | <i>o</i> -Nitroaniline        | U         | 375    | ug/kg | 75.0    | 375     |
|            | 3-Nitroaniline                |           |        |       |         |         |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114012

Client ID: RE15-10-8418  
Batch ID: 944874  
Run Date: 01/29/2010 02:59  
Prep Date: 01/25/2010 21:06  
Data File: s3a2840.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.06 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 11.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.                      | Parname                    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------------------------|----------------------------|-----------|--------|-------|---------|---------|
| <i>m-Nitroaniline</i>        |                            |           |        |       |         |         |
| 131-11-3                     | Dimethylphthalate          | U         | 375    | ug/kg | 75.0    | 375     |
| 606-20-2                     | 2,6-Dinitrotoluene         | U         | 375    | ug/kg | 37.5    | 375     |
| 208-96-8                     | Acenaphthylene             | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 51-28-5                      | 2,4-Dinitrophenol          | U         | 750    | ug/kg | 142     | 750     |
| 132-64-9                     | Dibenzofuran               | U         | 375    | ug/kg | 75.0    | 375     |
| 84-66-2                      | Diethylphthalate           | U         | 375    | ug/kg | 75.0    | 375     |
| 86-73-7                      | Fluorene                   | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 7005-72-3                    | 4-Chlorophenylphenylether  | U         | 375    | ug/kg | 75.0    | 375     |
| 534-52-1                     | 2-Methyl-4,6-dinitrophenol | U         | 375    | ug/kg | 75.0    | 375     |
| 100-01-6                     | 4-Nitroaniline             | U         | 375    | ug/kg | 112     | 375     |
| <i>p-Nitroaniline</i>        |                            |           |        |       |         |         |
| 122-39-4                     | Diphenylamine              | U         | 375    | ug/kg | 75.0    | 375     |
| 122-66-7                     | Azobenzene                 | U         | 375    | ug/kg | 75.0    | 375     |
| <i>1,2-Diphenylhydrazine</i> |                            |           |        |       |         |         |
| 101-55-3                     | 4-Bromophenylphenylether   | U         | 375    | ug/kg | 75.0    | 375     |
| 118-74-1                     | Hexachlorobenzene          | U         | 375    | ug/kg | 75.0    | 375     |
| 85-01-8                      | Phenanthrene               | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 120-12-7                     | Anthracene                 | U         | 37.5   | ug/kg | 7.50    | 37.5    |
| 84-74-2                      | Di-n-butylphthalate        | U         | 375    | ug/kg | 75.0    | 375     |
| 206-44-0                     | Fluoranthene               | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 85-68-7                      | Butylbenzylphthalate       | U         | 375    | ug/kg | 75.0    | 375     |
| 56-55-3                      | Benzo(a)anthracene         | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 91-94-1                      | 3,3'-Dichlorobenzidine     | U         | 375    | ug/kg | 112     | 375     |
| 218-01-9                     | Chrysene                   | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 117-81-7                     | bis(2-Ethylhexyl)phthalate | U         | 375    | ug/kg | 75.0    | 375     |
| 117-84-0                     | Di-n-octylphthalate        | U         | 375    | ug/kg | 75.0    | 375     |
| 205-99-2                     | Benzo(b)fluoranthene       | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 207-08-9                     | Benzo(k)fluoranthene       | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 50-32-8                      | Benzo(a)pyrene             | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 193-39-5                     | Indeno(1,2,3-cd)pyrene     | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 53-70-3                      | Dibenzo(a,h)anthracene     | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 191-24-2                     | Benzo(ghi)perylene         | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 120-82-1                     | 1,2,4-Trichlorobenzene     | U         | 375    | ug/kg | 75.0    | 375     |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.08 | 1390      | ug/kg |     | J    |
|         | Unknown                               | 2.25 | 204       | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114012    | Date Received: 01/20/2010 08:45  | %Moisture: 11.3      |
|                             | Client: LANL010                  | Project: LANL01004   |
| Client ID: RE15-10-8418     | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Batch ID: 944874            | Inst: MSD3.I                     | Dilution: 1          |
| Run Date: 01/29/2010 02:59  | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Prep Date: 01/25/2010 21:06 | Aliquot: 30.06 g                 | Final Volume: 1 mL   |
| Data File: s3a2840.d        | Column: J&W DB-5MS               | Level: LOW           |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |                                       |       |           |       |     |      |
|---|---------------------------------------|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|   | Unknown Aldol Condensate              | 3.33  | 232       | ug/kg |     | JA   |
|   | Unknown                               | 15.65 | 1050      | ug/kg |     | J    |
|   | Unknown                               | 16.43 | 1640      | ug/kg |     | J    |
|   | Unknown                               | 17.59 | 235       | ug/kg |     | J    |
|   | Unknown                               | 17.6  | 310       | ug/kg |     | J    |



Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1324  
Lab Sample ID: 245114015

Client ID: RE15-10-8420  
Batch ID: 944874  
Run Date: 01/29/2010 04:14  
Prep Date: 01/25/2010 21:06  
Data File: s3a2843.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.18 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 30.1  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 474    | ug/kg | 94.9    | 474     |
| 108-95-2   | Phenol                        | U         | 474    | ug/kg | 94.9    | 474     |
| 95-57-8    | 2-Chlorophenol                | U         | 474    | ug/kg | 94.9    | 474     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 474    | ug/kg | 94.9    | 474     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 474    | ug/kg | 94.9    | 474     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 474    | ug/kg | 94.9    | 474     |
| 83-32-9    | Acenaphthene                  | U         | 47.4   | ug/kg | 15.7    | 47.4    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 474    | ug/kg | 47.4    | 474     |
| 100-02-7   | 4-Nitrophenol                 | U         | 474    | ug/kg | 157     | 474     |
| 87-86-5    | Pentachlorophenol             | U         | 474    | ug/kg | 119     | 474     |
| 129-00-0   | Pyrene                        | J         | 16.5   | ug/kg | 14.2    | 47.4    |
| 110-86-1   | Pyridine                      | U         | 474    | ug/kg | 94.9    | 474     |
| 62-53-3    | Aniline                       | U         | 474    | ug/kg | 142     | 474     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 474    | ug/kg | 94.9    | 474     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 474    | ug/kg | 94.9    | 474     |
| 100-51-6   | Benzyl alcohol                | U         | 474    | ug/kg | 142     | 474     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 474    | ug/kg | 94.9    | 474     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 474    | ug/kg | 94.9    | 474     |
| 95-48-7    | o-Cresol                      | U         | 474    | ug/kg | 94.9    | 474     |
| 65794-96-9 | m,p-Cresols                   | U         | 474    | ug/kg | 142     | 474     |
| 67-72-1    | Hexachloroethane              | U         | 474    | ug/kg | 94.9    | 474     |
| 98-95-3    | Nitrobenzene                  | U         | 474    | ug/kg | 94.9    | 474     |
| 78-59-1    | Isophorone                    | U         | 474    | ug/kg | 94.9    | 474     |
| 88-75-5    | 2-Nitrophenol                 | U         | 474    | ug/kg | 94.9    | 474     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 474    | ug/kg | 166     | 474     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 474    | ug/kg | 94.9    | 474     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 474    | ug/kg | 94.9    | 474     |
| 65-85-0    | Benzoic acid                  | U         | 949    | ug/kg | 237     | 949     |
| 91-20-3    | Naphthalene                   | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 106-47-8   | 4-Chloroaniline               | U         | 474    | ug/kg | 94.9    | 474     |
| 87-68-3    | Hexachlorobutadiene           | U         | 474    | ug/kg | 94.9    | 474     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 47.4   | ug/kg | 9.49    | 47.4    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 474    | ug/kg | 94.9    | 474     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 474    | ug/kg | 94.9    | 474     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 474    | ug/kg | 94.9    | 474     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 47.4   | ug/kg | 15.7    | 47.4    |
| 88-74-4    | 2-Nitroaniline                | U         | 474    | ug/kg | 94.9    | 474     |
|            | <i>o</i> -Nitroaniline        |           |        |       |         |         |
| 99-09-2    | 3-Nitroaniline                | U         | 474    | ug/kg | 94.9    | 474     |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1324  
Lab Sample ID: 245114015

Client ID: RE15-10-8420  
Batch ID: 944874  
Run Date: 01/29/2010 04:14  
Prep Date: 01/25/2010 21:06  
Data File: s3a2843.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.18 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 30.1  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname  | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|---|-----------|--------|-------|---------|---------|
| 131-11-3  | <i>m</i> -Nitroaniline<br>Dimethylphthalate               | U         | 474    | ug/kg | 94.9    | 474     |
| 606-20-2  | 2,6-Dinitrotoluene  | U         | 474    | ug/kg | 47.4    | 474     |
| 208-96-8  | Acenaphthylene  | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 51-28-5   | 2,4-Dinitrophenol   | U         | 949    | ug/kg | 180     | 949     |
| 132-64-9  | Dibenzofuran  | U         | 474    | ug/kg | 94.9    | 474     |
| 84-66-2   | Diethylphthalate  | U         | 474    | ug/kg | 94.9    | 474     |
| 86-73-7   | Fluorene  | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 7005-72-3 | 4-Chlorophenylphenylether                                 | U         | 474    | ug/kg | 94.9    | 474     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol                                | U         | 474    | ug/kg | 94.9    | 474     |
| 100-01-6  | 4-Nitroaniline  | U         | 474    | ug/kg | 142     | 474     |
| 122-39-4  | <i>p</i> -Nitroaniline<br>Diphenylamine                   | U         | 474    | ug/kg | 94.9    | 474     |
| 122-66-7  | Azobenzene  | U         | 474    | ug/kg | 94.9    | 474     |
| 101-55-3  | <i>1,2</i> -Diphenylhydrazine<br>4-Bromophenylphenylether | U         | 474    | ug/kg | 94.9    | 474     |
| 118-74-1  | Hexachlorobenzene   | U         | 474    | ug/kg | 94.9    | 474     |
| 85-01-8   | Phenanthrene  | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 120-12-7  | Anthracene  | U         | 47.4   | ug/kg | 9.49    | 47.4    |
| 84-74-2   | Di-n-butylphthalate                                       | U         | 474    | ug/kg | 94.9    | 474     |
| 206-44-0  | Fluoranthene  | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 85-68-7   | Butylbenzylphthalate                                      | U         | 474    | ug/kg | 94.9    | 474     |
| 56-55-3   | Benzo(a)anthracene  | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 91-94-1   | 3,3'-Dichlorobenzidine                                    | U         | 474    | ug/kg | 142     | 474     |
| 218-01-9  | Chrysene  | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate                                | U         | 474    | ug/kg | 94.9    | 474     |
| 117-84-0  | Di-n-octylphthalate                                       | U         | 474    | ug/kg | 94.9    | 474     |
| 205-99-2  | Benzo(b)fluoranthene                                      | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 207-08-9  | Benzo(k)fluoranthene                                      | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 50-32-8   | Benzo(a)pyrene  | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene                                    | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 53-70-3   | Dibenzo(a,h)anthracene                                    | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 191-24-2  | Benzo(ghi)perylene  | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 120-82-1  | 1,2,4-Trichlorobenzene                                    | U         | 474    | ug/kg | 94.9    | 474     |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.07 | 694       | ug/kg |     | J    |
|         | Unknown                               | 2.24 | 343       | ug/kg |     | J    |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1324  
Lab Sample ID: 245114015

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.J  
Analyst: JLD1  
Aliquot: 30.18 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 30.1  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8420  
Batch ID: 944874  
Run Date: 01/29/2010 04:14  
Prep Date: 01/25/2010 21:06  
Data File: s3a2843.d

| CAS No.  | Parmname                                 | Qualifier | Result    | Units | MDL/LOD | PQL/LOQ |
|--|--|-----------|-----------|-------|---------|---------|
| <b>Tentatively Identified Compound Summary</b> |  |           |           |       |         |         |
| CAS No.  | Tentatively Identified Compound (TIC)    | RT        | Estimated | Units | Fit     | Qual    |
|  | Unknown Aldol Condensate                 | 3.33      | 257       | ug/kg |         | JA      |
| 7785-70-8                                      | 1R-.alpha.-Pinene                        | 4.1       | 629       | ug/kg | 98      | NJ      |
| 79-92-5  | Camphene                                 | 4.24      | 280       | ug/kg | 97      | NJ      |
|  | Unknown                                  | 5.69      | 198       | ug/kg |         | J       |
| 5655-61-8                                      | Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimeth | 6.58      | 285       | ug/kg | 98      | NJ      |
| 475-20-7                                       | 1,4-Methanoazulene, decahydro-4,8,8-trim | 7.47      | 193       | ug/kg | 98      | NJ      |
| 87-44-5  | Caryophyllene                            | 7.49      | 275       | ug/kg | 96      | NJ      |
| 23986-74-5                                     | 1,6-Cyclodecadiene, 1-methyl-5-methylene | 7.83      | 346       | ug/kg | 96      | NJ      |
| 483-76-1                                       | Naphthalene, 1,2,3,5,6,8a-hexahydro-4,7- | 7.99      | 341       | ug/kg | 98      | NJ      |
| 1000156-12-8                                   | Alloaromadendrene oxide-(1)              | 11.3      | 292       | ug/kg | 84      | NJ      |
| 24174-25-2                                     | 5.alpha.,14.beta.-Androstane, 16.alpha., | 11.65     | 247       | ug/kg | 93      | NJ      |
| 1235-74-1                                      | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.76     | 597       | ug/kg | 95      | NJ      |
|  | Unknown                                  | 11.79     | 372       | ug/kg |         | J       |
|  | Unknown                                  | 11.98     | 222       | ug/kg |         | J       |
|  | Unknown                                  | 12.32     | 207       | ug/kg |         | J       |
|  | Unknown                                  | 12.64     | 233       | ug/kg |         | J       |
| 559-74-0                                       | Friedelan-3-one                          | 13.01     | 3230      | ug/kg | 91      | NJ      |
| 62016-76-6                                     | Nonadecane, 1-chloro-                    | 13.19     | 227       | ug/kg | 95      | NJ      |
|  | Unknown                                  | 13.23     | 247       | ug/kg |         | J       |
| 309735-29-3                                    | 1,2-Benzisothiazole, 3-(hexahydro-1H-aze | 13.31     | 312       | ug/kg | 91      | NJ      |
| 62600-05-9                                     | Cedran-diol, 8S,14-                      | 13.37     | 248       | ug/kg | 83      | NJ      |
| 504-57-4                                       | 10-Nonadecanone                          | 15.5      | 441       | ug/kg | 81      | NJ      |
|  | Unknown                                  | 15.7      | 3460      | ug/kg |         | J       |
|  | Unknown                                  | 16.44     | 1530      | ug/kg |         | J       |
| 83-47-6  | .gamma.-Sitosterol                       | 17.54     | 2310      | ug/kg | 93      | NJ      |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114014

Client ID: RE15-10-8421  
Batch ID: 944874  
Run Date: 01/29/2010 03:49  
Prep Date: 01/25/2010 21:06  
Data File: s3a2842.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 12.5  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 380    | ug/kg | 76.1    | 380     |
| 108-95-2   | Phenol                        | U         | 380    | ug/kg | 76.1    | 380     |
| 95-57-8    | 2-Chlorophenol                | U         | 380    | ug/kg | 76.1    | 380     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 380    | ug/kg | 76.1    | 380     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 380    | ug/kg | 76.1    | 380     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 380    | ug/kg | 76.1    | 380     |
| 83-32-9    | Acenaphthene                  | U         | 38.0   | ug/kg | 12.6    | 38.0    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 380    | ug/kg | 38.0    | 380     |
| 100-02-7   | 4-Nitrophenol                 | U         | 380    | ug/kg | 126     | 380     |
| 87-86-5    | Pentachlorophenol             | U         | 380    | ug/kg | 95.1    | 380     |
| 129-00-0   | Pyrene                        | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 110-86-1   | Pyridine                      | U         | 380    | ug/kg | 76.1    | 380     |
| 62-53-3    | Aniline                       | U         | 380    | ug/kg | 114     | 380     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 380    | ug/kg | 76.1    | 380     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 380    | ug/kg | 76.1    | 380     |
| 100-51-6   | Benzyl alcohol                | U         | 380    | ug/kg | 114     | 380     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 380    | ug/kg | 76.1    | 380     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 380    | ug/kg | 76.1    | 380     |
| 95-48-7    | o-Cresol                      | U         | 380    | ug/kg | 76.1    | 380     |
| 65794-96-9 | m,p-Cresols                   | U         | 380    | ug/kg | 114     | 380     |
| 67-72-1    | Hexachloroethane              | U         | 380    | ug/kg | 76.1    | 380     |
| 98-95-3    | Nitrobenzene                  | U         | 380    | ug/kg | 76.1    | 380     |
| 78-59-1    | Isophorone                    | U         | 380    | ug/kg | 76.1    | 380     |
| 88-75-5    | 2-Nitrophenol                 | U         | 380    | ug/kg | 76.1    | 380     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 380    | ug/kg | 133     | 380     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 380    | ug/kg | 76.1    | 380     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 380    | ug/kg | 76.1    | 380     |
| 65-85-0    | Benzoic acid                  | U         | 761    | ug/kg | 190     | 761     |
| 91-20-3    | Naphthalene                   | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 106-47-8   | 4-Chloroaniline               | U         | 380    | ug/kg | 76.1    | 380     |
| 87-68-3    | Hexachlorobutadiene           | U         | 380    | ug/kg | 76.1    | 380     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 38.0   | ug/kg | 7.61    | 38.0    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 380    | ug/kg | 76.1    | 380     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 380    | ug/kg | 76.1    | 380     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 380    | ug/kg | 76.1    | 380     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 38.0   | ug/kg | 12.6    | 38.0    |
| 88-74-4    | 2-Nitroaniline                | U         | 380    | ug/kg | 76.1    | 380     |
|            | <i>o</i> -Nitroaniline        |           |        |       |         |         |
| 99-09-2    | 3-Nitroaniline                | U         | 380    | ug/kg | 76.1    | 380     |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114014

Client ID: RE15-10-8421  
Batch ID: 944874  
Run Date: 01/29/2010 03:49  
Prep Date: 01/25/2010 21:06  
Data File: s3a2842.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
% Moisture: 12.5  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|-------------------------------|-----------|--------|-------|---------|---------|
| 131-11-3  | <i>m</i> -Nitroaniline        |           |        |       |         |         |
|           | Dimethylphthalate             | U         | 380    | ug/kg | 76.1    | 380     |
| 606-20-2  | 2,6-Dinitrotoluene            | U         | 380    | ug/kg | 38.0    | 380     |
| 208-96-8  | Acenaphthylene                | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 51-28-5   | 2,4-Dinitrophenol             | U         | 761    | ug/kg | 145     | 761     |
| 132-64-9  | Dibenzofuran                  | U         | 380    | ug/kg | 76.1    | 380     |
| 84-66-2   | Diethylphthalate              | U         | 380    | ug/kg | 76.1    | 380     |
| 86-73-7   | Fluorene                      | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 7005-72-3 | 4-Chlorophenylphenylether     | U         | 380    | ug/kg | 76.1    | 380     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol    | U         | 380    | ug/kg | 76.1    | 380     |
| 100-01-6  | 4-Nitroaniline                | U         | 380    | ug/kg | 114     | 380     |
| 122-39-4  | <i>p</i> -Nitroaniline        |           |        |       |         |         |
|           | Diphenylamine                 | U         | 380    | ug/kg | 76.1    | 380     |
| 122-66-7  | Azobenzene                    | U         | 380    | ug/kg | 76.1    | 380     |
| 101-55-3  | <i>1,2</i> -Diphenylhydrazine |           |        |       |         |         |
|           | 4-Bromophenylphenylether      | U         | 380    | ug/kg | 76.1    | 380     |
| 118-74-1  | Hexachlorobenzene             | U         | 380    | ug/kg | 76.1    | 380     |
| 85-01-8   | Phenanthrene                  | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 120-12-7  | Anthracene                    | U         | 38.0   | ug/kg | 7.61    | 38.0    |
| 84-74-2   | Di-n-butylphthalate           | U         | 380    | ug/kg | 76.1    | 380     |
| 206-44-0  | Fluoranthene                  | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 85-68-7   | Butylbenzylphthalate          | U         | 380    | ug/kg | 76.1    | 380     |
| 56-55-3   | Benzo(a)anthracene            | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 91-94-1   | 3,3'-Dichlorobenzidine        | U         | 380    | ug/kg | 114     | 380     |
| 218-01-9  | Chrysene                      | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate    | U         | 380    | ug/kg | 76.1    | 380     |
| 117-84-0  | Di-n-octylphthalate           | U         | 380    | ug/kg | 76.1    | 380     |
| 205-99-2  | Benzo(b)fluoranthene          | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 207-08-9  | Benzo(k)fluoranthene          | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 50-32-8   | Benzo(a)pyrene                | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene        | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 53-70-3   | Dibenzo(a,h)anthracene        | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 191-24-2  | Benzo(ghi)perylene            | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 120-82-1  | 1,2,4-Trichlorobenzene        | U         | 380    | ug/kg | 76.1    | 380     |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.07 | 2110      | ug/kg |     | J    |
|         | Unknown                               | 2.24 | 242       | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114014    | Date Received: 01/20/2010 08:45  | %Moisture: 12.5      |
| Client ID: RE15-10-8421     | Client: LANL010                  | Project: LANL01004   |
| Batch ID: 944874            | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Run Date: 01/29/2010 03:49  | Inst: MSD3.I                     | Dilution: 1          |
| Prep Date: 01/25/2010 21:06 | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Data File: s3a2842.d        | Aliquot: 30.03 g                 | Final Volume: 1 mL   |
|                             | Column: J&W DB-5MS               | Level: LOW           |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |                                       |       |           |       |     |      |
|---|---------------------------------------|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|   | Unknown Aldol Condensate              | 3.32  | 195       | ug/kg |     | JA   |
|   | Unknown                               | 15.66 | 2000      | ug/kg |     | J    |
|   | Unknown                               | 16.43 | 1920      | ug/kg |     | J    |
|   | Unknown                               | 16.95 | 220       | ug/kg |     | J    |
|   | Unknown                               | 17.6  | 498       | ug/kg |     | J    |
|   | Unknown                               | 17.64 | 285       | ug/kg |     | J    |
|   | Unknown                               | 18.06 | 341       | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114008

Client ID: RE15-10-8422  
Batch ID: 944874  
Run Date: 01/29/2010 01:19  
Prep Date: 01/25/2010 21:06  
Data File: s3a2836.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/23/2010 09:20  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.1 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parname                       | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 373    | ug/kg | 74.6    | 373     |
| 108-95-2   | Phenol                        | U         | 373    | ug/kg | 74.6    | 373     |
| 95-57-8    | 2-Chlorophenol                | U         | 373    | ug/kg | 74.6    | 373     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 373    | ug/kg | 74.6    | 373     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 373    | ug/kg | 74.6    | 373     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 373    | ug/kg | 74.6    | 373     |
| 83-32-9    | Acenaphthene                  | U         | 37.3   | ug/kg | 12.3    | 37.3    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 373    | ug/kg | 37.3    | 373     |
| 100-02-7   | 4-Nitrophenol                 | U         | 373    | ug/kg | 123     | 373     |
| 87-86-5    | Pentachlorophenol             | U         | 373    | ug/kg | 93.3    | 373     |
| 129-00-0   | Pyrene                        |           | 51.4   | ug/kg | 11.2    | 37.3    |
| 110-86-1   | Pyridine                      | U         | 373    | ug/kg | 74.6    | 373     |
| 62-53-3    | Aniline                       | U         | 373    | ug/kg | 112     | 373     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 373    | ug/kg | 74.6    | 373     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 373    | ug/kg | 74.6    | 373     |
| 100-51-6   | Benzyl alcohol                | U         | 373    | ug/kg | 112     | 373     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 373    | ug/kg | 74.6    | 373     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 373    | ug/kg | 74.6    | 373     |
| 95-48-7    | o-Cresol                      | U         | 373    | ug/kg | 74.6    | 373     |
| 65794-96-9 | m,p-Cresols                   | U         | 373    | ug/kg | 112     | 373     |
| 67-72-1    | Hexachloroethane              | U         | 373    | ug/kg | 74.6    | 373     |
| 98-95-3    | Nitrobenzene                  | U         | 373    | ug/kg | 74.6    | 373     |
| 78-59-1    | Isophorone                    | U         | 373    | ug/kg | 74.6    | 373     |
| 88-75-5    | 2-Nitrophenol                 | U         | 373    | ug/kg | 74.6    | 373     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 373    | ug/kg | 131     | 373     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 373    | ug/kg | 74.6    | 373     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 373    | ug/kg | 74.6    | 373     |
| 65-85-0    | Benzoic acid                  | U         | 746    | ug/kg | 187     | 746     |
| 91-20-3    | Naphthalene                   | U         | 37.3   | ug/kg | 11.2    | 37.3    |
| 106-47-8   | 4-Chloroaniline               | U         | 373    | ug/kg | 74.6    | 373     |
| 87-68-3    | Hexachlorobutadiene           | U         | 373    | ug/kg | 74.6    | 373     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 37.3   | ug/kg | 74.6    | 37.3    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 373    | ug/kg | 74.6    | 373     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 373    | ug/kg | 74.6    | 373     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 373    | ug/kg | 74.6    | 373     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 37.3   | ug/kg | 12.3    | 37.3    |
| 88-74-4    | 2-Nitroaniline                | U         | 373    | ug/kg | 74.6    | 373     |
|            | <i>o</i> -Nitroaniline        |           |        |       |         |         |
| 99-09-2    | 3-Nitroaniline                | U         | 373    | ug/kg | 74.6    | 373     |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114008

Client ID: RE15-10-8422  
Batch ID: 944874  
Run Date: 01/29/2010 01:19  
Prep Date: 01/25/2010 21:06  
Data File: s3a2836.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/23/2010 09:20  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.1 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|------------------------------|-----------|--------|-------|---------|---------|
|           | <i>m</i> -Nitroaniline       |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate            | U         | 373    | ug/kg | 74.6    | 373     |
| 606-20-2  | 2,6-Dinitrotoluene           | U         | 373    | ug/kg | 37.3    | 373     |
| 208-96-8  | Acenaphthylene               | U         | 37.3   | ug/kg | 11.2    | 37.3    |
| 51-28-5   | 2,4-Dinitrophenol            | U         | 746    | ug/kg | 142     | 746     |
| 132-64-9  | Dibenzofuran                 | U         | 373    | ug/kg | 74.6    | 373     |
| 84-66-2   | Diethylphthalate             | U         | 373    | ug/kg | 74.6    | 373     |
| 86-73-7   | Fluorene                     | U         | 37.3   | ug/kg | 11.2    | 37.3    |
| 7005-72-3 | 4-Chlorophenylphenylether    | U         | 373    | ug/kg | 74.6    | 373     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol   | U         | 373    | ug/kg | 74.6    | 373     |
| 100-01-6  | 4-Nitroaniline               | U         | 373    | ug/kg | 112     | 373     |
|           | <i>p</i> -Nitroaniline       |           |        |       |         |         |
| 122-39-4  | Diphenylamine                | U         | 373    | ug/kg | 74.6    | 373     |
| 122-66-7  | Azobenzene                   | U         | 373    | ug/kg | 74.6    | 373     |
|           | <i>1,2-Diphenylhydrazine</i> |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether     | U         | 373    | ug/kg | 74.6    | 373     |
| 118-74-1  | Hexachlorobenzene            | U         | 373    | ug/kg | 74.6    | 373     |
| 85-01-8   | Phenanthrene                 | J         | 15.8   | ug/kg | 11.2    | 37.3    |
| 120-12-7  | Anthracene                   | U         | 37.3   | ug/kg | 74.6    | 37.3    |
| 84-74-2   | Di-n-butylphthalate          | J         | 206    | ug/kg | 74.6    | 373     |
| 206-44-0  | Fluoranthene                 | J         | 20.1   | ug/kg | 11.2    | 37.3    |
| 85-68-7   | Butylbenzylphthalate         | U         | 373    | ug/kg | 74.6    | 373     |
| 56-55-3   | Benzo(a)anthracene           | J         | 21.3   | ug/kg | 11.2    | 37.3    |
| 91-94-1   | 3,3'-Dichlorobenzidine       | U         | 373    | ug/kg | 112     | 373     |
| 218-01-9  | Chrysene                     | J         | 17.4   | ug/kg | 11.2    | 37.3    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate   | U         | 373    | ug/kg | 74.6    | 373     |
| 117-84-0  | Di-n-octylphthalate          | U         | 373    | ug/kg | 74.6    | 373     |
| 205-99-2  | Benzo(b)fluoranthene         | U         | 37.3   | ug/kg | 11.2    | 37.3    |
| 207-08-9  | Benzo(k)fluoranthene         | U         | 37.3   | ug/kg | 11.2    | 37.3    |
| 50-32-8   | Benzo(a)pyrene               | J         | 19.4   | ug/kg | 11.2    | 37.3    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene       | U         | 37.3   | ug/kg | 11.2    | 37.3    |
| 53-70-3   | Dibenzo(a,h)anthracene       | U         | 37.3   | ug/kg | 11.2    | 37.3    |
| 191-24-2  | Benzo(ghi)perylene           | U         | 37.3   | ug/kg | 11.2    | 37.3    |
| 120-82-1  | 1,2,4-Trichlorobenzene       | U         | 373    | ug/kg | 74.6    | 373     |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.07 | 3080      | ug/kg |     | J    |
|         | Unknown                               | 2.24 | 179       | ug/kg |     | J    |



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114008    | Date Received: 01/23/2010 09:20  | %Moisture: 10.9      |
| Client ID: RE15-10-8422     | Client: LANL010                  | Project: LANL01004   |
| Batch ID: 944874            | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Run Date: 01/29/2010 01:19  | Inst: MSD3.I                     | Dilution: 1          |
| Prep Date: 01/25/2010 21:06 | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Data File: s3a2836.d        | Aliquot: 30.1 g                  | Final Volume: 1 mL   |
|                             | Column: J&W DB-5MS               | Level: LOW           |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |  |       | Estimated |       |     |      |
|---|--|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC)    | RT    |           | Units | Fit | Qual |
|   | Unknown Aldol Condensate                 | 3.32  | 207       | ug/kg |     | JA   |
| 7785-70-8                               | 1R-.alpha.-Pinene                        | 4.09  | 152       | ug/kg | 98  | NJ   |
| 498-15-7                                | Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy | 4.66  | 184       | ug/kg | 97  | NJ   |
|   | Unknown                                  | 6.69  | 358       | ug/kg |     | J    |
| 1117-52-8                               | 5,9,13-Pentadecatrien-2-one, 6,10,14-tri | 9.86  | 301       | ug/kg | 91  | NJ   |
|   | Unknown                                  | 11.42 | 236       | ug/kg |     | J    |
|   | Unknown                                  | 11.51 | 208       | ug/kg |     | J    |
|   | Unknown                                  | 11.65 | 377       | ug/kg |     | J    |
| 1235-74-1                               | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.76 | 436       | ug/kg | 98  | NJ   |
|   | Unknown                                  | 11.87 | 155       | ug/kg |     | J    |
| 309735-29-3                             | 1,2-Benzisothiazole, 3-(hexahydro-1H-aze | 11.98 | 399       | ug/kg | 90  | NJ   |
|   | Unknown                                  | 12.83 | 263       | ug/kg |     | J    |
|   | Unknown                                  | 12.91 | 280       | ug/kg |     | J    |
|   | Unknown                                  | 12.94 | 447       | ug/kg |     | J    |
|   | Unknown                                  | 15    | 364       | ug/kg |     | J    |
|   | Unknown                                  | 15.66 | 4840      | ug/kg |     | J    |
|   | Unknown                                  | 16.44 | 4890      | ug/kg |     | J    |
|   | Unknown                                  | 16.57 | 511       | ug/kg |     | J    |
|   | Unknown                                  | 17.61 | 1510      | ug/kg |     | J    |
|   | Unknown                                  | 17.77 | 2020      | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114010

Client ID: RE15-10-8423  
Batch ID: 944874  
Run Date: 01/27/2010 20:10  
Prep Date: 01/25/2010 21:06  
Data File: s3a2727.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.02 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 368    | ug/kg | 73.5    | 368     |
| 108-95-2   | Phenol                        | U         | 368    | ug/kg | 73.5    | 368     |
| 95-57-8    | 2-Chlorophenol                | U         | 368    | ug/kg | 73.5    | 368     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 368    | ug/kg | 73.5    | 368     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 368    | ug/kg | 73.5    | 368     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 368    | ug/kg | 73.5    | 368     |
| 83-32-9    | Acenaphthene                  | U         | 36.8   | ug/kg | 12.1    | 36.8    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 368    | ug/kg | 36.8    | 368     |
| 100-02-7   | 4-Nitrophenol                 | U         | 368    | ug/kg | 121     | 368     |
| 87-86-5    | Pentachlorophenol             | U         | 368    | ug/kg | 91.9    | 368     |
| 129-00-0   | Pyrene                        |           | 38.4   | ug/kg | 11.0    | 36.8    |
| 110-86-1   | Pyridine                      | U         | 368    | ug/kg | 73.5    | 368     |
| 62-53-3    | Aniline                       | U         | 368    | ug/kg | 110     | 368     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 368    | ug/kg | 73.5    | 368     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 368    | ug/kg | 73.5    | 368     |
| 100-51-6   | Benzyl alcohol                | U         | 368    | ug/kg | 110     | 368     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 368    | ug/kg | 73.5    | 368     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 368    | ug/kg | 73.5    | 368     |
| 95-48-7    | o-Cresol                      | U         | 368    | ug/kg | 73.5    | 368     |
| 65794-96-9 | m,p-Cresols                   | U         | 368    | ug/kg | 110     | 368     |
| 67-72-1    | Hexachloroethane              | U         | 368    | ug/kg | 73.5    | 368     |
| 98-95-3    | Nitrobenzene                  | U         | 368    | ug/kg | 73.5    | 368     |
| 78-59-1    | Isophorone                    | U         | 368    | ug/kg | 73.5    | 368     |
| 88-75-5    | 2-Nitrophenol                 | U         | 368    | ug/kg | 73.5    | 368     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 368    | ug/kg | 129     | 368     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 368    | ug/kg | 73.5    | 368     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 368    | ug/kg | 73.5    | 368     |
| 65-85-0    | Benzoic acid                  | U         | 735    | ug/kg | 184     | 735     |
| 91-20-3    | Naphthalene                   | U         | 36.8   | ug/kg | 11.0    | 36.8    |
| 106-47-8   | 4-Chloroaniline               | U         | 368    | ug/kg | 73.5    | 368     |
| 87-68-3    | Hexachlorobutadiene           | U         | 368    | ug/kg | 73.5    | 368     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 36.8   | ug/kg | 7.35    | 36.8    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 368    | ug/kg | 73.5    | 368     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 368    | ug/kg | 73.5    | 368     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 368    | ug/kg | 73.5    | 368     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 36.8   | ug/kg | 12.1    | 36.8    |
| 88-74-4    | 2-Nitroaniline                | U         | 368    | ug/kg | 73.5    | 368     |
| 99-09-2    | <i>o</i> -Nitroaniline        |           |        |       |         |         |
|            | 3-Nitroaniline                | U         | 368    | ug/kg | 73.5    | 368     |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

Page 2 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114010

Client ID: RE15-10-8423  
Batch ID: 944874  
Run Date: 01/27/2010 20:10  
Prep Date: 01/25/2010 21:06  
Data File: s3a2727.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.02 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|-------------------------------|-----------|--------|-------|---------|---------|
|           | <i>m</i> -Nitroaniline        |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate             | U         | 368    | ug/kg | 73.5    | 368     |
| 606-20-2  | 2,6-Dinitrotoluene            | U         | 368    | ug/kg | 36.8    | 368     |
| 208-96-8  | Acenaphthylene                | U         | 36.8   | ug/kg | 11.0    | 36.8    |
| 51-28-5   | 2,4-Dinitrophenol             | U         | 735    | ug/kg | 140     | 735     |
| 132-64-9  | Dibenzofuran                  | U         | 368    | ug/kg | 73.5    | 368     |
| 84-66-2   | Diethylphthalate              | U         | 368    | ug/kg | 73.5    | 368     |
| 86-73-7   | Fluorenc                      | U         | 36.8   | ug/kg | 11.0    | 36.8    |
| 7005-72-3 | 4-Chlorophenylphenylether     | U         | 368    | ug/kg | 73.5    | 368     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol    | U         | 368    | ug/kg | 73.5    | 368     |
| 100-01-6  | 4-Nitroaniline                | U         | 368    | ug/kg | 110     | 368     |
|           | <i>p</i> -Nitroaniline        |           |        |       |         |         |
| 122-39-4  | Diphenylamine                 | U         | 368    | ug/kg | 73.5    | 368     |
| 122-66-7  | Azobenzene                    | U         | 368    | ug/kg | 73.5    | 368     |
|           | <i>1,2</i> -Diphenylhydrazine |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether      | U         | 368    | ug/kg | 73.5    | 368     |
| 118-74-1  | Hexachlorobenzene             | U         | 368    | ug/kg | 73.5    | 368     |
| 85-01-8   | Phenanthrene                  | J         | 14.9   | ug/kg | 11.0    | 36.8    |
| 120-12-7  | Anthracene                    | U         | 36.8   | ug/kg | 7.35    | 36.8    |
| 84-74-2   | Di-n-butylphthalate           | J         | 244    | ug/kg | 73.5    | 368     |
| 206-44-0  | Fluoranthene                  | J         | 18.2   | ug/kg | 11.0    | 36.8    |
| 85-68-7   | Butylbenzylphthalate          | U         | 368    | ug/kg | 73.5    | 368     |
| 56-55-3   | Benzo(a)anthracene            | J         | 14.4   | ug/kg | 11.0    | 36.8    |
| 91-94-1   | 3,3'-Dichlorobenzidine        | U         | 368    | ug/kg | 110     | 368     |
| 218-01-9  | Chrysene                      | J         | 12.4   | ug/kg | 11.0    | 36.8    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate    | U         | 368    | ug/kg | 73.5    | 368     |
| 117-84-0  | Di-n-octylphthalate           | U         | 368    | ug/kg | 73.5    | 368     |
| 205-99-2  | Benzo(b)fluoranthene          | U         | 36.8   | ug/kg | 11.0    | 36.8    |
| 207-08-9  | Benzo(k)fluoranthene          | U         | 36.8   | ug/kg | 11.0    | 36.8    |
| 50-32-8   | Benzo(a)pyrene                | J         | 12.8   | ug/kg | 11.0    | 36.8    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene        | U         | 36.8   | ug/kg | 11.0    | 36.8    |
| 53-70-3   | Dibenzo(a,h)anthracene        | U         | 36.8   | ug/kg | 11.0    | 36.8    |
| 191-24-2  | Benzo(ghi)perylene            | U         | 36.8   | ug/kg | 11.0    | 36.8    |
| 120-82-1  | 1,2,4-Trichlorobenzene        | U         | 368    | ug/kg | 73.5    | 368     |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.11 | 3700      | ug/kg |     | J    |
|         | Unknown                               | 2.29 | 247       | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114010  
  
Client ID: RE15-10-8423  
Batch ID: 944874  
Run Date: 01/27/2010 20:10  
Prep Date: 01/25/2010 21:06  
Data File: s3a2727.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.02 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |  |       | Estimated |       |     |      |
|---|--|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC)    | RT    |           | Units | Fit | Qual |
|   | Unknown Aldol Condensate                 | 3.4   | 192       | ug/kg |     | JA   |
| 3387-41-5                               | Bicyclo[3.1.0]hexane, 4-methylene-1-(1-m | 4.48  | 277       | ug/kg | 83  | NJ   |
| 127-91-3                                | .beta.-Pinene                            | 4.55  | 206       | ug/kg | 97  | NJ   |
| 498-15-7                                | Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy | 4.76  | 1300      | ug/kg | 97  | NJ   |
| 138-86-3                                | Limonene                                 | 4.9   | 251       | ug/kg | 95  | NJ   |
| 1117-52-8                               | 5,9,13-Pentadecatrien-2-one, 6,10,14-tri | 9.96  | 262       | ug/kg | 83  | NJ   |
|   | Unknown                                  | 11.09 | 164       | ug/kg |     | J    |
| 118-65-0                                | Bicyclo[7.2.0]undec-4-ene, 4,11,11-trime | 11.46 | 537       | ug/kg | 92  | NJ   |
|   | Unknown                                  | 11.53 | 485       | ug/kg |     | J    |
| 1686-62-0                               | 1-Phenanthrenecarboxylic acid, 7-ethenyl | 11.75 | 506       | ug/kg | 95  | NJ   |
|   | Unknown                                  | 11.79 | 180       | ug/kg |     | J    |
| 1235-74-1                               | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.87 | 427       | ug/kg | 98  | NJ   |
| 17974-57-1                              | (3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1 | 11.9  | 378       | ug/kg | 90  | NJ   |
|   | Unknown                                  | 12.1  | 191       | ug/kg |     | J    |
|   | Unknown                                  | 12.11 | 249       | ug/kg |     | J    |
|   | Unknown                                  | 12.36 | 309       | ug/kg |     | J    |
|   | Unknown                                  | 12.78 | 227       | ug/kg |     | J    |
| 309735-29-3                             | 1,2-Benzisothiazole, 3-(hexahydro-1H-aze | 13.34 | 269       | ug/kg | 91  | NJ   |
|   | Unknown                                  | 15.09 | 491       | ug/kg |     | J    |
|   | Unknown                                  | 15.19 | 560       | ug/kg |     | J    |
|   | Unknown                                  | 15.82 | 630       | ug/kg |     | J    |
|   | Unknown                                  | 15.89 | 520       | ug/kg |     | J    |
|   | Unknown                                  | 15.98 | 1330      | ug/kg |     | J    |
|   | Unknown                                  | 16.84 | 557       | ug/kg |     | J    |
|   | Unknown                                  | 17.17 | 620       | ug/kg |     | J    |
| 83-47-6                                 | .gamma.-Sitosterol                       | 17.67 | 2010      | ug/kg | 97  | NJ   |
| 1058-61-3                               | Stigmast-4-en-3-one                      | 18.81 | 1310      | ug/kg | 89  | NJ   |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1324  
Lab Sample ID: 245114013

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8424  
Batch ID: 944874  
Run Date: 01/29/2010 03:24  
Prep Date: 01/25/2010 21:06  
Data File: s3a2841.d

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 369    | ug/kg | 73.8    | 369     |
| 108-95-2   | Phenol                        | U         | 369    | ug/kg | 73.8    | 369     |
| 95-57-8    | 2-Chlorophenol                | U         | 369    | ug/kg | 73.8    | 369     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 369    | ug/kg | 73.8    | 369     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 369    | ug/kg | 73.8    | 369     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 369    | ug/kg | 73.8    | 369     |
| 83-32-9    | Acenaphthene                  | U         | 36.9   | ug/kg | 12.2    | 36.9    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 369    | ug/kg | 36.9    | 369     |
| 100-02-7   | 4-Nitrophenol                 | U         | 369    | ug/kg | 122     | 369     |
| 87-86-5    | Pentachlorophenol             | U         | 369    | ug/kg | 92.2    | 369     |
| 129-00-0   | Pyrene                        | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 110-86-1   | Pyridine                      | U         | 369    | ug/kg | 73.8    | 369     |
| 62-53-3    | Aniline                       | U         | 369    | ug/kg | 111     | 369     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 369    | ug/kg | 73.8    | 369     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 369    | ug/kg | 73.8    | 369     |
| 100-51-6   | Benzyl alcohol                | U         | 369    | ug/kg | 111     | 369     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 369    | ug/kg | 73.8    | 369     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 369    | ug/kg | 73.8    | 369     |
| 95-48-7    | o-Cresol                      | U         | 369    | ug/kg | 73.8    | 369     |
| 65794-96-9 | m,p-Cresols                   | U         | 369    | ug/kg | 111     | 369     |
| 67-72-1    | Hexachloroethane              | U         | 369    | ug/kg | 73.8    | 369     |
| 98-95-3    | Nitrobenzene                  | U         | 369    | ug/kg | 73.8    | 369     |
| 78-59-1    | Isophorone                    | U         | 369    | ug/kg | 73.8    | 369     |
| 88-75-5    | 2-Nitrophenol                 | U         | 369    | ug/kg | 73.8    | 369     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 369    | ug/kg | 129     | 369     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 369    | ug/kg | 73.8    | 369     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 369    | ug/kg | 73.8    | 369     |
| 65-85-0    | Benzoic acid                  | U         | 738    | ug/kg | 184     | 738     |
| 91-20-3    | Naphthalene                   | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 106-47-8   | 4-Chloroaniline               | U         | 369    | ug/kg | 73.8    | 369     |
| 87-68-3    | Hexachlorobutadiene           | U         | 369    | ug/kg | 73.8    | 369     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 36.9   | ug/kg | 7.38    | 36.9    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 369    | ug/kg | 73.8    | 369     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 369    | ug/kg | 73.8    | 369     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 369    | ug/kg | 73.8    | 369     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 36.9   | ug/kg | 12.2    | 36.9    |
| 88-74-4    | 2-Nitroaniline                | U         | 369    | ug/kg | 73.8    | 369     |
|            | <i>o</i> -Nitroaniline        |           |        |       |         |         |
| 99-09-2    | 3-Nitroaniline                | U         | 369    | ug/kg | 73.8    | 369     |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114013

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8424  
Batch ID: 944874  
Run Date: 01/29/2010 03:24  
Prep Date: 01/25/2010 21:06  
Data File: s3a2841.d

| CAS No.   | Parmname                     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|------------------------------|-----------|--------|-------|---------|---------|
|           | <i>m</i> -Nitroaniline       |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate            | U         | 369    | ug/kg | 73.8    | 369     |
| 606-20-2  | 2,6-Dinitrotoluene           | U         | 369    | ug/kg | 36.9    | 369     |
| 208-96-8  | Acenaphthylene               | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 51-28-5   | 2,4-Dinitrophenol            | U         | 738    | ug/kg | 140     | 738     |
| 132-64-9  | Dibenzofuran                 | U         | 369    | ug/kg | 73.8    | 369     |
| 84-66-2   | Diethylphthalate             | U         | 369    | ug/kg | 73.8    | 369     |
| 86-73-7   | Fluorene                     | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 7005-72-3 | 4-Chlorophenylphenylether    | U         | 369    | ug/kg | 73.8    | 369     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol   | U         | 369    | ug/kg | 73.8    | 369     |
| 100-01-6  | 4-Nitroaniline               | U         | 369    | ug/kg | 111     | 369     |
|           | <i>p</i> -Nitroaniline       |           |        |       |         |         |
| 122-39-4  | Diphenylamine                | U         | 369    | ug/kg | 73.8    | 369     |
| 122-66-7  | Azobenzene                   | U         | 369    | ug/kg | 73.8    | 369     |
|           | <i>1,2-Diphenylhydrazine</i> |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether     | U         | 369    | ug/kg | 73.8    | 369     |
| 118-74-1  | Hexachlorobenzene            | U         | 369    | ug/kg | 73.8    | 369     |
| 85-01-8   | Phenanthrene                 | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 120-12-7  | Anthracene                   | U         | 36.9   | ug/kg | 7.38    | 36.9    |
| 84-74-2   | Di-n-butylphthalate          | U         | 369    | ug/kg | 73.8    | 369     |
| 206-44-0  | Fluoranthene                 | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 85-68-7   | Butylbenzylphthalate         | U         | 369    | ug/kg | 73.8    | 369     |
| 56-55-3   | Benzo(a)anthracene           | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 91-94-1   | 3,3'-Dichlorobenzidine       | U         | 369    | ug/kg | 111     | 369     |
| 218-01-9  | Chrysene                     | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate   | J         | 170    | ug/kg | 73.8    | 369     |
| 117-84-0  | Di-n-octylphthalate          | U         | 369    | ug/kg | 73.8    | 369     |
| 205-99-2  | Benzo(b)fluoranthene         | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 207-08-9  | Benzo(k)fluoranthene         | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 50-32-8   | Benzo(a)pyrene               | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene       | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 53-70-3   | Dibenzo(a,h)anthracene       | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 191-24-2  | Benzo(ghi)perylene           | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 120-82-1  | 1,2,4-Trichlorobenzene       | U         | 369    | ug/kg | 73.8    | 369     |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.09 | 2120      | ug/kg |     | J    |
|         | Unknown                               | 2.26 | 209       | ug/kg |     | J    |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1324  
Lab Sample ID: 245114013

Client ID: RE15-10-8424  
Batch ID: 944874  
Run Date: 01/29/2010 03:24  
Prep Date: 01/25/2010 21:06  
Data File: s3a2841.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.  | Parmname                                 | Qualifier | Result    | Units | MDL/LOD | PQL/LOQ |
|--|--|-----------|-----------|-------|---------|---------|
| <b>Tentatively Identified Compound Summary</b> |  |           |           |       |         |         |
| CAS No.  | Tentatively Identified Compound (TIC)    | RT        | Estimated | Units | Fit     | Qual    |
|  | Unknown Aldol Condensate                 | 3.33      | 184       | ug/kg |         | JA      |
| 7785-70-8                                      | 1R-.alpha.-Pinene                        | 4.1       | 231       | ug/kg | 98      | NJ      |
| 498-15-7                                       | Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy | 4.66      | 211       | ug/kg | 97      | NJ      |
|  | Unknown                                  | 11.42     | 415       | ug/kg |         | J       |
|  | Unknown                                  | 11.45     | 158       | ug/kg |         | J       |
| 1686-62-0                                      | 1-Phenanthrenecarboxylic acid, 7-ethenyl | 11.64     | 405       | ug/kg | 95      | NJ      |
| 1235-74-1                                      | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.76     | 228       | ug/kg | 99      | NJ      |
| 127-25-3                                       | Methyl abietate                          | 11.99     | 329       | ug/kg | 86      | NJ      |
|  | Unknown                                  | 15.65     | 1410      | ug/kg |         | J       |
|  | Unknown                                  | 16.42     | 2340      | ug/kg |         | J       |
|  | Unknown                                  | 17.6      | 609       | ug/kg |         | J       |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114007

Date Collected: 01/14/2010 12:00  
Date Received: 01/23/2010 09:20  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.05 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 371    | ug/kg | 74.3    | 371     |
| 108-95-2   | Phenol                        | U         | 371    | ug/kg | 74.3    | 371     |
| 95-57-8    | 2-Chlorophenol                | U         | 371    | ug/kg | 74.3    | 371     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 371    | ug/kg | 74.3    | 371     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 371    | ug/kg | 74.3    | 371     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 371    | ug/kg | 74.3    | 371     |
| 83-32-9    | Acenaphthene                  | U         | 37.1   | ug/kg | 12.3    | 37.1    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 371    | ug/kg | 37.1    | 371     |
| 100-02-7   | 4-Nitrophenol                 | U         | 371    | ug/kg | 123     | 371     |
| 87-86-5    | Pentachlorophenol             | U         | 371    | ug/kg | 92.9    | 371     |
| 129-00-0   | Pyrene                        | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 110-86-1   | Pyridine                      | U         | 371    | ug/kg | 74.3    | 371     |
| 62-53-3    | Aniline                       | U         | 371    | ug/kg | 111     | 371     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 371    | ug/kg | 74.3    | 371     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 371    | ug/kg | 74.3    | 371     |
| 100-51-6   | Benzyl alcohol                | U         | 371    | ug/kg | 111     | 371     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 371    | ug/kg | 74.3    | 371     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 371    | ug/kg | 74.3    | 371     |
| 95-48-7    | o-Cresol                      | U         | 371    | ug/kg | 74.3    | 371     |
| 65794-96-9 | m,p-Cresols                   | U         | 371    | ug/kg | 111     | 371     |
| 67-72-1    | Hexachloroethane              | U         | 371    | ug/kg | 74.3    | 371     |
| 98-95-3    | Nitrobenzene                  | U         | 371    | ug/kg | 74.3    | 371     |
| 78-59-1    | Isophorone                    | U         | 371    | ug/kg | 74.3    | 371     |
| 88-75-5    | 2-Nitrophenol                 | U         | 371    | ug/kg | 74.3    | 371     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 371    | ug/kg | 130     | 371     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 371    | ug/kg | 74.3    | 371     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 371    | ug/kg | 74.3    | 371     |
| 65-85-0    | Benzoic acid                  | U         | 743    | ug/kg | 186     | 743     |
| 91-20-3    | Naphthalene                   | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 106-47-8   | 4-Chloroaniline               | U         | 371    | ug/kg | 74.3    | 371     |
| 87-68-3    | Hexachlorobutadiene           | U         | 371    | ug/kg | 74.3    | 371     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 37.1   | ug/kg | 7.43    | 37.1    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 371    | ug/kg | 74.3    | 371     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 371    | ug/kg | 74.3    | 371     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 371    | ug/kg | 74.3    | 371     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 37.1   | ug/kg | 12.3    | 37.1    |
| 88-74-4    | 2-Nitroaniline                | U         | 371    | ug/kg | 74.3    | 371     |
| 99-09-2    | <i>o</i> -Nitroaniline        |           |        |       |         |         |
|            | 3-Nitroaniline                | U         | 371    | ug/kg | 74.3    | 371     |



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

Page 2 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114007

Client ID: RE15-10-8425  
Batch ID: 944874  
Run Date: 01/27/2010 18:53  
Prep Date: 01/25/2010 21:06  
Data File: s3a2724.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/23/2010 09:20  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.05 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.                      | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------------------------|----------------------------|-----------|--------|-------|---------|---------|
| <i>m-Nitroaniline</i>        |                            |           |        |       |         |         |
| 131-11-3                     | Dimethylphthalate          | U         | 371    | ug/kg | 74.3    | 371     |
| 606-20-2                     | 2,6-Dinitrotoluene         | U         | 371    | ug/kg | 37.1    | 371     |
| 208-96-8                     | Acenaphthylene             | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 51-28-5                      | 2,4-Dinitrophenol          | U         | 743    | ug/kg | 141     | 743     |
| 132-64-9                     | Dibenzofuran               | U         | 371    | ug/kg | 74.3    | 371     |
| 84-66-2                      | Diethylphthalate           | U         | 371    | ug/kg | 74.3    | 371     |
| 86-73-7                      | Fluorene                   | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 7005-72-3                    | 4-Chlorophenylphenylether  | U         | 371    | ug/kg | 74.3    | 371     |
| 534-52-1                     | 2-Methyl-4,6-dinitrophenol | U         | 371    | ug/kg | 74.3    | 371     |
| 100-01-6                     | 4-Nitroaniline             | U         | 371    | ug/kg | 111     | 371     |
| <i>p-Nitroaniline</i>        |                            |           |        |       |         |         |
| 122-39-4                     | Diphenylamine              | U         | 371    | ug/kg | 74.3    | 371     |
| 122-66-7                     | Azobenzene                 | U         | 371    | ug/kg | 74.3    | 371     |
| <i>1,2-Diphenylhydrazine</i> |                            |           |        |       |         |         |
| 101-55-3                     | 4-Bromophenylphenylether   | U         | 371    | ug/kg | 74.3    | 371     |
| 118-74-1                     | Hexachlorobenzene          | U         | 371    | ug/kg | 74.3    | 371     |
| 85-01-8                      | Phenanthrene               | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 120-12-7                     | Anthracene                 | U         | 37.1   | ug/kg | 7.43    | 37.1    |
| 84-74-2                      | Di-n-butylphthalate        | U         | 371    | ug/kg | 74.3    | 371     |
| 206-44-0                     | Fluoranthene               | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 85-68-7                      | Butylbenzylphthalate       | U         | 371    | ug/kg | 74.3    | 371     |
| 56-55-3                      | Benzo(a)anthracene         | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 91-94-1                      | 3,3'-Dichlorobenzidine     | U         | 371    | ug/kg | 111     | 371     |
| 218-01-9                     | Chrysene                   | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 117-81-7                     | bis(2-Ethylhexyl)phthalate | U         | 371    | ug/kg | 74.3    | 371     |
| 117-84-0                     | Di-n-octylphthalate        | U         | 371    | ug/kg | 74.3    | 371     |
| 205-99-2                     | Benzo(b)fluoranthene       | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 207-08-9                     | Benzo(k)fluoranthene       | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 50-32-8                      | Benzo(a)pyrene             | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 193-39-5                     | Indeno(1,2,3-cd)pyrene     | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 53-70-3                      | Dibenzo(a,h)anthracene     | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 191-24-2                     | Benzo(ghi)perylene         | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 120-82-1                     | 1,2,4-Trichlorobenzene     | U         | 371    | ug/kg | 74.3    | 371     |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT  | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|-----|-----------|-------|-----|------|
|         | Unknown                               | 2.1 | 2270      | ug/kg |     | J    |
|         | Unknown Aldol Condensate              | 3.4 | 180       | ug/kg |     | JA   |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

Page 3 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114007

Date Collected: 01/14/2010 12:00  
Date Received: 01/23/2010 09:20  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.1  
Analyst: JLD1  
Aliquot: 30.05 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8425  
Batch ID: 944874  
Run Date: 01/27/2010 18:53  
Prep Date: 01/25/2010 21:06  
Data File: s3a2724.d

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |  |       |           |       |     |      |
|---|--|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC)    | RT    | Estimated | Units | Fit | Qual |
|   | Unknown                                  | 11.53 | 163       | ug/kg |     | J    |
|   | Unknown                                  | 11.65 | 177       | ug/kg |     | J    |
| 1686-62-0                               | 1-Phenanthrenecarboxylic acid, 7-ethenyl | 11.75 | 195       | ug/kg | 90  | NJ   |
| 1235-74-1                               | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.87 | 157       | ug/kg | 98  | NJ   |
| 17974-57-1                              | (3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1 | 11.9  | 227       | ug/kg | 90  | NJ   |
|   | Unknown                                  | 11.99 | 169       | ug/kg |     | J    |
|   | Unknown                                  | 15.12 | 3270      | ug/kg |     | J    |
| 70038-20-9                              | 7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet | 16    | 3360      | ug/kg | 91  | NJ   |
|   | Unknown                                  | 16.14 | 171       | ug/kg |     | J    |
|   | Unknown                                  | 17.47 | 706       | ug/kg |     | J    |
| 83-47-6                                 | .gamma.-Sitosterol                       | 17.66 | 711       | ug/kg | 91  | NJ   |
|   | Unknown                                  | 18.16 | 157       | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114005

Client ID: RE15-10-8441  
Batch ID: 944874  
Run Date: 01/27/2010 16:44  
Prep Date: 01/25/2010 21:06  
Data File: s3a2719.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.12 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 367    | ug/kg | 73.4    | 367     |
| 108-95-2   | Phenol                        | U         | 367    | ug/kg | 73.4    | 367     |
| 95-57-8    | 2-Chlorophenol                | U         | 367    | ug/kg | 73.4    | 367     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 367    | ug/kg | 73.4    | 367     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 367    | ug/kg | 73.4    | 367     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 367    | ug/kg | 73.4    | 367     |
| 83-32-9    | Acenaphthene                  | U         | 36.7   | ug/kg | 12.1    | 36.7    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 367    | ug/kg | 36.7    | 367     |
| 100-02-7   | 4-Nitrophenol                 | U         | 367    | ug/kg | 121     | 367     |
| 87-86-5    | Pentachlorophenol             | U         | 367    | ug/kg | 91.8    | 367     |
| 129-00-0   | Pyrene                        | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 110-86-1   | Pyridine                      | U         | 367    | ug/kg | 73.4    | 367     |
| 62-53-3    | Aniline                       | U         | 367    | ug/kg | 110     | 367     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 367    | ug/kg | 73.4    | 367     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 367    | ug/kg | 73.4    | 367     |
| 100-51-6   | Benzyl alcohol                | U         | 367    | ug/kg | 110     | 367     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 367    | ug/kg | 73.4    | 367     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 367    | ug/kg | 73.4    | 367     |
| 95-48-7    | o-Cresol                      | U         | 367    | ug/kg | 73.4    | 367     |
| 65794-96-9 | m,p-Cresols                   | U         | 367    | ug/kg | 110     | 367     |
| 67-72-1    | Hexachloroethane              | U         | 367    | ug/kg | 73.4    | 367     |
| 98-95-3    | Nitrobenzene                  | U         | 367    | ug/kg | 73.4    | 367     |
| 78-59-1    | Isophorone                    | U         | 367    | ug/kg | 73.4    | 367     |
| 88-75-5    | 2-Nitrophenol                 | U         | 367    | ug/kg | 73.4    | 367     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 367    | ug/kg | 129     | 367     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 367    | ug/kg | 73.4    | 367     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 367    | ug/kg | 73.4    | 367     |
| 65-85-0    | Benzoic acid                  | U         | 734    | ug/kg | 184     | 734     |
| 91-20-3    | Naphthalene                   | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 106-47-8   | 4-Chloroaniline               | U         | 367    | ug/kg | 73.4    | 367     |
| 87-68-3    | Hexachlorobutadiene           | U         | 367    | ug/kg | 73.4    | 367     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 36.7   | ug/kg | 7.34    | 36.7    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 367    | ug/kg | 73.4    | 367     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 367    | ug/kg | 73.4    | 367     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 367    | ug/kg | 73.4    | 367     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 36.7   | ug/kg | 12.1    | 36.7    |
| 88-74-4    | 2-Nitroaniline                | U         | 367    | ug/kg | 73.4    | 367     |
| 99-09-2    | <i>o</i> -Nitroaniline        | U         | 367    | ug/kg | 73.4    | 367     |
|            | 3-Nitroaniline                |           |        |       |         |         |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114005

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.12 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8441  
Batch ID: 944874  
Run Date: 01/27/2010 16:44  
Prep Date: 01/25/2010 21:06  
Data File: s3a2719.d

| CAS No.   | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|-------------------------------|-----------|--------|-------|---------|---------|
|           | <i>m</i> -Nitroaniline        |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate             | U         | 367    | ug/kg | 73.4    | 367     |
| 606-20-2  | 2,6-Dinitrotoluene            | U         | 367    | ug/kg | 36.7    | 367     |
| 208-96-8  | Acenaphthylene                | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 51-28-5   | 2,4-Dinitrophenol             | U         | 734    | ug/kg | 140     | 734     |
| 132-64-9  | Dibenzofuran                  | U         | 367    | ug/kg | 73.4    | 367     |
| 84-66-2   | Diethylphthalate              | U         | 367    | ug/kg | 73.4    | 367     |
| 86-73-7   | Fluorene                      | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 7005-72-3 | 4-Chlorophenylphenylether     | U         | 367    | ug/kg | 73.4    | 367     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol    | U         | 367    | ug/kg | 73.4    | 367     |
| 100-01-6  | 4-Nitroaniline                | U         | 367    | ug/kg | 110     | 367     |
|           | <i>p</i> -Nitroaniline        |           |        |       |         |         |
| 122-39-4  | Diphenylamine                 | U         | 367    | ug/kg | 73.4    | 367     |
| 122-66-7  | Azobenzene                    | U         | 367    | ug/kg | 73.4    | 367     |
|           | <i>1,2</i> -Diphenylhydrazine |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether      | U         | 367    | ug/kg | 73.4    | 367     |
| 118-74-1  | Hexachlorobenzene             | U         | 367    | ug/kg | 73.4    | 367     |
| 85-01-8   | Phenanthrene                  | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 120-12-7  | Anthracene                    | U         | 36.7   | ug/kg | 7.34    | 36.7    |
| 84-74-2   | Di-n-butylphthalate           | U         | 367    | ug/kg | 73.4    | 367     |
| 206-44-0  | Fluoranthene                  | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 85-68-7   | Butylbenzylphthalate          | U         | 367    | ug/kg | 73.4    | 367     |
| 56-55-3   | Benzo(a)anthracene            | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 91-94-1   | 3,3'-Dichlorobenzidine        | U         | 367    | ug/kg | 110     | 367     |
| 218-01-9  | Chrysene                      | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate    | U         | 367    | ug/kg | 73.4    | 367     |
| 117-84-0  | Di-n-octylphthalate           | U         | 367    | ug/kg | 73.4    | 367     |
| 205-99-2  | Benzo(b)fluoranthene          | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 207-08-9  | Benzo(k)fluoranthene          | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 50-32-8   | Benzo(a)pyrene                | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene        | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 53-70-3   | Dibenzo(a,h)anthracene        | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 191-24-2  | Benzo(ghi)perylene            | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 120-82-1  | 1,2,4-Trichlorobenzene        | U         | 367    | ug/kg | 73.4    | 367     |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.12 | 1540      | ug/kg |     | J    |
|         | Unknown                               | 2.3  | 150       | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114005    | Date Received: 01/20/2010 08:45  | %Moisture: 9.6       |
| Client ID: RE15-10-8441     | Client: LANL010                  | Project: LANL01004   |
| Batch ID: 944874            | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Run Date: 01/27/2010 16:44  | Inst: MSD3.I                     | Dilution: 1          |
| Prep Date: 01/25/2010 21:06 | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Data File: s3a2719.d        | Aliquot: 30.12 g                 | Final Volume: 1 mL   |
|                             | Column: J&W DB-5MS               | Level: LOW           |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |                                       |       | Estimated |       |     |      |
|---|---------------------------------------|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC) | RT    |           | Units | Fit | Qual |
| 7785-70-8                               | Unknown Aldol Condensate              | 3.41  | 180       | ug/kg |     | JA   |
|   | 1R-.alpha.-Pinene                     | 4.18  | 200       | ug/kg | 98  | NJ   |
|   | Unknown                               | 5.77  | 184       | ug/kg |     | J    |
|   | Unknown                               | 15.81 | 166       | ug/kg |     | J    |
|   | Unknown                               | 15.99 | 255       | ug/kg |     | J    |

# QC Summary

Semi-Volatile  
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1324

Matrix Type: SOLID

CAP Column (1) : J&amp;W DB-5MS

| Sample ID  | Client ID            | 2FP<br>%REC | PHL<br>%REC | NBZ<br>%REC | FBP<br>%REC | TBP<br>%REC | TPH<br>%REC |
|------------|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 1202023496 | MB for batch 944873  | 72          | 67          | 74          | 76          | 77          | 96          |
| 1202023497 | LCS for batch 944873 | 72          | 68          | 68          | 75          | 86          | 95          |
| 245114002  | RE15-10-8410         | 71          | 68          | 75          | 78          | 95          | 115         |
| 1202023498 | RE15-10-8410MS       | 59          | 56          | 57          | 63          | 84          | 101         |
| 1202023499 | RE15-10-8410MSD      | 63          | 60          | 60          | 67          | 81          | 103         |
| 245114003  | RE15-10-8411         | 62          | 58          | 50          | 68          | 78          | 59          |
| 245114004  | RE15-10-8412         | 63          | 61          | 66          | 70          | 83          | 95          |
| 245114005  | RE15-10-8441         | 64          | 64          | 66          | 76          | 95          | 103         |
| 245114007  | RE15-10-8425         | 71          | 69          | 74          | 77          | 89          | 101         |
| 245114010  | RE15-10-8423         | 66          | 65          | 70          | 75          | 86          | 116         |
| 245114006  | RE15-10-8413         | 63          | 58          | 63          | 65          | 52          | 103         |
| 245114008  | RE15-10-8422         | 63          | 58          | 64          | 66          | 54          | 96          |
| 245114009  | RE15-10-8417         | 69          | 64          | 73          | 74          | 63          | 119         |
| 245114012  | RE15-10-8418         | 74          | 71          | 77          | 79          | 76          | 113         |
| 245114013  | RE15-10-8424         | 69          | 64          | 74          | 78          | 61          | 121         |
| 245114014  | RE15-10-8421         | 68          | 65          | 70          | 72          | 66          | 112         |
| 245114015  | RE15-10-8420         | 69          | 66          | 73          | 77          | 72          | 122         |
| 245114011  | RE15-10-8416         | 70          | 68          | 78          | 77          | 72          | 112         |

**Surrogate****Acceptance Limits**

|     |                        |            |
|-----|------------------------|------------|
| 2FP | = 2-Fluorophenol       | (35%-96%)  |
| PHL | = Phenol-d5            | (36%-96%)  |
| NBZ | = Nitrobenzene-d5      | (34%-104%) |
| FBP | = 2-Fluorobiphenyl     | (36%-100%) |
| TBP | = 2,4,6-Tribromophenol | (37%-106%) |
| TPH | = p-Terphenyl-d14      | (40%-124%) |

\* Recovery outside Acceptance Limits

# Column to be used to flag recovery values

D Sample Diluted

# Quality Control Summary Spike Recovery Report

SDG Number: 10-1324

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 944873

Matrix: SOIL

Lab Sample ID:1202023497

Instrument: MSD3.I

Analysis Date: 01/26/2010 13:44

Dilution: 1

Analyst: JLD1

Pren Batch II 944873

Inj. Vol: .5 uL

Batch ID: 944874

| CAS No     | Parmname                        | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits |
|------------|---------------------------------|--------------------------|--------------------------|-------------------------|---------------|----------------------|
| 62-75-9    | LCS N-Methyl-N-nitrosomethylam  | 1670                     | 0.0                      | 881                     | 53            | 31-95                |
| 108-95-2   | LCS Phenol                      | 1670                     | 0.0                      | 1220                    | 73            | 37-104               |
| 95-57-8    | LCS 2-Chlorophenol              | 1670                     | 0.0                      | 1320                    | 79            | 40-105               |
| 106-46-7   | LCS 1,4-Dichlorobenzene         | 1670                     | 0.0                      | 1250                    | 75            | 34-103               |
| 621-64-7   | LCS N-Nitrosodipropylamine      | 1670                     | 0.0                      | 1140                    | 68            | 36-110               |
| 59-50-7    | LCS 4-Chloro-3-methylphenol     | 1670                     | 0.0                      | 1300                    | 78            | 46-114               |
| 83-32-9    | LCS Acenaphthene                | 1670                     | 0.0                      | 1280                    | 77            | 40-105               |
| 121-14-2   | LCS 2,4-Dinitrotoluene          | 1670                     | 0.0                      | 1420                    | 85            | 49-107               |
| 100-02-7   | LCS 4-Nitrophenol               | 1670                     | 0.0                      | 1330                    | 80            | 33-110               |
| 87-86-5    | LCS Pentachlorophenol           | 1670                     | 0.0                      | 1460                    | 88            | 38-116               |
| 129-00-0   | LCS Pyrene                      | 1670                     | 0.0                      | 1410                    | 84            | 43-108               |
| 110-86-1   | LCS Pyridine                    | 1670                     | 0.0                      | 1230                    | 74            | 13-129               |
| 62-53-3    | LCS Aniline                     | 1670                     | 0.0                      | 834                     | 50            | 30-121               |
| 111-44-4   | LCS bis(2-Chloroethyl) ether    | 1670                     | 0.0                      | 986                     | 59            | 37-106               |
| 541-73-1   | LCS 1,3-Dichlorobenzene         | 1670                     | 0.0                      | 1250                    | 75            | 33-103               |
| 100-51-6   | LCS Benzyl alcohol              | 1670                     | 0.0                      | 1260                    | 75            | 31-100               |
| 95-50-1    | LCS 1,2-Dichlorobenzene         | 1670                     | 0.0                      | 1280                    | 77            | 34-108               |
| 108-60-1   | LCS bis(2-Chloroisopropyl)ether | 1670                     | 0.0                      | 987                     | 59            | 34-120               |
| 95-48-7    | LCS o-Cresol                    | 1670                     | 0.0                      | 1280                    | 77            | 39-111               |
| 65794-96-9 | LCS m,p-Cresols                 | 1670                     | 0.0                      | 1400                    | 84            | 43-118               |
| 67-72-1    | LCS Hexachloroethane            | 1670                     | 0.0                      | 1170                    | 70            | 34-105               |
| 98-95-3    | LCS Nitrobenzene                | 1670                     | 0.0                      | 1130                    | 68            | 37-110               |



Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1324

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 944873

Matrix: SOIL

Lab Sample ID: 1202023497

Instrument: MSD3.I

Analysis Date: 01/26/2010 13:44

Dilution: 1

Analyst: JLD1

Pren Batch #: 944873

Inj. Vol: .5 uL

Batch ID: 944874

| CAS No   | Parmname                       | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits |
|----------|--------------------------------|--------------------------|--------------------------|-------------------------|---------------|----------------------|
| 78-59-1  | LCS Isophorone                 | 1670                     | 0.0                      | 1160                    | 70            | 41-108               |
| 88-75-5  | LCS 2-Nitrophenol              | 1670                     | 0.0                      | 1270                    | 76            | 35-112               |
| 105-67-9 | LCS 2,4-Dimethylphenol         | 1670                     | 0.0                      | 1260                    | 76            | 35-114               |
| 111-91-1 | LCS bis(2-Chloroethoxy)methane | 1670                     | 0.0                      | 1130                    | 68            | 40-109               |
| 120-83-2 | LCS 2,4-Dichlorophenol         | 1670                     | 0.0                      | 1340                    | 80            | 45-109               |
| 65-85-0  | LCS Benzoic acid               | 3330                     | 0.0                      | 3210                    | 96            | 27-137               |
| 91-20-3  | LCS Naphthalene                | 1670                     | 0.0                      | 1130                    | 68            | 35-105               |
| 106-47-8 | LCS 4-Chloroaniline            | 1670                     | 0.0                      | 765                     | 46            | 30-122               |
| 87-68-3  | LCS Hexachlorobutadiene        | 1670                     | 0.0                      | 1370                    | 82            | 37-111               |
| 91-57-6  | LCS 2-Methylnaphthalene        | 1670                     | 0.0                      | 1290                    | 78            | 40-106               |
| 77-47-4  | LCS Hexachlorocyclopentadiene  | 1670                     | 0.0                      | 1430                    | 86            | 24-135               |
| 88-06-2  | LCS 2,4,6-Trichlorophenol      | 1670                     | 0.0                      | 1400                    | 84            | 46-107               |
| 95-95-4  | LCS 2,4,5-Trichlorophenol      | 1670                     | 0.0                      | 1450                    | 87            | 44-110               |
| 91-58-7  | LCS 2-Chloronaphthalene        | 1670                     | 0.0                      | 1320                    | 79            | 44-104               |
| 88-74-4  | LCS 2-Nitroaniline             | 1670                     | 0.0                      | 1120                    | 67            | 44-113               |
| 99-09-2  | LCS <i>o</i> -Nitroaniline     | 1670                     | 0.0                      | 1170                    | 70            | 48-113               |
| 131-11-3 | LCS 3-Nitroaniline             | 1670                     | 0.0                      | 1170                    | 70            | 48-113               |
| 131-11-3 | LCS <i>m</i> -Nitroaniline     | 1670                     | 0.0                      | 1170                    | 70            | 48-113               |
| 131-11-3 | LCS Dimethylphthalate          | 1670                     | 0.0                      | 1380                    | 83            | 47-104               |
| 606-20-2 | LCS 2,6-Dinitrotoluene         | 1670                     | 0.0                      | 1350                    | 81            | 47-103               |
| 208-96-8 | LCS Acenaphthylene             | 1670                     | 0.0                      | 1330                    | 80            | 43-104               |
| 51-28-5  | LCS 2,4-Dinitrophenol          | 1670                     | 0.0                      | 1430                    | 86            | 32-114               |
| 132-64-9 | LCS Dibenzofuran               | 1670                     | 0.0                      | 1710                    | 102           | 47-112               |
| 84-66-2  | LCS Diethylphthalate           | 1670                     | 0.0                      | 1420                    | 85            | 50-108               |

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1324

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 944873

Matrix: SOIL

Lab Sample ID: 1202023497

Instrument: MSD3.I

Analysis Date: 01/26/2010 13:44

Dilution: 1

Analyst: JLD1

Pren Batch II 944873

Inj. Vol: .5 uL

Batch ID: 944874

| CAS No    | Parmname  | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits |
|-----------|---|--------------------------|--------------------------|-------------------------|---------------|----------------------|
| 86-73-7   | LCS Fluorene                                    | 1670                     | 0.0                      | 1380                    | 83            | 49-102               |
| 7005-72-3 | LCS 4-Chlorophenylphenylether                   | 1670                     | 0.0                      | 1440                    | 86            | 50-109               |
| 534-52-1  | LCS 2-Methyl-4,6-dinitrophenol                  | 1670                     | 0.0                      | 1410                    | 85            | 35-114               |
| 100-01-6  | LCS 4-Nitroaniline<br><i>p</i> -Nitroaniline    | 1670                     | 0.0                      | 1450                    | 87            | 44-139               |
| 122-39-4  | LCS Diphenylamine                               | 1670                     | 0.0                      | 1360                    | 82            | 46-111               |
| 122-66-7  | LCS Azobenzene<br><i>1,2</i> -Diphenylhydrazine | 1670                     | 0.0                      | 1130                    | 68            | 40-119               |
| 101-55-3  | LCS 4-Bromophenylphenylether                    | 1670                     | 0.0                      | 1250                    | 75            | 45-112               |
| 118-74-1  | LCS Hexachlorobenzene                           | 1670                     | 0.0                      | 1290                    | 77            | 44-115               |
| 85-01-8   | LCS Phenanthrene                                | 1670                     | 0.0                      | 1360                    | 81            | 45-107               |
| 120-12-7  | LCS Anthracene                                  | 1670                     | 0.0                      | 1380                    | 83            | 46-106               |
| 84-74-2   | LCS Di-n-butylphthalate                         | 1670                     | 0.0                      | 1540                    | 92            | 52-115               |
| 206-44-0  | LCS Fluoranthene                                | 1670                     | 0.0                      | 1620                    | 97            | 50-115               |
| 85-68-7   | LCS Butylbenzylphthalate                        | 1670                     | 0.0                      | 1400                    | 84            | 49-115               |
| 56-55-3   | LCS Benzo(a)anthracene                          | 1670                     | 0.0                      | 1400                    | 84            | 48-105               |
| 91-94-1   | LCS 3,3'-Dichlorobenzidine                      | 1670                     | 0.0                      | 1100                    | 66            | 45-98                |
| 218-01-9  | LCS Chrysene                                    | 1670                     | 0.0                      | 1430                    | 86            | 48-105               |
| 117-81-7  | LCS bis(2-Ethylhexyl)phthalate                  | 1670                     | 0.0                      | 1380                    | 83            | 50-117               |
| 117-84-0  | LCS Di-n-octylphthalate                         | 1670                     | 0.0                      | 1600                    | 96            | 39-123               |
| 205-99-2  | LCS Benzo(b)fluoranthene                        | 1670                     | 0.0                      | 1550                    | 93            | 46-111               |
| 207-08-9  | LCS Benzo(k)fluoranthene                        | 1670                     | 0.0                      | 1550                    | 93            | 46-114               |
| 50-32-8   | LCS Benzo(a)pyrene                              | 1670                     | 0.0                      | 1550                    | 93            | 49-112               |
| 193-39-5  | LCS Indeno(1,2,3-cd)pyrene                      | 1670                     | 0.0                      | 1440                    | 87            | 45-128               |

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

Page 4 of 4

SDG Number: 10-1324

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 944873

Matrix: SOIL

Lab Sample ID:1202023497

Instrument: MSD3.I

Analysis Date: 01/26/2010 13:44

Dilution: 1

Analyst: JLD1

Pre Batch ID 944873

Inj. Vol: .5 uL

Batch ID: 944874

| CAS No   | Parmname                   | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits |
|----------|----------------------------|--------------------------|--------------------------|-------------------------|---------------|----------------------|
| 53-70-3  | LCS Dibenzo(a,h)anthracene | 1670                     | 0.0                      | 1470                    | 88            | 44-131               |
| 191-24-2 | LCS Benzo(ghi)perylene     | 1670                     | 0.0                      | 1380                    | 83            | 42-128               |
| 120-82-1 | LCS 1,2,4-Trichlorobenzene | 1670                     | 0.0                      | 1340                    | 80            | 36-109               |

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1324

Client ID: RE15-10-8410MS

Lab Sample ID: 1202023498

Instrument: MSD3.I

Analyst: JLD1

Inj. Vol: .5 uL

Sample Type: Matrix Spike

Matrix: R

%Moisture: 24.9

Analysis Date: 01/27/2010 15:01

Dilution: 1

Prep Batch ID: 944873

Batch ID: 944874

| CAS No     | Parmname                       | Amount Added<br>ug/kg | Sample Conc.<br>ug/kg | Spike Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits |
|------------|--------------------------------|-----------------------|-----------------------|----------------------|---------------|----------------------|
| 62-75-9    | MS N-Methyl-N-nitrosomethylam  | 2220                  | 0.00 U                | 945                  | 43            | 32-90                |
| 108-95-2   | MS Phenol                      | 2220                  | 0.00 U                | 1340                 | 60            | 32-105               |
| 95-57-8    | MS 2-Chlorophenol              | 2220                  | 0.00 U                | 1500                 | 68            | 33-106               |
| 106-46-7   | MS 1,4-Dichlorobenzene         | 2220                  | 0.00 U                | 1400                 | 63            | 33-95                |
| 621-64-7   | MS N-Nitrosodipropylamine      | 2220                  | 0.00 U                | 1320                 | 59            | 31-109               |
| 59-50-7    | MS 4-Chloro-3-methylphenol     | 2220                  | 0.00 U                | 1590                 | 72            | 38-119               |
| 83-32-9    | MS Acenaphthene                | 2220                  | 0.00 U                | 1450                 | 65            | 39-100               |
| 121-14-2   | MS 2,4-Dinitrotoluene          | 2220                  | 0.00 U                | 1560                 | 70            | 42-107               |
| 100-02-7   | MS 4-Nitrophenol               | 2220                  | 0.00 U                | 1550                 | 70            | 24-120               |
| 87-86-5    | MS Pentachlorophenol           | 2220                  | 0.00 U                | 1760                 | 79            | 26-121               |
| 129-00-0   | MS Pyrene                      | 2220                  | 0.00 U                | 1890                 | 85            | 34-120               |
| 110-86-1   | MS Pyridine                    | 2220                  | 0.00 U                | 1100                 | 50            | 30-95                |
| 62-53-3    | MS Aniline                     | 2220                  | 0.00 U                | 411                  | 19 *          | 34-111               |
| 111-44-4   | MS bis(2-Chloroethyl) ether    | 2220                  | 0.00 U                | 1100                 | 49            | 34-101               |
| 541-73-1   | MS 1,3-Dichlorobenzene         | 2220                  | 0.00 U                | 1400                 | 63            | 31-97                |
| 100-51-6   | MS Benzyl alcohol              | 2220                  | 0.00 U                | 1660                 | 75            | 17-120               |
| 95-50-1    | MS 1,2-Dichlorobenzene         | 2220                  | 0.00 U                | 1440                 | 65            | 32-102               |
| 108-60-1   | MS bis(2-Chloroisopropyl)ether | 2220                  | 0.00 U                | 1110                 | 50            | 32-113               |
| 95-48-7    | MS o-Cresol                    | 2220                  | 0.00 U                | 1390                 | 63            | 31-119               |
| 65794-96-9 | MS m,p-Cresols                 | 2220                  | 0.00 U                | 1580                 | 71            | 35-125               |
| 67-72-1    | MS Hexachloroethane            | 2220                  | 0.00 U                | 1240                 | 56            | 30-100               |
| 98-95-3    | MS Nitrobenzene                | 2220                  | 0.00 U                | 1300                 | 59            | 33-108               |

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1324

Sample Type: Matrix Spike

Client ID: RE15-10-8410MS

Matrix: R

Lab Sample ID:1202023498

%Moisture: 24.9

Instrument: MSD3.I

Analysis Date: 01/27/2010 15:01

Dilution: 1

Analyst: JLD1

Prep Batch ID: 944873

Inj. Vol: .5 uL

Batch ID: 944874

| CAS No   |    | Parmname                   | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg |   | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits |
|----------|----|----------------------------|--------------------------|--------------------------|---|-------------------------|---------------|----------------------|
| 78-59-1  | MS | Isophorone                 | 2220                     | 0.00                     | U | 1370                    | 62            | 34-110               |
| 88-75-5  | MS | 2-Nitrophenol              | 2220                     | 0.00                     | U | 1470                    | 66            | 32-108               |
| 105-67-9 | MS | 2,4-Dimethylphenol         | 2220                     | 0.00                     | U | 1480                    | 67            | 32-115               |
| 111-91-1 | MS | bis(2-Chloroethoxy)methane | 2220                     | 0.00                     | U | 1330                    | 60            | 35-108               |
| 120-83-2 | MS | 2,4-Dichlorophenol         | 2220                     | 0.00                     | U | 1580                    | 71            | 38-110               |
| 65-85-0  | MS | Benzoic acid               | 4430                     | 0.00                     | U | 3860                    | 87            | 18-134               |
| 91-20-3  | MS | Naphthalene                | 2220                     | 0.00                     | U | 1300                    | 59            | 31-105               |
| 106-47-8 | MS | 4-Chloroaniline            | 2220                     | 0.00                     | U | 337                     | 15 *          | 29-123               |
| 87-68-3  | MS | Hexachlorobutadiene        | 2220                     | 0.00                     | U | 1620                    | 73            | 31-109               |
| 91-57-6  | MS | 2-Methylnaphthalene        | 2220                     | 0.00                     | U | 1520                    | 68            | 32-110               |
| 77-47-4  | MS | Hexachlorocyclopentadiene  | 2220                     | 0.00                     | U | 971                     | 44            | 21-122               |
| 88-06-2  | MS | 2,4,6-Trichlorophenol      | 2220                     | 0.00                     | U | 1660                    | 75            | 37-108               |
| 95-95-4  | MS | 2,4,5-Trichlorophenol      | 2220                     | 0.00                     | U | 1660                    | 75            | 37-116               |
| 91-58-7  | MS | 2-Chloronaphthalene        | 2220                     | 0.00                     | U | 1490                    | 67            | 37-103               |
| 88-74-4  | MS | 2-Nitroaniline             | 2220                     | 0.00                     | U | 1210                    | 55            | 36-115               |
| 99-09-2  | MS | <i>o</i> -Nitroaniline     | 2220                     | 0.00                     | U | 878                     | 40            | 39-117               |
| 131-11-3 | MS | 3-Nitroaniline             | 2220                     | 0.00                     | U | 1550                    | 70            | 41-105               |
| 606-20-2 | MS | <i>m</i> -Nitroaniline     | 2220                     | 0.00                     | U | 1480                    | 67            | 41-103               |
| 208-96-8 | MS | Dimethylphthalate          | 2220                     | 0.00                     | U | 1510                    | 68            | 41-103               |
| 51-28-5  | MS | 2,6-Dinitrotoluene         | 2220                     | 0.00                     | U | 1340                    | 60            | 25-104               |
| 132-64-9 | MS | Acenaphthylene             | 2220                     | 0.00                     | U | 1940                    | 87            | 40-114               |
| 84-66-2  | MS | Dibenzofuran               | 2220                     | 0.00                     | U | 1610                    | 73            | 43-110               |
|          | MS | Diethylphthalate           | 2220                     | 0.00                     | U |                         |               |                      |

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1324

Sample Type: Matrix Spike

Client ID: RE15-10-8410MS

Matrix: R

Lab Sample ID: 1202023498

% Moisture: 24.9

Instrument: MSD3.1

Analysis Date: 01/27/2010 15:01

Dilution: 1

Analyst: JLD1

Prep Batch ID: 944873

Inj. Vol: .5 uL

Batch ID: 944874

| CAS No    |    | Parmname                                   | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg |   | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits |
|-----------|----|--|--------------------------|--------------------------|---|-------------------------|---------------|----------------------|
| 86-73-7   | MS | Fluorene                                   | 2220                     | 0.00                     | U | 1660                    | 75            | 48-99                |
| 7005-72-3 | MS | 4-Chlorophenylphenylether                  | 2220                     | 0.00                     | U | 1750                    | 79            | 42-111               |
| 534-52-1  | MS | 2-Methyl-4,6-dinitrophenol                 | 2220                     | 0.00                     | U | 1400                    | 63            | 19-118               |
| 100-01-6  | MS | 4-Nitroaniline<br><i>p-Nitroaniline</i>    | 2220                     | 0.00                     | U | 1030                    | 46            | 35-139               |
| 122-39-4  | MS | Diphenylamine                              | 2220                     | 0.00                     | U | 1530                    | 69            | 41-112               |
| 122-66-7  | MS | Azobenzene<br><i>1,2-Diphenylhydrazine</i> | 2220                     | 0.00                     | U | 1270                    | 57            | 37-118               |
| 101-55-3  | MS | 4-Bromophenylphenylether                   | 2220                     | 0.00                     | U | 1490                    | 67            | 39-112               |
| 118-74-1  | MS | Hexachlorobenzene                          | 2220                     | 0.00                     | U | 1490                    | 67            | 38-113               |
| 85-01-8   | MS | Phenanthrene                               | 2220                     | 0.00                     | U | 1520                    | 69            | 38-110               |
| 120-12-7  | MS | Anthracene                                 | 2220                     | 0.00                     | U | 1520                    | 69            | 38-112               |
| 84-74-2   | MS | Di-n-butylphthalate                        | 2220                     | 0.00                     | U | 1600                    | 72            | 42-119               |
| 206-44-0  | MS | Fluoranthene                               | 2220                     | 0.00                     | U | 1490                    | 67            | 38-119               |
| 85-68-7   | MS | Butylbenzylphthalate                       | 2220                     | 0.00                     | U | 1850                    | 83            | 39-126               |
| 56-55-3   | MS | Benzo(a)anthracene                         | 2220                     | 0.00                     | U | 1510                    | 68            | 39-110               |
| 91-94-1   | MS | 3,3'-Dichlorobenzidine                     | 2220                     | 0.00                     | U | 0.00                    | 0 *           | 35-106               |
| 218-01-9  | MS | Chrysene                                   | 2220                     | 0.00                     | U | 1530                    | 69            | 39-109               |
| 117-81-7  | MS | bis(2-Ethylhexyl)phthalate                 | 2220                     | 0.00                     | U | 1870                    | 84            | 40-125               |
| 117-84-0  | MS | Di-n-octylphthalate                        | 2220                     | 0.00                     | U | 2400                    | 108           | 30-147               |
| 205-99-2  | MS | Benzo(b)fluoranthene                       | 2220                     | 0.00                     | U | 1780                    | 81            | 38-117               |
| 207-08-9  | MS | Benzo(k)fluoranthene                       | 2220                     | 0.00                     | U | 1700                    | 77            | 39-120               |
| 50-32-8   | MS | Benzo(a)pyrene                             | 2220                     | 0.00                     | U | 1690                    | 76            | 40-115               |
| 193-39-5  | MS | Indeno(1,2,3-cd)pyrene                     | 2220                     | 0.00                     | U | 1420                    | 64            | 32-120               |

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

Page 4 of 8

SDG Number: 10-1324

Sample Type: Matrix Spike

Client ID: RE15-10-8410MS

Matrix: R

Lab Sample ID:1202023498

% Moisture: 24.9

Instrument: MSD3.I

Analysis Date: 01/27/2010 15:01

Dilution: 1

Analyst: JLD1

Prep Batch ID: 944873

Inj. Vol: .5 uL

Batch ID: 944874

| CAS No   | Parmname                  | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits |
|----------|---------------------------|--------------------------|--------------------------|-------------------------|---------------|----------------------|
| 53-70-3  | MS Dibenzo(a,h)anthracene | 2220                     | 0.00 U                   | 1480                    | 67            | 32-124               |
| 191-24-2 | MS Benzo(ghi)perylene     | 2220                     | 0.00 U                   | 1320                    | 60            | 28-119               |
| 120-82-1 | MS 1,2,4-Trichlorobenzene | 2220                     | 0.00 U                   | 1560                    | 70            | 31-105               |

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1324

Sample Type: Matrix Spike Duplicate

Client ID: RE15-10-8410MSD

Matrix: R

Lab Sample ID: 1202023499

% Moisture: 24.9

Instrument: MSD3.I

Analysis Date: 01/27/2010 15:26

Dilution: 1

Analyst: JLD1

Prep Batch ID: 944873

Inj. Vol: .5 uL

Batch ID: 944874

| CAS No     | Parmname                        | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg |   | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits | RPD<br>% | Acceptance<br>Limits |
|------------|---------------------------------|--------------------------|--------------------------|---|-------------------------|---------------|----------------------|----------|----------------------|
| 62-75-9    | MSD N-Methyl-N-nitrosomethylam  | 2220                     | 0.00                     | U | 986                     | 44            | 32-90                | 4        | 0-30                 |
| 108-95-2   | MSD Phenol                      | 2220                     | 0.00                     | U | 1420                    | 64            | 32-105               | 6        | 0-30                 |
| 95-57-8    | MSD 2-Chlorophenol              | 2220                     | 0.00                     | U | 1600                    | 72            | 33-106               | 7        | 0-30                 |
| 106-46-7   | MSD 1,4-Dichlorobenzene         | 2220                     | 0.00                     | U | 1460                    | 66            | 33-95                | 4        | 0-30                 |
| 621-64-7   | MSD N-Nitrosodipropylamine      | 2220                     | 0.00                     | U | 1390                    | 63            | 31-109               | 5        | 0-30                 |
| 59-50-7    | MSD 4-Chloro-3-methylphenol     | 2220                     | 0.00                     | U | 1710                    | 77            | 38-119               | 7        | 0-30                 |
| 83-32-9    | MSD Accnaphthene                | 2220                     | 0.00                     | U | 1520                    | 69            | 39-100               | 5        | 0-30                 |
| 121-14-2   | MSD 2,4-Dinitrotoluene          | 2220                     | 0.00                     | U | 1640                    | 74            | 42-107               | 5        | 0-30                 |
| 100-02-7   | MSD 4-Nitrophenol               | 2220                     | 0.00                     | U | 1650                    | 74            | 24-120               | 6        | 0-30                 |
| 87-86-5    | MSD Pentachlorophenol           | 2220                     | 0.00                     | U | 1790                    | 80            | 26-121               | 1        | 0-30                 |
| 129-00-0   | MSD Pyrene                      | 2220                     | 0.00                     | U | 1940                    | 87            | 34-120               | 3        | 0-30                 |
| 110-86-1   | MSD Pyridine                    | 2220                     | 0.00                     | U | 1150                    | 52            | 30-95                | 5        | 0-30                 |
| 62-53-3    | MSD Aniline                     | 2220                     | 0.00                     | U | 191                     | 9 *           | 34-111               | 73 *     | 0-30                 |
| 111-44-4   | MSD bis(2-Chloroethyl) ether    | 2220                     | 0.00                     | U | 1150                    | 52            | 34-101               | 4        | 0-30                 |
| 541-73-1   | MSD 1,3-Dichlorobenzene         | 2220                     | 0.00                     | U | 1450                    | 66            | 31-97                | 4        | 0-30                 |
| 100-51-6   | MSD Benzyl alcohol              | 2220                     | 0.00                     | U | 1770                    | 80            | 17-120               | 6        | 0-30                 |
| 95-50-1    | MSD 1,2-Dichlorobenzene         | 2220                     | 0.00                     | U | 1500                    | 68            | 32-102               | 4        | 0-30                 |
| 108-60-1   | MSD bis(2-Chloroisopropyl)ether | 2220                     | 0.00                     | U | 1170                    | 53            | 32-113               | 6        | 0-30                 |
| 95-48-7    | MSD o-Cresol                    | 2220                     | 0.00                     | U | 1490                    | 67            | 31-119               | 6        | 0-30                 |
| 65794-96-9 | MSD m,p-Cresols                 | 2220                     | 0.00                     | U | 1690                    | 76            | 35-125               | 7        | 0-30                 |
| 67-72-1    | MSD Hexachloroethane            | 2220                     | 0.00                     | U | 1230                    | 56            | 30-100               | 1        | 0-30                 |
| 98-95-3    | MSD Nitrobenzene                | 2220                     | 0.00                     | U | 1340                    | 60            | 33-108               | 3        | 0-30                 |



## Semi-Volatile

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1324

Sample Type: Matrix Spike Duplicate

Client ID: RE15-10-8410MSD

Matrix: R

Lab Sample ID: 1202023499

%Moisture: 24.9

Instrument: MSD3.I

Analysis Date: 01/27/2010 15:26

Dilution: 1

Analyst: JLD1

Pren Batch ID: 944873

Inj. Vol: .5 uL

Batch ID: 944874

| CAS No   | Parname                                      | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg |   | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits | RPD<br>% | Acceptance<br>Limits |
|----------|--|--------------------------|--------------------------|---|-------------------------|---------------|----------------------|----------|----------------------|
| 78-59-1  | MSD Isophorone                               | 2220                     | 0.00                     | U | 1430                    | 65            | 34-110               | 4        | 0-30                 |
| 88-75-5  | MSD 2-Nitrophenol                            | 2220                     | 0.00                     | U | 1510                    | 68            | 32-108               | 3        | 0-30                 |
| 105-67-9 | MSD 2,4-Dimethylphenol                       | 2220                     | 0.00                     | U | 1570                    | 71            | 32-115               | 6        | 0-30                 |
| 111-91-1 | MSD bis(2-Chloroethoxy)methane               | 2220                     | 0.00                     | U | 1380                    | 62            | 35-108               | 4        | 0-30                 |
| 120-83-2 | MSD 2,4-Dichlorophenol                       | 2220                     | 0.00                     | U | 1670                    | 75            | 38-110               | 6        | 0-30                 |
| 65-85-0  | MSD Benzoic acid                             | 4440                     | 0.00                     | U | 4190                    | 95            | 18-134               | 8        | 0-30                 |
| 91-20-3  | MSD Naphthalene                              | 2220                     | 0.00                     | U | 1360                    | 61            | 31-105               | 4        | 0-30                 |
| 106-47-8 | MSD 4-Chloroaniline                          | 2220                     | 0.00                     | U | 288                     | 13 *          | 29-123               | 16       | 0-30                 |
| 87-68-3  | MSD Hexachlorobutadiene                      | 2220                     | 0.00                     | U | 1670                    | 75            | 31-109               | 3        | 0-30                 |
| 91-57-6  | MSD 2-Methylnaphthalene                      | 2220                     | 0.00                     | U | 1600                    | 72            | 32-110               | 6        | 0-30                 |
| 77-47-4  | MSD Hexachlorocyclopentadiene                | 2220                     | 0.00                     | U | 809                     | 36            | 21-122               | 18       | 0-30                 |
| 88-06-2  | MSD 2,4,6-Trichlorophenol                    | 2220                     | 0.00                     | U | 1760                    | 79            | 37-108               | 6        | 0-30                 |
| 95-95-4  | MSD 2,4,5-Trichlorophenol                    | 2220                     | 0.00                     | U | 1750                    | 79            | 37-116               | 6        | 0-30                 |
| 91-58-7  | MSD 2-Chloronaphthalene                      | 2220                     | 0.00                     | U | 1570                    | 71            | 37-103               | 5        | 0-30                 |
| 88-74-4  | MSD 2-Nitroaniline<br><i>o</i> -Nitroaniline | 2220                     | 0.00                     | U | 1300                    | 58            | 36-115               | 7        | 0-30                 |
| 99-09-2  | MSD 3-Nitroaniline<br><i>m</i> -Nitroaniline | 2220                     | 0.00                     | U | 670                     | 30 *          | 39-117               | 27       | 0-30                 |
| 131-11-3 | MSD Dimethylphthalate                        | 2220                     | 0.00                     | U | 1650                    | 74            | 41-105               | 6        | 0-30                 |
| 606-20-2 | MSD 2,6-Dinitrotoluene                       | 2220                     | 0.00                     | U | 1560                    | 70            | 41-103               | 5        | 0-30                 |
| 208-96-8 | MSD Acenaphthylene                           | 2220                     | 0.00                     | U | 1600                    | 72            | 41-103               | 6        | 0-30                 |
| 51-28-5  | MSD 2,4-Dinitrophenol                        | 2220                     | 0.00                     | U | 1200                    | 54            | 25-104               | 11       | 0-30                 |
| 132-64-9 | MSD Dibenzofuran                             | 2220                     | 0.00                     | U | 2050                    | 92            | 40-114               | 6        | 0-30                 |
| 84-66-2  | MSD Diethylphthalate                         | 2220                     | 0.00                     | U | 1730                    | 78            | 43-110               | 7        | 0-30                 |

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1324

Sample Type: Matrix Spike Duplicate

Client ID: RE15-10-8410MSD

Matrix: R

Lab Sample ID: 1202023499

%Moisture: 24.9

Instrument: MSD3.I

Analysis Date: 01/27/2010 15:26

Dilution: 1

Analyst: JLD1

Preo Batch ID: 944873

Inj. Vol: .5 uL

Batch ID: 944874

| CAS No    | Parmname                                       | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg |   | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits | RPD<br>% | Acceptance<br>Limits |
|-----------|--|--------------------------|--------------------------|---|-------------------------|---------------|----------------------|----------|----------------------|
| 86-73-7   | MSD Fluorenc                                   | 2220                     | 0.00                     | U | 1660                    | 75            | 48-99                | 0        | 0-30                 |
| 7005-72-3 | MSD 4-Chlorophenylphenylether                  | 2220                     | 0.00                     | U | 1780                    | 80            | 42-111               | 1        | 0-30                 |
| 534-52-1  | MSD 2-Methyl-4,6-dinitrophenol                 | 2220                     | 0.00                     | U | 1300                    | 59            | 19-118               | 8        | 0-30                 |
| 100-01-6  | MSD 4-Nitroaniline<br><i>p-Nitroaniline</i>    | 2220                     | 0.00                     | U | 783                     | 35            | 35-139               | 27       | 0-30                 |
| 122-39-4  | MSD Diphenylamine                              | 2220                     | 0.00                     | U | 1590                    | 72            | 41-112               | 4        | 0-30                 |
| 122-66-7  | MSD Azobenzene<br><i>1,2-Diphenylhydrazine</i> | 2220                     | 0.00                     | U | 1330                    | 60            | 37-118               | 5        | 0-30                 |
| 101-55-3  | MSD 4-Bromophenylphenylether                   | 2220                     | 0.00                     | U | 1520                    | 68            | 39-112               | 2        | 0-30                 |
| 118-74-1  | MSD Hexachlorobenzene                          | 2220                     | 0.00                     | U | 1530                    | 69            | 38-113               | 2        | 0-30                 |
| 85-01-8   | MSD Phenanthrene                               | 2220                     | 0.00                     | U | 1600                    | 72            | 38-110               | 5        | 0-30                 |
| 120-12-7  | MSD Anthracene                                 | 2220                     | 0.00                     | U | 1610                    | 72            | 38-112               | 5        | 0-30                 |
| 84-74-2   | MSD Di-n-butylphthalate                        | 2220                     | 0.00                     | U | 1780                    | 80            | 42-119               | 11       | 0-30                 |
| 206-44-0  | MSD Fluoranthene                               | 2220                     | 0.00                     | U | 1750                    | 79            | 38-119               | 16       | 0-30                 |
| 85-68-7   | MSD Butylbenzylphthalate                       | 2220                     | 0.00                     | U | 1890                    | 85            | 39-126               | 2        | 0-30                 |
| 56-55-3   | MSD Benzo(a)anthracene                         | 2220                     | 0.00                     | U | 1590                    | 72            | 39-110               | 6        | 0-30                 |
| 91-94-1   | MSD 3,3'-Dichlorobenzidine                     | 2220                     | 0.00                     | U | 0.00                    | 0 *           | 35-106               | 0        | 0-30                 |
| 218-01-9  | MSD Chrysene                                   | 2220                     | 0.00                     | U | 1610                    | 73            | 39-109               | 5        | 0-30                 |
| 117-81-7  | MSD bis(2-Ethylhexyl)phthalate                 | 2220                     | 0.00                     | U | 1910                    | 86            | 40-125               | 2        | 0-30                 |
| 117-84-0  | MSD Di-n-octylphthalate                        | 2220                     | 0.00                     | U | 2390                    | 108           | 30-147               | 1        | 0-30                 |
| 205-99-2  | MSD Benzo(b)fluoranthene                       | 2220                     | 0.00                     | U | 1830                    | 82            | 38-117               | 2        | 0-30                 |
| 207-08-9  | MSD Benzo(k)fluoranthene                       | 2220                     | 0.00                     | U | 1780                    | 80            | 39-120               | 5        | 0-30                 |
| 50-32-8   | MSD Benzo(a)pyrene                             | 2220                     | 0.00                     | U | 1770                    | 80            | 40-115               | 4        | 0-30                 |
| 193-39-5  | MSD Indeno(1,2,3-cd)pyrene                     | 2220                     | 0.00                     | U | 1690                    | 76            | 32-120               | 17       | 0-30                 |

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1324

Client ID: RE15-10-8410MSD

Lab Sample ID:1202023499

Instrument: MSD3.I

Analyst: JLD1

Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate

Matrix: R

%Moisture: 24.9

Analysis Date: 01/27/2010 15:26

Dilution: 1

Pre Batch ID 944873

Batch ID: 944874

| CAS No   | Parmname                   | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg |   | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits | RPD<br>% | Acceptance<br>Limits |
|----------|----------------------------|--------------------------|--------------------------|---|-------------------------|---------------|----------------------|----------|----------------------|
| 53-70-3  | MSD Dibenzo(a,h)anthracene | 2220                     | 0.00                     | U | 1740                    | 79            | 32-124               | 17       | 0-30                 |
| 191-24-2 | MSD Benzo(ghi)perylene     | 2220                     | 0.00                     | U | 1620                    | 73            | 28-119               | 20       | 0-30                 |
| 120-82-1 | MSD 1,2,4-Trichlorobenzene | 2220                     | 0.00                     | U | 1620                    | 73            | 31-105               | 3        | 0-30                 |

## Method Blank Summary

Page 1 of 1

|                |                     |                |                  |            |                |
|----------------|---------------------|----------------|------------------|------------|----------------|
| SDG Number:    | 10-1324             | Client:        | LANL010          | Matrix:    | SOIL           |
| Client ID:     | MB for batch 944873 | Instrument ID: | MSD3.I           | Data File: | s3a2610.d      |
| Lab Sample ID: | 1202023496          | Prep Date:     | 01/25/2010 21:06 | Analyzed:  | 01/26/10 13:18 |
| Column:        | J&W DB-5MS          | Level:         | LOW              |            |                |

This method blank applies to the following samples and quality control samples:

| Client Sample ID        | Lab Sample ID | File ID   | Date Analyzed | Time Analyzed |
|-------------------------|---------------|-----------|---------------|---------------|
| 01 LCS for batch 944873 | 1202023497    | s3a2611.d | 01/26/10      | 1344          |
| 02 RE15-10-8410         | 245114002     | s3a2714.d | 01/27/10      | 1435          |
| 03 RE15-10-8410MS       | 1202023498    | s3a2715.d | 01/27/10      | 1501          |
| 04 RE15-10-8410MSD      | 1202023499    | s3a2716.d | 01/27/10      | 1526          |
| 05 RE15-10-8411         | 245114003     | s3a2717.d | 01/27/10      | 1552          |
| 06 RE15-10-8412         | 245114004     | s3a2718.d | 01/27/10      | 1618          |
| 07 RE15-10-8441         | 245114005     | s3a2719.d | 01/27/10      | 1644          |
| 08 RE15-10-8425         | 245114007     | s3a2724.d | 01/27/10      | 1853          |
| 09 RE15-10-8423         | 245114010     | s3a2727.d | 01/27/10      | 2010          |
| 10 RE15-10-8413         | 245114006     | s3a2835.d | 01/29/10      | 0054          |
| 11 RE15-10-8422         | 245114008     | s3a2836.d | 01/29/10      | 0119          |
| 12 RE15-10-8417         | 245114009     | s3a2837.d | 01/29/10      | 0144          |
| 13 RE15-10-8418         | 245114012     | s3a2840.d | 01/29/10      | 0259          |
| 14 RE15-10-8424         | 245114013     | s3a2841.d | 01/29/10      | 0324          |
| 15 RE15-10-8421         | 245114014     | s3a2842.d | 01/29/10      | 0349          |
| 16 RE15-10-8420         | 245114015     | s3a2843.d | 01/29/10      | 0414          |
| 17 RE15-10-8416         | 245114011     | s3a2915.d | 01/29/10      | 1736          |

## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1324

Instrument ID: MSD3.I

Injection Date/Time: 20-JAN-10 17:17

Column Description: J&amp;W DB-5MS

Lab File ID /chem/MSD3.i/s012010a.b/s3a2013.d

| m/e | Ion Abundance Criteria             | % Relative Abundance |
|-----|------------------------------------|----------------------|
| 198 | Base Peak, 100% Relative Abundance | 100                  |
| 51  | 30 - 60% of mass 198               | 51.6                 |
| 68  | Less than 2% of mass 69            | 1.9                  |
| 69  | Mass 69 Relative Abundance         | 48.3                 |
| 70  | Less than 2% of mass 69            | 0.5                  |
| 127 | 40 - 60% of mass 198               | 53                   |
| 197 | 0 - 1% of mass 198                 | 0                    |
| 199 | 5 - 9% of mass 198                 | 6.7                  |
| 275 | 10 - 30% of mass 198               | 26.4                 |
| 365 | Greater than 1% of mass 198        | 3.5                  |
| 441 | Present, but less than mass 443    | 74                   |
| 442 | Greater than 40% of mass 198       | 98                   |
| 443 | 17 - 23% of mass 442               | 20.6                 |

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD, BLANKS AND STANDARDS

| Client Sample ID | Lab Sample ID  | Lab File ID                   | Time Analyzed   |
|------------------|----------------|-------------------------------|-----------------|
| MEGAICAL01       | WBN100112-08   | /chem/MSD3.i/s012010a.b/s3a20 | 20-JAN-10 17:59 |
| MEGAICAL010      | WBN100112-07   | /chem/MSD3.i/s012010a.b/s3a20 | 20-JAN-10 18:29 |
| MEGAICAL020      | WBN100112-06   | /chem/MSD3.i/s012010a.b/s3a20 | 20-JAN-10 18:58 |
| MEGAICAL040      | WBN100112-05   | /chem/MSD3.i/s012010a.b/s3a20 | 20-JAN-10 19:28 |
| MEGAICAL050      | WBN100112-04   | /chem/MSD3.i/s012010a.b/s3a20 | 20-JAN-10 19:58 |
| MEGAICAL080      | WBN100112-03   | /chem/MSD3.i/s012010a.b/s3a20 | 20-JAN-10 20:27 |
| MEGAICAL100      | WBN100112-02   | /chem/MSD3.i/s012010a.b/s3a20 | 20-JAN-10 20:57 |
| MEGAICAL120      | WBN100112-01   | /chem/MSD3.i/s012010a.b/s3a20 | 20-JAN-10 21:26 |
| APICAL010        | WBN100103-01   | /chem/MSD3.i/s012010a.b/s3a20 | 20-JAN-10 21:56 |
| APICAL020        | WBN100103-02   | /chem/MSD3.i/s012010a.b/s3a20 | 20-JAN-10 22:22 |
| APICAL040        | WBN100103-03.1 | /chem/MSD3.i/s012010a.b/s3a20 | 20-JAN-10 22:48 |
| APICAL050        | WBN100103-04   | /chem/MSD3.i/s012010a.b/s3a20 | 20-JAN-10 23:15 |
| APICAL080        | WBN100103-05   | /chem/MSD3.i/s012010a.b/s3a20 | 20-JAN-10 23:41 |
| APICAL100        | WBN100103-06   | /chem/MSD3.i/s012010a.b/s3a20 | 21-JAN-10 00:07 |
| APICAL120        | WBN100103-07   | /chem/MSD3.i/s012010a.b/s3a20 | 21-JAN-10 00:33 |
| MEGAICV          | WBN100106-09.3 | /chem/MSD3.i/s012010a.b/s3a20 | 21-JAN-10 00:59 |

## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1324

Instrument ID: MSD3.I

Injection Date/Time: 20-JAN-10 17:17

Column Description: J&amp;W DB-5MS

Lab File ID /chem/MSD3.i/s012010a.b/s3a2013.d

| m/e | Ion Abundance Criteria             | % Relative Abundance |
|-----|------------------------------------|----------------------|
| 198 | Base Peak, 100% Relative Abundance | 100                  |
| 51  | 30 - 60% of mass 198               | 51.6                 |
| 68  | Less than 2% of mass 69            | 1.9                  |
| 69  | Mass 69 Relative Abundance         | 48.3                 |
| 70  | Less than 2% of mass 69            | 0.5                  |
| 127 | 40 - 60% of mass 198               | 53                   |
| 197 | 0 - 1% of mass 198                 | 0                    |
| 199 | 5 - 9% of mass 198                 | 6.7                  |
| 275 | 10 - 30% of mass 198               | 26.4                 |
| 365 | Greater than 1% of mass 198        | 3.5                  |
| 441 | Present, but less than mass 443    | 74                   |
| 442 | Greater than 40% of mass 198       | 98                   |
| 443 | 17 - 23% of mass 442               | 20.6                 |

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

| Client<br>Sample ID | Lab<br>Sample ID | Lab<br>File ID                    | Time<br>Analyzed |
|---------------------|------------------|-----------------------------------|------------------|
| APICV               | WBN100103-08.1   | /chem/MSD3.i/s012010a.b/s3a2013.d | 21-JAN-10 01:29  |

## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1324

Instrument ID: MSD3.I

Injection Date/Time: 26-JAN-10 11:36

Column Description: J&amp;W DB-5MS

Lab File ID /chem/MSD3.i/s012610a.b/s3a2606.d

| m/e | Ion Abundance Criteria             | % Relative Abundance |
|-----|------------------------------------|----------------------|
| 198 | Base Peak, 100% Relative Abundance | 100                  |
| 51  | 30 - 60% of mass 198               | 39.5                 |
| 68  | Less than 2% of mass 69            | 1.8                  |
| 69  | Mass 69 Relative Abundance         | 40.1                 |
| 70  | Less than 2% of mass 69            | 0.5                  |
| 127 | 40 - 60% of mass 198               | 48.3                 |
| 197 | 0 - 1% of mass 198                 | 0                    |
| 199 | 5 - 9% of mass 198                 | 6.7                  |
| 275 | 10 - 30% of mass 198               | 24.2                 |
| 365 | Greater than 1% of mass 198        | 2.6                  |
| 441 | Present, but less than mass 443    | 75.9                 |
| 442 | Greater than 40% of mass 198       | 95.8                 |
| 443 | 17 - 23% of mass 442               | 19.4                 |

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD, BLANKS AND STANDARDS

| Client Sample ID | Lab Sample ID  | Lab File ID                       | Time Analyzed   |
|------------------|----------------|-----------------------------------|-----------------|
| MEGACVS          | WBN100121-17.2 | /chem/MSD3.i/s012610a.b/s3a2606.d | 26-JAN-10 11:48 |
| APCVS            | WBN100120-08.3 | /chem/MSD3.i/s012610a.b/s3a2606.d | 26-JAN-10 12:19 |
| SBLK01           | 1202023496     | /chem/MSD3.i/s012610a.b/s3a2606.d | 26-JAN-10 13:18 |
| SBLK01LCS        | 1202023497     | /chem/MSD3.i/s012610a.b/s3a2606.d | 26-JAN-10 13:44 |

## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1324

Instrument ID: MSD3.I

Injection Date/Time: 27-JAN-10 08:57

Column Description: J&amp;W DB-5MS

Lab File ID /chem/MSD3.i/s012710.b/s3a2701.d

| m/e | Ion Abundance Criteria             | % Relative Abundance |
|-----|------------------------------------|----------------------|
| 198 | Base Peak, 100% Relative Abundance | 100                  |
| 51  | 30 - 60% of mass 198               | 38.6                 |
| 68  | Less than 2% of mass 69            | 1.8                  |
| 69  | Mass 69 Relative Abundance         | 39.9                 |
| 70  | Less than 2% of mass 69            | 0.5                  |
| 127 | 40 - 60% of mass 198               | 48.7                 |
| 197 | 0 - 1% of mass 198                 | 0                    |
| 199 | 5 - 9% of mass 198                 | 6.9                  |
| 275 | 10 - 30% of mass 198               | 24.9                 |
| 365 | Greater than 1% of mass 198        | 2.7                  |
| 441 | Present, but less than mass 443    | 77.7                 |
| 442 | Greater than 40% of mass 198       | 98.2                 |
| 443 | 17 - 23% of mass 442               | 19.3                 |

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD, BLANKS AND STANDARDS

| Client Sample ID | Lab Sample ID  | Lab File ID                    | Time Analyzed   |
|------------------|----------------|--------------------------------|-----------------|
| MEGACVS          | WBN100121-17.2 | /chem/MSD3.i/s012710.b/s3a2701 | 27-JAN-10 09:09 |
| APCVS            | WBN100120-08.4 | /chem/MSD3.i/s012710.b/s3a2701 | 27-JAN-10 10:11 |
| RE15-10-8410     | 245114002      | /chem/MSD3.i/s012710.b/s3a2711 | 27-JAN-10 14:35 |
| RE15-10-8410MS   | 1202023498     | /chem/MSD3.i/s012710.b/s3a2711 | 27-JAN-10 15:01 |
| RE15-10-8410MSD  | 1202023499     | /chem/MSD3.i/s012710.b/s3a2711 | 27-JAN-10 15:26 |
| RE15-10-8411     | 245114003      | /chem/MSD3.i/s012710.b/s3a2711 | 27-JAN-10 15:52 |
| RE15-10-8412     | 245114004      | /chem/MSD3.i/s012710.b/s3a2711 | 27-JAN-10 16:18 |
| RE15-10-8441     | 245114005      | /chem/MSD3.i/s012710.b/s3a2711 | 27-JAN-10 16:44 |
| RE15-10-8425     | 245114007      | /chem/MSD3.i/s012710.b/s3a2721 | 27-JAN-10 18:53 |
| RE15-10-8423     | 245114010      | /chem/MSD3.i/s012710.b/s3a2721 | 27-JAN-10 20:10 |



## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1324

Instrument ID: MSD3.I

Injection Date/Time: 28-JAN-10 18:28

Column Description: J&amp;W DB-5MS

Lab File ID /chem/MSD3.i/s012810a.b/s3a2819.d

| m/e | Ion Abundance Criteria             | % Relative Abundance |
|-----|------------------------------------|----------------------|
| 198 | Base Peak, 100% Relative Abundance | 100                  |
| 51  | 30 - 60% of mass 198               | 37.4                 |
| 68  | Less than 2% of mass 69            | 1.9                  |
| 69  | Mass 69 Relative Abundance         | 38.3                 |
| 70  | Less than 2% of mass 69            | 0.5                  |
| 127 | 40 - 60% of mass 198               | 47.1                 |
| 197 | 0 - 1% of mass 198                 | 0                    |
| 199 | 5 - 9% of mass 198                 | 6.9                  |
| 275 | 10 - 30% of mass 198               | 24.8                 |
| 365 | Greater than 1% of mass 198        | 2.3                  |
| 441 | Present, but less than mass 443    | 77.5                 |
| 442 | Greater than 40% of mass 198       | 91.3                 |
| 443 | 17 - 23% of mass 442               | 19.4                 |

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD, BLANKS AND STANDARDS

| Client Sample ID | Lab Sample ID  | Lab File ID                       | Time Analyzed   |
|------------------|----------------|-----------------------------------|-----------------|
| MEGACVS          | WBN100121-13.5 | /chem/MSD3.i/s012810a.b/s3a2819.d | 28-JAN-10 19:05 |
| APCVS            | WBN100120-08.4 | /chem/MSD3.i/s012810a.b/s3a2819.d | 28-JAN-10 20:23 |
| RE15-10-8413     | 245114006      | /chem/MSD3.i/s012810a.b/s3a2819.d | 29-JAN-10 00:54 |
| RE15-10-8422     | 245114008      | /chem/MSD3.i/s012810a.b/s3a2819.d | 29-JAN-10 01:19 |
| RE15-10-8417     | 245114009      | /chem/MSD3.i/s012810a.b/s3a2819.d | 29-JAN-10 01:44 |
| RE15-10-8418     | 245114012      | /chem/MSD3.i/s012810a.b/s3a2819.d | 29-JAN-10 02:59 |
| RE15-10-8424     | 245114013      | /chem/MSD3.i/s012810a.b/s3a2819.d | 29-JAN-10 03:24 |
| RE15-10-8421     | 245114014      | /chem/MSD3.i/s012810a.b/s3a2819.d | 29-JAN-10 03:49 |
| RE15-10-8420     | 245114015      | /chem/MSD3.i/s012810a.b/s3a2819.d | 29-JAN-10 04:14 |

## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1324

Instrument ID: MSD3.I

Injection Date/Time: 29-JAN-10 14:07

Column Description: J&amp;W DB-5MS

Lab File ID /chem/MSD3.i/s012910a.b/s3a2907.d

| m/e | Ion Abundance Criteria             | % Relative Abundance |
|-----|------------------------------------|----------------------|
| 198 | Base Peak, 100% Relative Abundance | 100                  |
| 51  | 30 - 60% of mass 198               | 39.3                 |
| 68  | Less than 2% of mass 69            | 0.6                  |
| 69  | Mass 69 Relative Abundance         | 39.8                 |
| 70  | Less than 2% of mass 69            | 0.5                  |
| 127 | 40 - 60% of mass 198               | 47.2                 |
| 197 | 0 - 1% of mass 198                 | 0                    |
| 199 | 5 - 9% of mass 198                 | 6.7                  |
| 275 | 10 - 30% of mass 198               | 24.4                 |
| 365 | Greater than 1% of mass 198        | 2.3                  |
| 441 | Present, but less than mass 443    | 79.5                 |
| 442 | Greater than 40% of mass 198       | 82.7                 |
| 443 | 17 - 23% of mass 442               | 19.3                 |

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD, BLANKS AND STANDARDS

| Client Sample ID | Lab Sample ID  | Lab File ID                       | Time Analyzed   |
|------------------|----------------|-----------------------------------|-----------------|
| MEGACVS          | WBN100121-17.2 | /chem/MSD3.i/s012910a.b/s3a2907.d | 29-JAN-10 14:20 |
| APCVS            | WBN100120-08.3 | /chem/MSD3.i/s012910a.b/s3a2907.d | 29-JAN-10 15:22 |
| RE15-10-8416     | 245114011      | /chem/MSD3.i/s012910a.b/s3a2907.d | 29-JAN-10 17:36 |

# Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1324

Instrument: MSD3.I

STD Analysis Time: 26-JAN-10 11:48

GC Column: J&amp;W DB-5MS

Data File: s3a2607.d

|             | 1,4-Dichlorobenzene-d4 |   |      | Naphthalene-d8 |   |      | Acenaphthene-d10 |   |      | Phenanthrene-d10 |   |      | Chrysene-d12 |   |      | Perylene-d12 |   |      |
|-------------|------------------------|---|------|----------------|---|------|------------------|---|------|------------------|---|------|--------------|---|------|--------------|---|------|
|             | Area                   | # | RT # | Area           | # | RT # | Area             | # | RT # | Area             | # | RT # | Area         | # | RT # | Area         | # | RT # |
| 12 Hour STD | 319045                 |   | 4.83 | 1275014        |   | 6.11 | 676019           |   | 7.99 | 1138387          |   | 9.61 | 825135       |   | 12.6 | 556699       |   | 15.0 |
| Upper Limit | 638090                 |   | 5.33 | 2550028        |   | 6.61 | 1352038          |   | 8.49 | 2276774          |   | 10.1 | 1650270      |   | 13.1 | 1113398      |   | 15.5 |
| Lower Limit | 159523                 |   | 4.33 | 637507         |   | 5.61 | 338010           |   | 7.49 | 569194           |   | 9.11 | 412568       |   | 12.1 | 278350       |   | 14.5 |
| Sample ID   |                        |   |      |                |   |      |                  |   |      |                  |   |      |              |   |      |              |   |      |
| K01         | 295272                 |   | 4.83 | 1122963        |   | 6.11 | 621437           |   | 7.99 | 1045631          |   | 9.6  | 912675       |   | 12.6 | 569151       |   | 15.0 |
| K01LCS      | 319102                 |   | 4.83 | 1317273        |   | 6.11 | 674475           |   | 7.99 | 1115519          |   | 9.61 | 914362       |   | 12.6 | 572001       |   | 15.0 |

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk

\* Value outside of QC Limits

# Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1324

Instrument: MSD3.I

STD Analysis Time: 27-JAN-10 09:09

GC Column: J&amp;W DB-5MS

Data File: s3a2702.d

|               | 1,4-Dichlorobenzene-d4 |   |      | Naphthalene-d8 |   |      | Acenaphthene-d10 |   |      | Phenanthrene-d10 |   |      | Chrysene-d12 |   |      | Perylene-d12 |   |      |
|---------------|------------------------|---|------|----------------|---|------|------------------|---|------|------------------|---|------|--------------|---|------|--------------|---|------|
|               | Area                   | # | RT # | Area           | # | RT # | Area             | # | RT # | Area             | # | RT # | Area         | # | RT # | Area         | # | RT # |
| 12 Hour STD   | 267689                 |   | 4.82 | 1068883        |   | 6.1  | 570163           |   | 7.97 | 947337           |   | 9.59 | 775080       |   | 12.6 | 562347       |   | 14.9 |
| Upper Limit   | 535378                 |   | 5.32 | 2137766        |   | 6.6  | 1140326          |   | 8.47 | 1894674          |   | 10.1 | 1550160      |   | 13.1 | 1124694      |   | 15.4 |
| Lower Limit   | 133845                 |   | 4.32 | 534442         |   | 5.6  | 285082           |   | 7.47 | 473669           |   | 9.09 | 387540       |   | 12.1 | 281174       |   | 14.4 |
| Sample ID     |                        |   |      |                |   |      |                  |   |      |                  |   |      |              |   |      |              |   |      |
| 15-10-8410    | 256303                 |   | 4.82 | 1000662        |   | 6.1  | 569902           |   | 7.97 | 945028           |   | 9.59 | 574360       |   | 12.6 | 309567       |   | 15.0 |
| 15-10-8410MS  | 273335                 |   | 4.82 | 1133125        |   | 6.1  | 612121           |   | 7.98 | 1088772          |   | 9.59 | 581717       |   | 12.6 | 289599       |   | 15.0 |
| 15-10-8410MSD | 219997                 |   | 4.82 | 927251         |   | 6.1  | 503952           |   | 7.97 | 852116           |   | 9.59 | 526439       |   | 12.6 | 277466       | * | 15.0 |
| 15-10-8411    | 240803                 |   | 4.82 | 1155876        |   | 6.1  | 542499           |   | 7.97 | 891250           |   | 9.59 | 989280       |   | 12.7 | 321381       |   | 15   |
| 15-10-8412    | 219220                 |   | 4.82 | 872901         |   | 6.1  | 498440           |   | 7.98 | 832193           |   | 9.59 | 603295       |   | 12.6 | 317973       |   | 15.0 |
| 15-10-8441    | 261983                 |   | 4.82 | 1060897        |   | 6.1  | 588808           |   | 7.97 | 988251           |   | 9.59 | 681078       |   | 12.6 | 349318       |   | 15.0 |
| 15-10-8425    | 237250                 |   | 4.82 | 958764         |   | 6.1  | 555197           |   | 7.97 | 916072           |   | 9.59 | 617638       |   | 12.6 | 339000       |   | 15.0 |
| 15-10-8423    | 225865                 |   | 4.82 | 896817         |   | 6.1  | 514542           |   | 7.98 | 826591           |   | 9.59 | 485708       |   | 12.6 | 216837       | * | 15.0 |

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk

\* Value outside of QC Limits

# **Internal Standard Area and RT Summary**

Lab Name : GEL Laboratories LLC

Client SDG: 10-1324

Instrument: MSD3.I

STD Analysis Time: 28-JAN-10 19:05

GC Column: J&amp;W DB-5MS

Data File: s3a2821.d

|             | 1,4-Dichlorobenzene-d4 |   |      | Naphthalene-d8 |   |      | Acenaphthene-d10 |   |      | Phenanthrene-d10 |   |      | Chrysene-d12 |   |      | Perylene-d12 |   |      |
|-------------|------------------------|---|------|----------------|---|------|------------------|---|------|------------------|---|------|--------------|---|------|--------------|---|------|
|             | Area                   | # | RT # | Area           | # | RT # | Area             | # | RT # | Area             | # | RT # | Area         | # | RT # | Area         | # | RT # |
| 12 Hour STD | 564026                 |   | 4.72 | 2270888        |   | 6    | 1166391          |   | 7.87 | 1814958          |   | 9.49 | 1061579      |   | 12.5 | 561008       |   | 14.8 |
| Upper Limit | 1128052                |   | 5.22 | 4541776        |   | 6.5  | 2332782          |   | 8.37 | 3629916          |   | 9.99 | 2123158      |   | 13.0 | 1122016      |   | 15.3 |
| Lower Limit | 282013                 |   | 4.22 | 1135444        |   | 5.5  | 583196           |   | 7.37 | 907479           |   | 8.99 | 530790       |   | 12.0 | 280504       |   | 14.3 |
| Sample ID   |                        |   |      |                |   |      |                  |   |      |                  |   |      |              |   |      |              |   |      |
| 15-10-8413  | 524170                 |   | 4.72 | 2007803        |   | 6    | 1107403          |   | 7.87 | 1664985          |   | 9.48 | 763540       |   | 12.5 | 342601       |   | 14.8 |
| 15-10-8422  | 552577                 |   | 4.72 | 2079079        |   | 6    | 1120987          |   | 7.87 | 1702590          |   | 9.48 | 842046       |   | 12.5 | 384918       |   | 14.8 |
| 15-10-8417  | 580327                 |   | 4.72 | 2156422        |   | 6    | 1151590          |   | 7.87 | 1695979          |   | 9.49 | 760340       |   | 12.5 | 396881       |   | 14.8 |
| 15-10-8418  | 631078                 |   | 4.72 | 2389127        |   | 6    | 1302544          |   | 7.87 | 2065315          |   | 9.49 | 1138163      |   | 12.5 | 513449       |   | 14.8 |
| 15-10-8424  | 635350                 |   | 4.72 | 2302107        |   | 6    | 1165118          |   | 7.87 | 1586639          |   | 9.49 | 637662       |   | 12.5 | 333205       |   | 14.8 |
| 15-10-8421  | 547364                 |   | 4.72 | 2109838        |   | 6    | 1156870          |   | 7.87 | 1769108          |   | 9.48 | 879149       |   | 12.5 | 442632       |   | 14.8 |
| 15-10-8420  | 600182                 |   | 4.72 | 2241939        |   | 6    | 1222050          |   | 7.87 | 1823318          |   | 9.49 | 839225       |   | 12.5 | 431406       |   | 14.8 |

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk

\* Value outside of QC Limits

# **Internal Standard Area and RT Summary**

Lab Name : GEL Laboratories LLC

Client SDG: 10-1324

Instrument: MSD3.I

STD Analysis Time: 29-JAN-10 14:20

GC Column: J&amp;W DB-5MS

Data File: s3a2908.d

|             | 1,4-Dichlorobenzene-d4 |   |      | Naphthalene-d8 |   |      | Acenaphthene-d10 |   |      | Phenanthrene-d10 |   |      | Chrysene-d12 |   |      | Perylene-d12 |   |      |
|-------------|------------------------|---|------|----------------|---|------|------------------|---|------|------------------|---|------|--------------|---|------|--------------|---|------|
|             | Area                   | # | RT # | Area           | # | RT # | Area             | # | RT # | Area             | # | RT # | Area         | # | RT # | Area         | # | RT # |
| 12 Hour STD | 571899                 |   | 4.65 | 2336765        |   | 5.92 | 1194351          |   | 7.79 | 1880547          |   | 9.4  | 1354768      |   | 12.4 | 840914       |   | 14.6 |
| Upper Limit | 1143798                |   | 5.15 | 4673530        |   | 6.42 | 2388702          |   | 8.29 | 3761094          |   | 9.9  | 2709536      |   | 12.9 | 1681828      |   | 15.1 |
| Lower Limit | 285950                 |   | 4.15 | 1168383        |   | 5.42 | 597176           |   | 7.29 | 940274           |   | 8.9  | 677384       |   | 11.9 | 420457       |   | 14.1 |
| Sample ID   |                        |   |      |                |   |      |                  |   |      |                  |   |      |              |   |      |              |   |      |
| 15-10-8416  | 578221                 |   | 4.65 | 2197391        |   | 5.92 | 1198309          |   | 7.79 | 1922801          |   | 9.4  | 1054671      |   | 12.4 | 534652       |   | 14.6 |

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk

\* Value outside of QC Limits

# Sample Data

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114002

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 24.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8410  
Batch ID: 944874  
Run Date: 01/27/2010 14:35  
Prep Date: 01/25/2010 21:06  
Data File: s3a2714.d

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 443    | ug/kg | 88.5    | 443     |
| 108-95-2   | Phenol                        | U         | 443    | ug/kg | 88.5    | 443     |
| 95-57-8    | 2-Chlorophenol                | U         | 443    | ug/kg | 88.5    | 443     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 443    | ug/kg | 88.5    | 443     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 443    | ug/kg | 88.5    | 443     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 443    | ug/kg | 88.5    | 443     |
| 83-32-9    | Acenaphthene                  | U         | 44.3   | ug/kg | 14.6    | 44.3    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 443    | ug/kg | 44.3    | 443     |
| 100-02-7   | 4-Nitrophenol                 | U         | 443    | ug/kg | 146     | 443     |
| 87-86-5    | Pentachlorophenol             | U         | 443    | ug/kg | 111     | 443     |
| 129-00-0   | Pyrene                        | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 110-86-1   | Pyridine                      | U         | 443    | ug/kg | 88.5    | 443     |
| 62-53-3    | Aniline                       | U         | 443    | ug/kg | 133     | 443     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 443    | ug/kg | 88.5    | 443     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 443    | ug/kg | 88.5    | 443     |
| 100-51-6   | Benzyl alcohol                | U         | 443    | ug/kg | 133     | 443     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 443    | ug/kg | 88.5    | 443     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 443    | ug/kg | 88.5    | 443     |
| 95-48-7    | o-Cresol                      | U         | 443    | ug/kg | 88.5    | 443     |
| 65794-96-9 | m,p-Cresols                   | U         | 443    | ug/kg | 133     | 443     |
| 67-72-1    | Hexachloroethane              | U         | 443    | ug/kg | 88.5    | 443     |
| 98-95-3    | Nitrobenzene                  | U         | 443    | ug/kg | 88.5    | 443     |
| 78-59-1    | Isophorone                    | U         | 443    | ug/kg | 88.5    | 443     |
| 88-75-5    | 2-Nitrophenol                 | U         | 443    | ug/kg | 88.5    | 443     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 443    | ug/kg | 155     | 443     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 443    | ug/kg | 88.5    | 443     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 443    | ug/kg | 88.5    | 443     |
| 65-85-0    | Benzoic acid                  | U         | 885    | ug/kg | 221     | 885     |
| 91-20-3    | Naphthalene                   | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 106-47-8   | 4-Chloroaniline               | U         | 443    | ug/kg | 88.5    | 443     |
| 87-68-3    | Hexachlorobutadiene           | U         | 443    | ug/kg | 88.5    | 443     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 44.3   | ug/kg | 8.85    | 44.3    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 443    | ug/kg | 88.5    | 443     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 443    | ug/kg | 88.5    | 443     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 443    | ug/kg | 88.5    | 443     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 44.3   | ug/kg | 14.6    | 44.3    |
| 88-74-4    | 2-Nitroaniline                | U         | 443    | ug/kg | 88.5    | 443     |
| 99-09-2    | <i>o</i> -Nitroaniline        | U         | 443    | ug/kg | 88.5    | 443     |
|            | 3-Nitroaniline                |           |        |       |         |         |



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114002

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
% Moisture: 24.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|------------------------------|-----------|--------|-------|---------|---------|
|           | <i>m</i> -Nitroaniline       |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate            | U         | 443    | ug/kg | 88.5    | 443     |
| 606-20-2  | 2,6-Dinitrotoluene           | U         | 443    | ug/kg | 44.3    | 443     |
| 208-96-8  | Accnaphthylene               | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 51-28-5   | 2,4-Dinitrophenol            | U         | 885    | ug/kg | 168     | 885     |
| 132-64-9  | Dibenzofuran                 | U         | 443    | ug/kg | 88.5    | 443     |
| 84-66-2   | Diethylphthalate             | U         | 443    | ug/kg | 88.5    | 443     |
| 86-73-7   | Fluorene                     | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 7005-72-3 | 4-Chlorophenylphenylether    | U         | 443    | ug/kg | 88.5    | 443     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol   | U         | 443    | ug/kg | 88.5    | 443     |
| 100-01-6  | 4-Nitroaniline               | U         | 443    | ug/kg | 133     | 443     |
|           | <i>p</i> -Nitroaniline       |           |        |       |         |         |
| 122-39-4  | Diphenylamine                | U         | 443    | ug/kg | 88.5    | 443     |
| 122-66-7  | Azobenzene                   | U         | 443    | ug/kg | 88.5    | 443     |
|           | <i>1,2-Diphenylhydrazine</i> |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether     | U         | 443    | ug/kg | 88.5    | 443     |
| 118-74-1  | Hexachlorobenzene            | U         | 443    | ug/kg | 88.5    | 443     |
| 85-01-8   | Phenanthrene                 | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 120-12-7  | Anthracene                   | U         | 44.3   | ug/kg | 8.85    | 44.3    |
| 84-74-2   | Di-n-butylphthalate          | U         | 443    | ug/kg | 88.5    | 443     |
| 206-44-0  | Fluoranthene                 | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 85-68-7   | Butylbenzylphthalate         | U         | 443    | ug/kg | 88.5    | 443     |
| 56-55-3   | Benzo(a)anthracene           | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 91-94-1   | 3,3'-Dichlorobenzidine       | U         | 443    | ug/kg | 133     | 443     |
| 218-01-9  | Chrysene                     | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate   | U         | 443    | ug/kg | 88.5    | 443     |
| 117-84-0  | Di-n-octylphthalate          | U         | 443    | ug/kg | 88.5    | 443     |
| 205-99-2  | Benzo(b)fluoranthene         | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 207-08-9  | Benzo(k)fluoranthene         | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 50-32-8   | Benzo(a)pyrene               | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene       | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 53-70-3   | Dibenzo(a,h)anthracene       | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 191-24-2  | Benzo(ghi)perylene           | U         | 44.3   | ug/kg | 13.3    | 44.3    |
| 120-82-1  | 1,2,4-Trichlorobenzene       | U         | 443    | ug/kg | 88.5    | 443     |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.12 | 370       | ug/kg |     | J    |
|         | Unknown                               | 2.3  | 314       | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114002

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 24.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.  | Parmname                                 | Qualifier | Result    | Units | MDL/LOD | PQL/LOQ |
|--|--|-----------|-----------|-------|---------|---------|
| <b>Tentatively Identified Compound Summary</b> |  |           |           |       |         |         |
| CAS No.  | Tentatively Identified Compound (TIC)    | RT        | Estimated | Units | Fit     | Qual    |
|  | Unknown Aldol Condensate                 | 3.4       | 248       | ug/kg |         | JA      |
| 7785-70-8                                      | 1R-.alpha.-Pinene                        | 4.18      | 517       | ug/kg | 98      | NJ      |
|  | Unknown                                  | 4.35      | 302       | ug/kg |         | J       |
|  | Unknown                                  | 4.48      | 382       | ug/kg |         | J       |
|  | Unknown                                  | 5.77      | 329       | ug/kg |         | J       |
| 103-82-2                                       | Benzeneacetic acid                       | 6.33      | 262       | ug/kg | 91      | NJ      |
| 544-63-8                                       | Tetradecanoic acid                       | 9.19      | 286       | ug/kg | 99      | NJ      |
| 57-10-3  | n-Hexadecanoic acid                      | 10.13     | 215       | ug/kg | 98      | NJ      |
| 1000197-14-1                                   | 4b,8-Dimethyl-2-isopropylphenanthrene, 4 | 10.6      | 181       | ug/kg | 98      | NJ      |
|  | Unknown                                  | 11.51     | 307       | ug/kg |         | J       |
|  | Unknown                                  | 11.76     | 467       | ug/kg |         | J       |
|  | Unknown                                  | 11.8      | 562       | ug/kg |         | J       |
| 1235-74-1                                      | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.86     | 307       | ug/kg | 99      | NJ      |
|  | Unknown                                  | 11.89     | 229       | ug/kg |         | J       |
|  | Unknown                                  | 12.22     | 387       | ug/kg |         | J       |
|  | Unknown                                  | 12.35     | 670       | ug/kg |         | J       |
|  | Unknown                                  | 13.25     | 289       | ug/kg |         | J       |
| 309735-29-3                                    | 1,2-Benzisothiazole, 3-(hexahydro-1H-aze | 13.33     | 255       | ug/kg | 91      | NJ      |
|  | Unknown                                  | 15.08     | 776       | ug/kg |         | J       |
| 2883-08-1                                      | Cyclohexane, 1,1'-(2-methyl-1,3-propaned | 15.8      | 890       | ug/kg | 89      | NJ      |
|  | Unknown                                  | 15.89     | 514       | ug/kg |         | J       |
|  | Unknown                                  | 15.94     | 656       | ug/kg |         | J       |
|  | Unknown                                  | 16.82     | 645       | ug/kg |         | J       |
| 1000214-20-7                                   | Stigmasterol, 22,23-dihydro-             | 17.65     | 1970      | ug/kg | 95      | NJ      |
| 1058-61-3                                      | Stigmast-4-en-3-one                      | 18.79     | 1440      | ug/kg | 93      | NJ      |

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2714.d  
Lab Smp Id: 245114002 Client Smp ID: RE15-10-8410  
Inj Date : 27-JAN-2010 14:35  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |245114002|944874|1|SVMF|1|LANL  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m  
Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 14  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1324.sub  
Target Version: 3.50  
Processing Host: hpclpl

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.09000  | weight of sample          |
| M    | 24.92040  | % moisture                |

Cpnd Variable Local Compound Variable

| Compounds                   | QUANT STG |        |        |         | CONCENTRATIONS |                      |                  |
|-----------------------------|-----------|--------|--------|---------|----------------|----------------------|------------------|
|                             | MASS      | RT     | EXP RT | REL RT  | RESPONSE       | ON-COLUMN<br>(ng/ul) | FTNAL<br>(ug/Kg) |
| * 10 1,4-Dichlorobenzene-d4 | 152       | 4.816  | 4.817  | (1.000) | 256303         | 40.0000              |                  |
| * 29 Naphthalene-d8         | 136       | 6.095  | 6.100  | (1.000) | 1000662        | 40.0000              |                  |
| * 46 Acenaphthene-d10       | 164       | 7.970  | 7.973  | (1.000) | 569902         | 40.0000              |                  |
| * 67 Phenanthrene-d10       | 188       | 9.589  | 9.588  | (1.000) | 945028         | 40.0000              |                  |
| * 91 Chrysene-d12           | 240       | 12.610 | 12.610 | (1.000) | 574360         | 40.0000              |                  |
| * 98 Perylene-d12           | 264       | 14.951 | 14.945 | (1.000) | 309567         | 40.0000              |                  |
| \$ 3 2-Fluorophenol         | 112       | 3.642  | 3.633  | (0.756) | 476451         | 71.4391              | 3160             |
| \$ 5 Phenol-d5              | 99        | 4.419  | 4.418  | (0.918) | 567042         | 67.6506              | 2990             |
| \$ 20 Nitrobenzene-d5       | 82        | 5.353  | 5.357  | (0.878) | 276820         | 37.4497              | 1660             |
| \$ 39 2-Fluorobiphenyl      | 172       | 7.223  | 7.227  | (0.906) | 575092         | 39.0402              | 1730             |
| \$ 60 2,4,6-Tribromophenol  | 329       | 8.823  | 8.825  | (1.107) | 154541         | 94.5927              | 4190             |
| \$ 81 p-Terphenyl-d14       | 244       | 11.300 | 11.297 | (0.896) | 567369         | 57.4716              | 2540             |

## ION RATIO REPORT

## SV REPORT

Data file: s3a2714.d

Report Date: 01/27/2010 15:44

Lab. ID: 245114002

SampleType: SAMPLE

Injection Date: 27-JAN-2010 14:35

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245114002|944874|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1324

Sample Matrix: SOIL

| MASS                      | RESPONSE | RT             | EXPECT RT | TARGET RANGE | RATIO | QUAL |
|---------------------------|----------|----------------|-----------|--------------|-------|------|
| =====                     |          |                |           |              |       |      |
| 4 Aniline                 |          | CAS#: 62-53-3  |           |              |       |      |
| 66                        | 34012    | 4.42           | 4.50      | 80-120       | 100   | (T)  |
| 93                        | 31368    | 4.48           | 4.50      | 205-265      | 92    | (Q)  |
| -----                     |          |                |           |              |       |      |
| 17 N-Nitrosodipropylamine |          | CAS#: 621-64-7 |           |              |       |      |
| 70                        | 40328    | 5.35           | 5.19      | 80-120       | 100   | (T)  |
| 42                        | 26828    | 5.35           | 5.19      | 43-103       | 67    | (T)  |
| -----                     |          |                |           |              |       |      |
| 40 2-Chloronaphthalene    |          | CAS#: 91-58-7  |           |              |       |      |
| 162                       | 16494    | 7.57           | 7.37      | 80-120       | 100   | (T)  |
| 164                       | 1070     | 7.57           | 7.37      | 2- 62        | 6     | (T)  |
| 127                       | 1418     | 7.57           | 7.37      | 9- 69        | 9     | (QT) |
| -----                     |          |                |           |              |       |      |
| 42 o-Nitroaniline         |          | CAS#: 88-74-4  |           |              |       |      |
| 65                        | 22244    | 7.57           | 7.47      | 80-120       | 100   | (T)  |
| 92                        | 24040    | 7.57           | 7.47      | 33- 93       | 108   | (QT) |
| 138                       | 2032     | 7.57           | 7.47      | 72-132       | 9     | (QT) |
| -----                     |          |                |           |              |       |      |
| 41 m-Nitroaniline         |          | CAS#: 99-09-2  |           |              |       |      |
| 138                       | 275      | 7.91           | 7.92      | 80-120       | 100   | ( )  |
| 92                        | 656      | 7.94           | 7.92      | 79-139       | 238   | (Q)  |
| 108                       | 584      | 7.88           | 7.92      | 0- 40        | 212   | (Q)  |
| -----                     |          |                |           |              |       |      |
| 44 2,6-Dinitrotoluene     |          | CAS#: 606-20-2 |           |              |       |      |
| 165                       | 75726    | 7.97           | 7.73      | 80-120       | 100   | (T)  |
| 63                        | 1636     | 7.97           | 7.73      | 35- 95       | 2     | (QT) |
| -----                     |          |                |           |              |       |      |

| MASS   | RESPONSE | RT    | EXPECT RT | TARGET RANGE   | RATIO | QUAL |
|--|----------|-------|-----------|----------------|-------|------|
| =====  |          |       |           |                |       |      |
| 50 2,4-Dinitrotoluene                              |          |       |           | CAS#: 121-14-2 |       |      |
| 165  | 75726    | 7.97  | 8.16      | 80-120         | 100   | (T)  |
| 89   | 1157     | 7.97  | 8.16      | 42-102         | 2     | (QT) |
| 63   | 1636     | 7.97  | 8.16      | 20- 80         | 2     | (QT) |
| -----  |          |       |           |                |       |      |
| 56 p-Nitroaniline                                  |          |       |           | CAS#: 100-01-6 |       |      |
| 138  | 281      | 8.62  | 8.58      | 80-120         | 100   | ( )  |
| 108  | 846      | 8.66  | 8.58      | 41-101         | 300   | (QT) |
| 92   | 206      | 8.60  | 8.58      | 17- 77         | 73    | ( )  |
| -----  |          |       |           |                |       |      |
| 90 3,3'-Dichlorobenzidine                          |          |       |           | CAS#: 91-94-1  |       |      |
| 252  | 351      | 12.51 | 12.53     | 80-120         | 100   | ( )  |
| 254  | 327      | 12.51 | 12.53     | 35- 95         | 93    | ( )  |
| 126  | 130      | 12.57 | 12.53     | 0- 45          | 37    | ( )  |
| -----  |          |       |           |                |       |      |
| Q qualifier indicates ion failed ratio requirement |          |       |           |                |       |      |

Report Date: 27-Jan-2010 15:48

## GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2714.d

Lab Smp Id: 245114002

Client Smp ID: RE15-10-8410

Inj Date : 27-JAN-2010 14:35

Operator : JLD1

Inst ID: MSD3.i

Smp Info : |245114002|944874|1|SVMF|1|LANL

Misc Info : |MSD8270 S|WBN100107-02|

Comment : Column: J&amp;W DB-5MS, 25 m x 0.20 mm x 0.33 micron film

Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m

Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD

Cal Date : 21-JAN-2010 21:36

Cal File: s3a2130.d

Als bottle: 14

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1324.sub

Target Version: 3.50

Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.09000  | weight of sample          |
| M    | 24.92040  | % moisture                |

Cpnd Variable

Local Compound Variable

| ISTD                        | RT     | AREA    | AMOUNT |
|-----------------------------|--------|---------|--------|
| * 10 1,4-Dichlorobenzene-d4 | 4.816  | 1663286 | 40.000 |
| * 29 Naphthalene-d8         | 6.095  | 2146896 | 40.000 |
| * 67 Phenanthrene-d10       | 9.589  | 2372141 | 40.000 |
| * 91 Chrysene-d12           | 12.610 | 1648196 | 40.000 |
| * 98 Perylene-d12           | 14.951 | 875807  | 40.000 |

| CONCENTRATIONS |       |               |              |       | QUANT   |           |        |
|----------------|-------|---------------|--------------|-------|---------|-----------|--------|
| RT             | AREA  | ON-COL(ng/ul) | FINAL(ug/Kg) | QUAL  | LIBRARY | LIB ENTRY | CPND # |
| =====          | ===== | =====         | =====        | ===== | =====   | =====     | =====  |

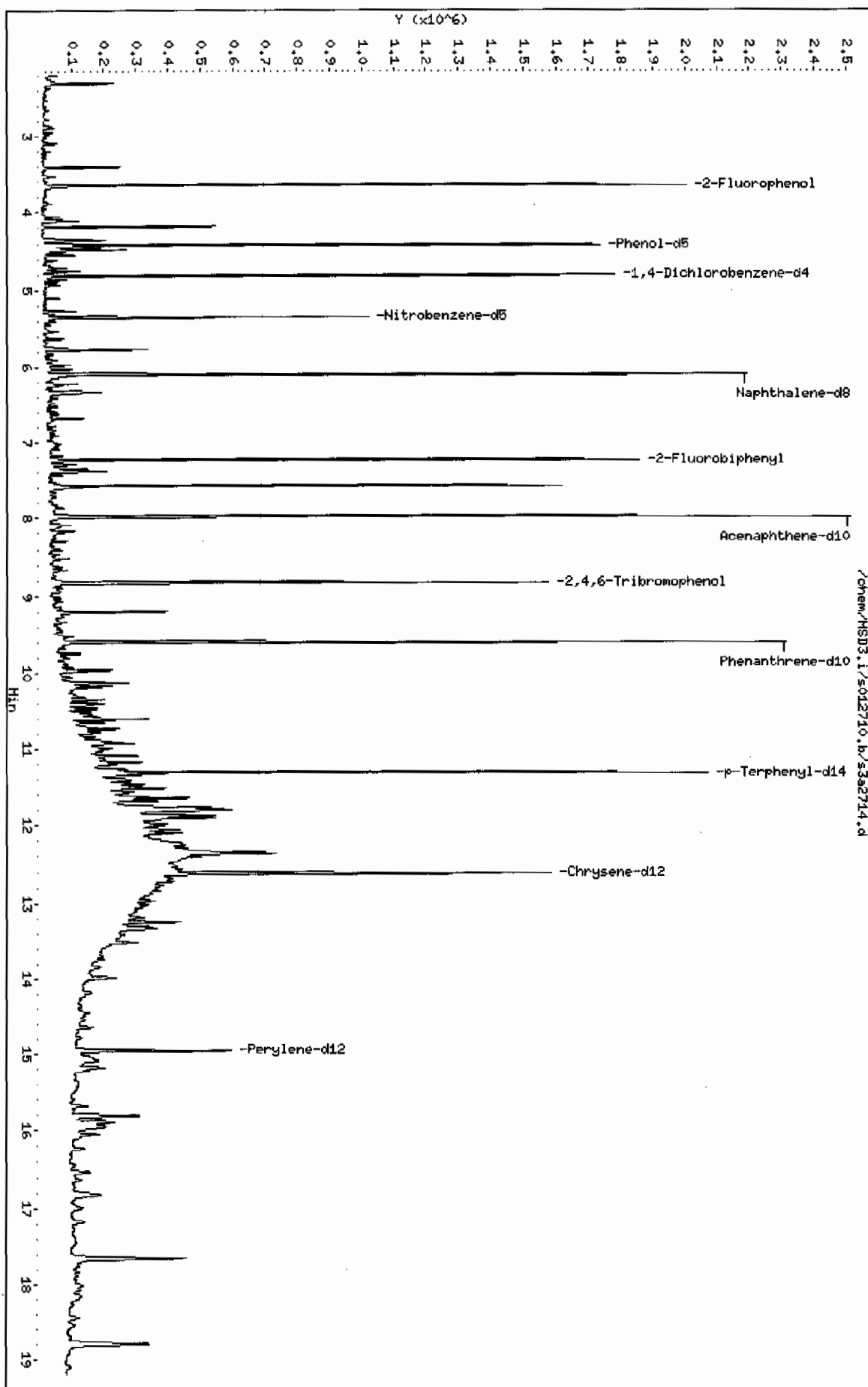
| RT                                       | CONCENTRATIONS |               |              | QUAL | QUANT               |           | CPND # |
|--|----------------|---------------|--------------|------|---------------------|-----------|--------|
|  | AREA           | ON-COL(ng/ul) | FINAL(ug/Kg) |      | LIBRARY             | LIB ENTRY |        |
| Unknown                                  |                |               |              |      | CAS #:              |           |        |
| 2.120                                    | 347306         | 8.35228679    | 370          | 0    |                     | 0         | 10     |
| Unknown                                  |                |               |              |      | CAS #:              |           |        |
| 2.299                                    | 295251         | 7.10041555    | 314          | 0    |                     | 0         | 10     |
| Unknown Aldol Condensate                 |                |               |              |      | CAS #:              |           |        |
| 3.402                                    | 233037         | 5.60424465    | 248          | 0    |                     | 0         | 10     |
| 1R-.alpha.-Pinene                        |                |               |              |      | CAS #: 7785-70-8    |           |        |
| 4.182                                    | 485598         | 11.6780325    | 517          | 98   | NIST05.L            | 15188     | 10     |
| Unknown                                  |                |               |              |      | CAS #:              |           |        |
| 4.349                                    | 283830         | 6.82577324    | 302          | 0    |                     | 0         | 10     |
| Unknown                                  |                |               |              |      | CAS #:              |           |        |
| 4.478                                    | 358471         | 8.62078905    | 382          | 0    |                     | 0         | 10     |
| Unknown                                  |                |               |              |      | CAS #:              |           |        |
| 5.769                                    | 399106         | 7.43595275    | 329          | 0    |                     | 0         | 29     |
| Benzeneacetic acid                       |                |               |              |      | CAS #: 103-82-2     |           |        |
| 6.327                                    | 317943         | 5.92376606    | 262          | 91   | NIST05.L            | 15740     | 29     |
| Tetradecanoic acid                       |                |               |              |      | CAS #: 544-63-8     |           |        |
| 9.194                                    | 383396         | 6.46497382    | 286          | 99   | NIST05.L            | 77276     | 67     |
| n-Hexadecanoic acid                      |                |               |              |      | CAS #: 57-10-3      |           |        |
| 10.128                                   | 287787         | 4.85278237    | 215          | 98   | NIST05.L            | 96235     | 67     |
| 4b,8-Dimethyl-2-isopropylphenanthrene, 4 |                |               |              |      | CAS #: 1000197-14-1 |           |        |
| 10.600                                   | 242621         | 4.09116916    | 181          | 98   | NIST05.L            | 96373     | 67     |
| Unknown                                  |                |               |              |      | CAS #:              |           |        |
| 11.513                                   | 285869         | 6.93774604    | 307          | 0    |                     | 0         | 91     |
| Unknown                                  |                |               |              |      | CAS #:              |           |        |
| 11.761                                   | 434786         | 10.5518007    | 467          | 0    |                     | 0         | 91     |
| Unknown                                  |                |               |              |      | CAS #:              |           |        |
| 11.796                                   | 522926         | 12.6908692    | 562          | 0    |                     | 0         | 91     |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 |                |               |              |      | CAS #: 1235-74-1    |           |        |
| 11.864                                   | 285958         | 6.93991137    | 307          | 99   | NIST05.L            | 133618    | 91     |

| RT                                       | CONCENTRATIONS |               |              | QUAL | QUANT               |           | CPND # |
|--|----------------|---------------|--------------|------|---------------------|-----------|--------|
|  | AREA           | ON-COL(ng/ul) | FINAL(ug/Kg) |      | LIBRARY             | LIB ENTRY |        |
| Unknown                                  |                |               |              |      | CAS #:              |           |        |
| 11.894                                   | 213194         | 5.17399629    | 229          | 0    |                     | 0         | 91     |
| Unknown                                  |                |               |              |      | CAS #:              |           |        |
| 12.222                                   | 360426         | 8.74717224    | 387          | 0    |                     | 0         | 91     |
| Unknown                                  |                |               |              |      | CAS #:              |           |        |
| 12.349                                   | 623247         | 15.1255497    | 670          | 0    |                     | 0         | 91     |
| Unknown                                  |                |               |              |      | CAS #:              |           |        |
| 13.246                                   | 268831         | 6.52424412    | 289          | 0    |                     | 0         | 91     |
| 1,2-Benzisothiazole, 3-(hexahydro-1H-aze |                |               |              |      | CAS #: 309735-29-3  |           |        |
| 13.331                                   | 237711         | 5.76899516    | 255          | 91   | NIST05.L            | 101019    | 91     |
| Unknown                                  |                |               |              |      | CAS #:              |           |        |
| 15.084                                   | 384016         | 17.5388253    | 776          | 0    |                     | 0         | 98     |
| Cyclohexane, 1,1'-(2-methyl-1,3-propaned |                |               |              |      | CAS #: 2883-08-1    |           |        |
| 15.802                                   | 440464         | 20.1169196    | 890          | 89   | NIST05.L            | 73082     | 98     |
| Unknown                                  |                |               |              |      | CAS #:              |           |        |
| 15.885                                   | 254443         | 11.6209495    | 514          | 0    |                     | 0         | 98     |
| Unknown                                  |                |               |              |      | CAS #:              |           |        |
| 15.944                                   | 324239         | 14.8087142    | 656          | 0    |                     | 0         | 98     |
| Unknown                                  |                |               |              |      | CAS #:              |           |        |
| 16.822                                   | 319139         | 14.5757757    | 645          | 0    |                     | 0         | 98     |
| Stigmasterol, 22,23-dihydro-             |                |               |              |      | CAS #: 1000214-20-7 |           |        |
| 17.646                                   | 974063         | 44.4875422    | 1970         | 95   | NIST05.L            | 174408    | 98     |
| Stigmast-4-en-3-one                      |                |               |              |      | CAS #: 1058-61-3    |           |        |
| 18.792                                   | 712982         | 32.5634356    | 1440         | 93   | NIST05.L            | 173936    | 98     |



Data File: /chem/MSD3.1/s012710.b/s3a2714.d  
Date: 27-JAN-2010 14:35  
Client ID: RE15-10-8410  
Sample Info: 124514002|94487411|SVHF11LGNL  
Volume Injected (uL): 0.5  
Column Phase: J&W DB-5MS

Instrument: MSD3.1  
Operator: LDI  
Column diameter: 0.20



Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.i

Sample Info: 1245114002194487411SVHF11ILANL

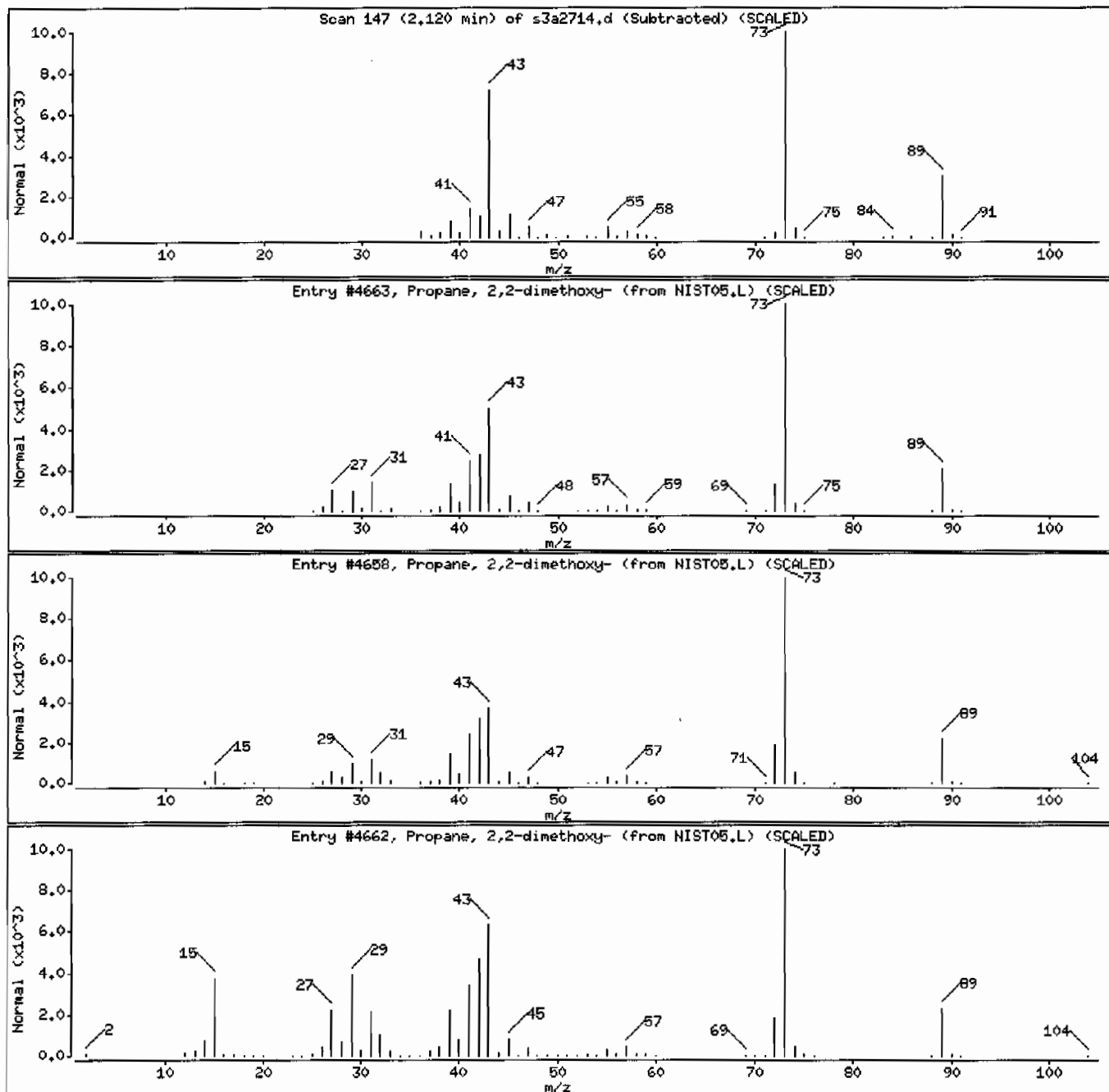
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown                       |            |          |       |         |         |        |
| Propane, 2,2-dimethoxy-       | 77-76-9    | NIST05.L | 4663  | 45      | C5H12O2 | 104    |
| Propane, 2,2-dimethoxy-       | 77-76-9    | NIST05.L | 4658  | 36      | C5H12O2 | 104    |
| Propane, 2,2-dimethoxy-       | 77-76-9    | NIST05.L | 4662  | 28      | C5H12O2 | 104    |



Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.1

Sample Info: 1245114002194487411SVHF111LANL

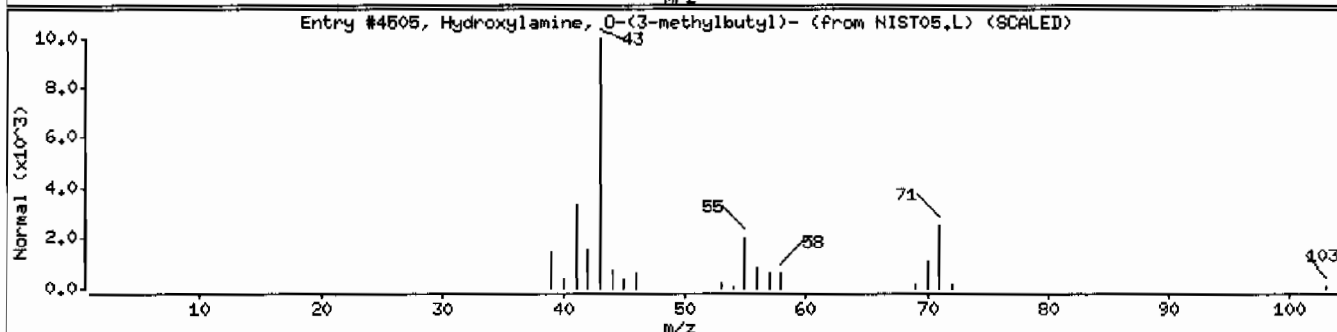
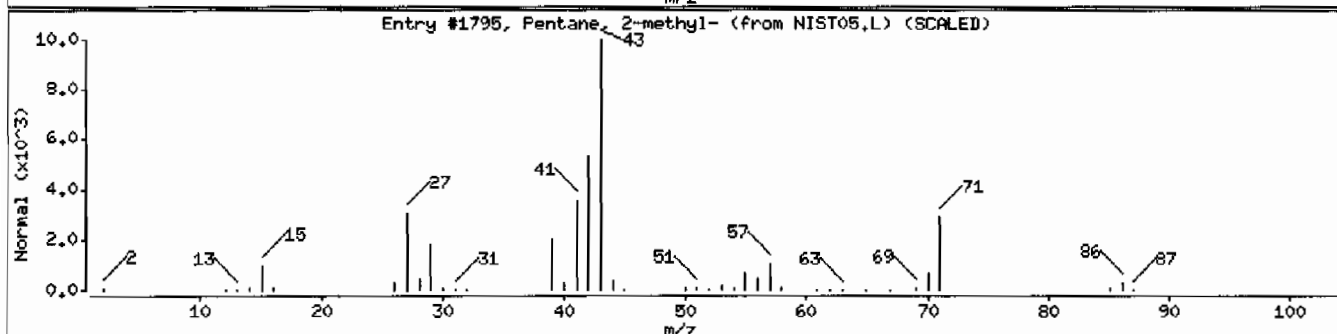
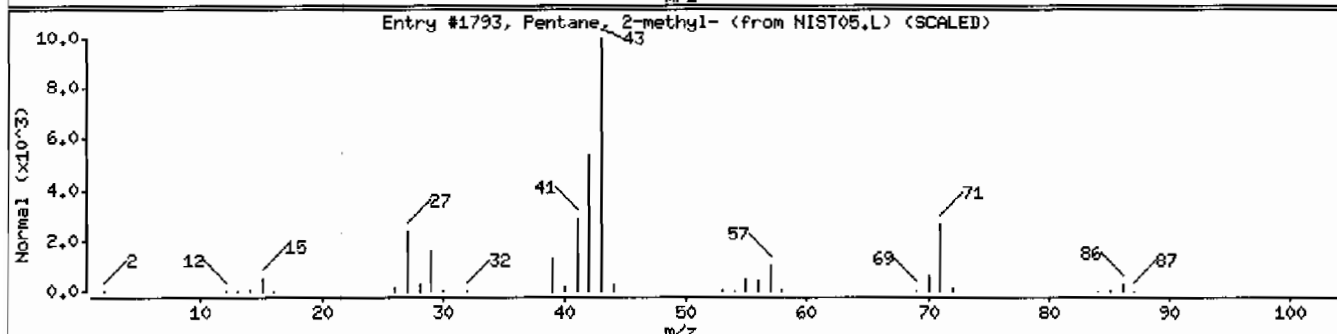
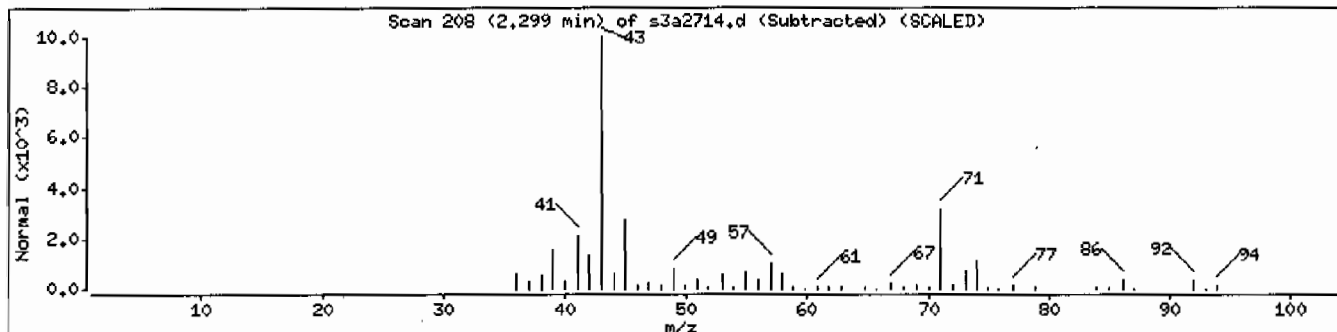
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match     | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-----------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown                           |            |          |       |         |         |        |
| Pentane, 2-methyl-                | 107-83-5   | NIST05.L | 1793  | 30      | C6H14   | 86     |
| Pentane, 2-methyl-                | 107-83-5   | NIST05.L | 1795  | 27      | C6H14   | 86     |
| Hydroxylamine, O-(3-methylbutyl)- | 19411-65-5 | NIST05.L | 4505  | 12      | C5H13NO | 103    |



Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: HSD3.i

Sample Info: 1245114002194487411|SVMF11|LANL

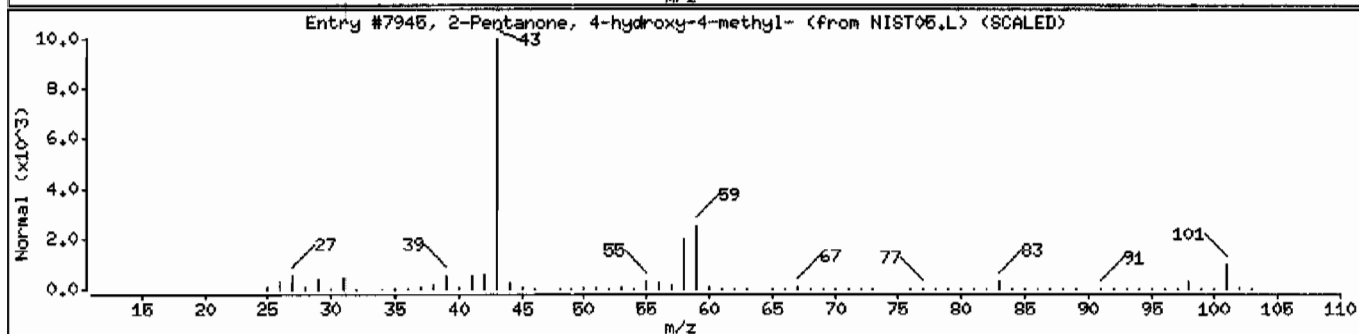
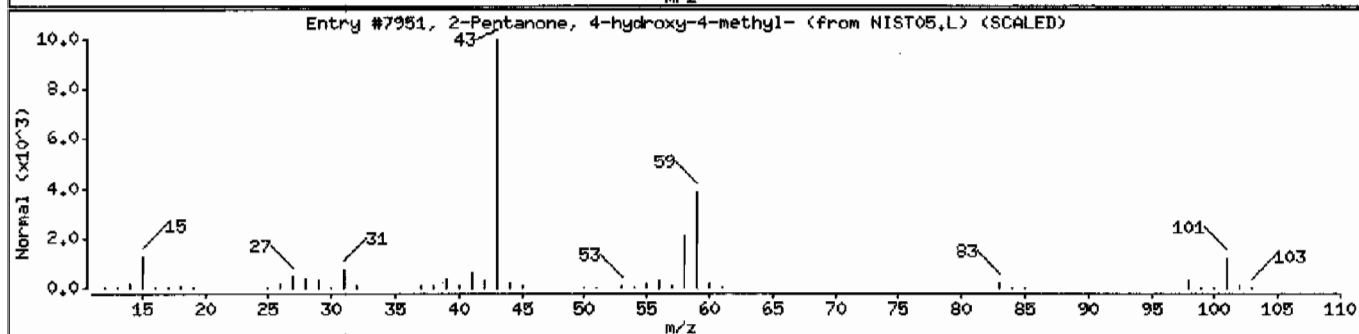
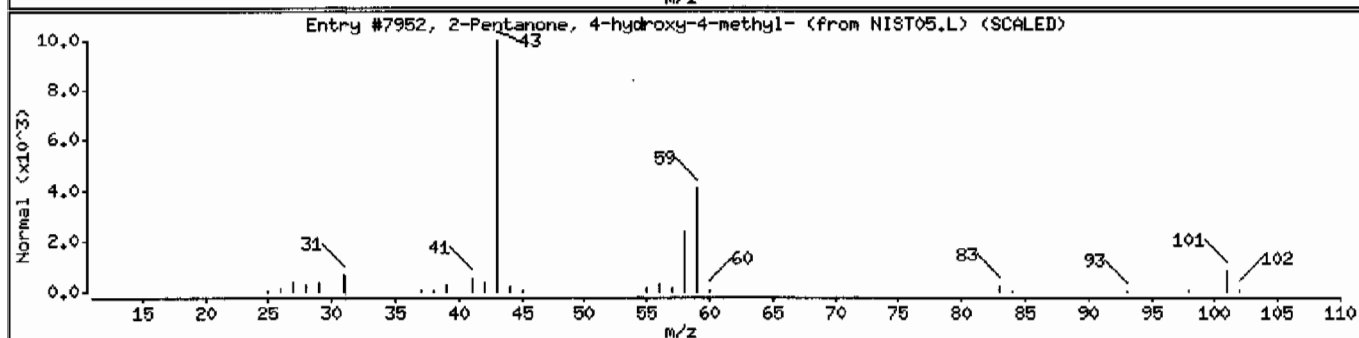
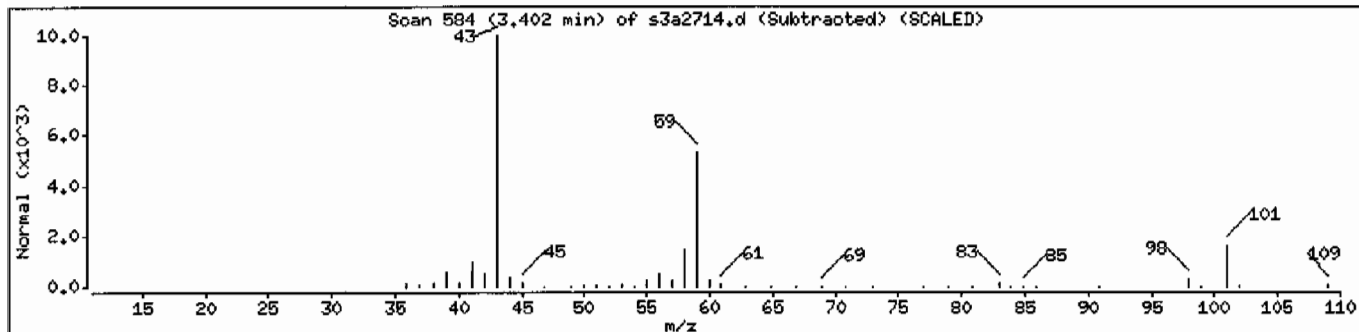
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match    | CAS Number | Library  | Entry | Quality | Formula | Weight |
|----------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown Aldol Condensate         |            |          |       |         |         |        |
| 2-Pentanone, 4-hydroxy-4-methyl- | 123-42-2   | NIST05.L | 7952  | 50      | C6H12O2 | 116    |
| 2-Pentanone, 4-hydroxy-4-methyl- | 123-42-2   | NIST05.L | 7951  | 45      | C6H12O2 | 116    |
| 2-Pentanone, 4-hydroxy-4-methyl- | 123-42-2   | NIST05.L | 7945  | 39      | C6H12O2 | 116    |



Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.i

Sample Info: 1245114002194487411|SVHF11|LANL

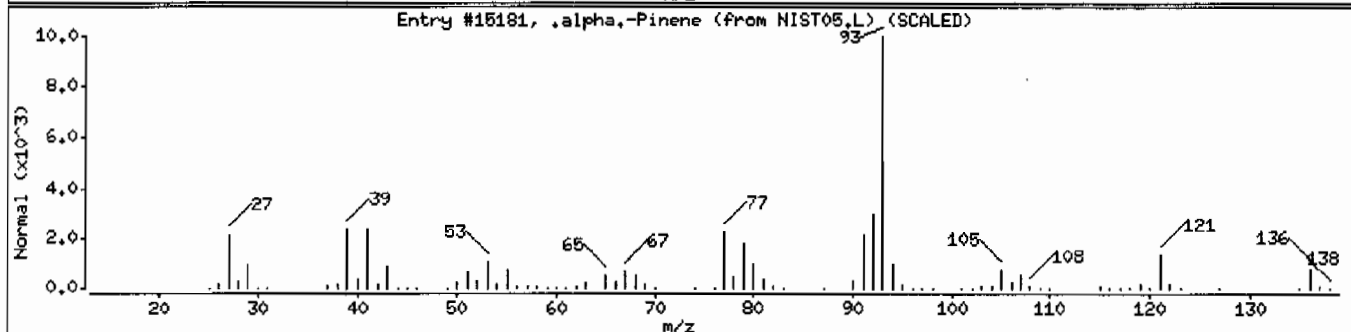
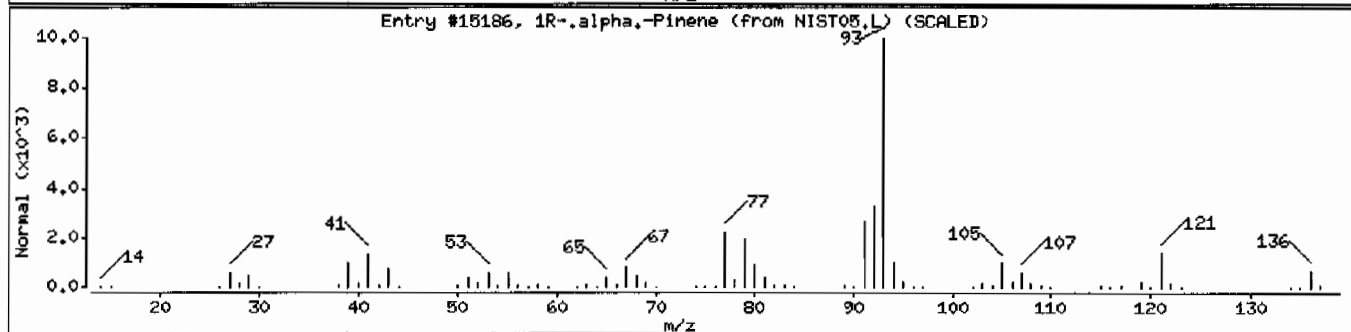
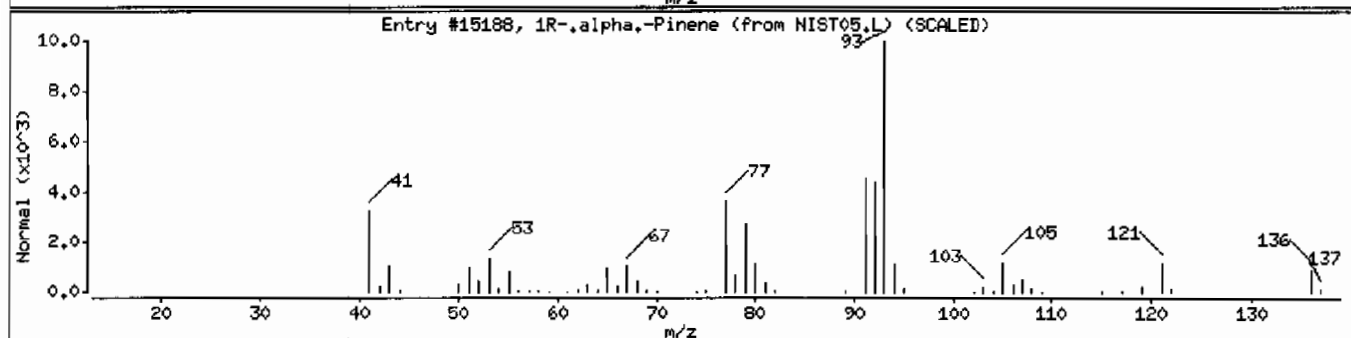
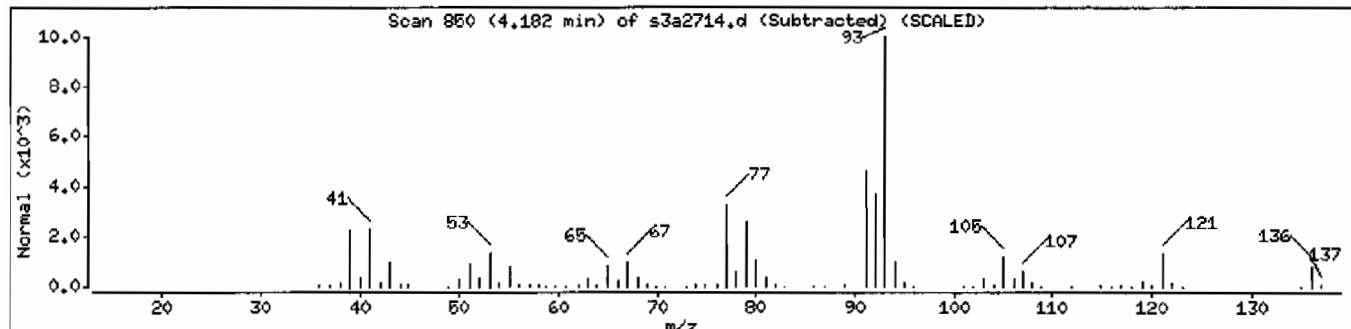
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| 1R-,alpha,-Pinene             | 7785-70-8  | NIST05.L | 15188 | 98      | C10H16  | 136    |
| 1R-,alpha,-Pinene             | 7785-70-8  | NIST05.L | 15186 | 96      | C10H16  | 136    |
| ,alpha,-Pinene                | 80-56-8    | NIST05.L | 15181 | 96      | C10H16  | 136    |



Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.i

Sample Info: 1245114002194487411SVHF111LANL

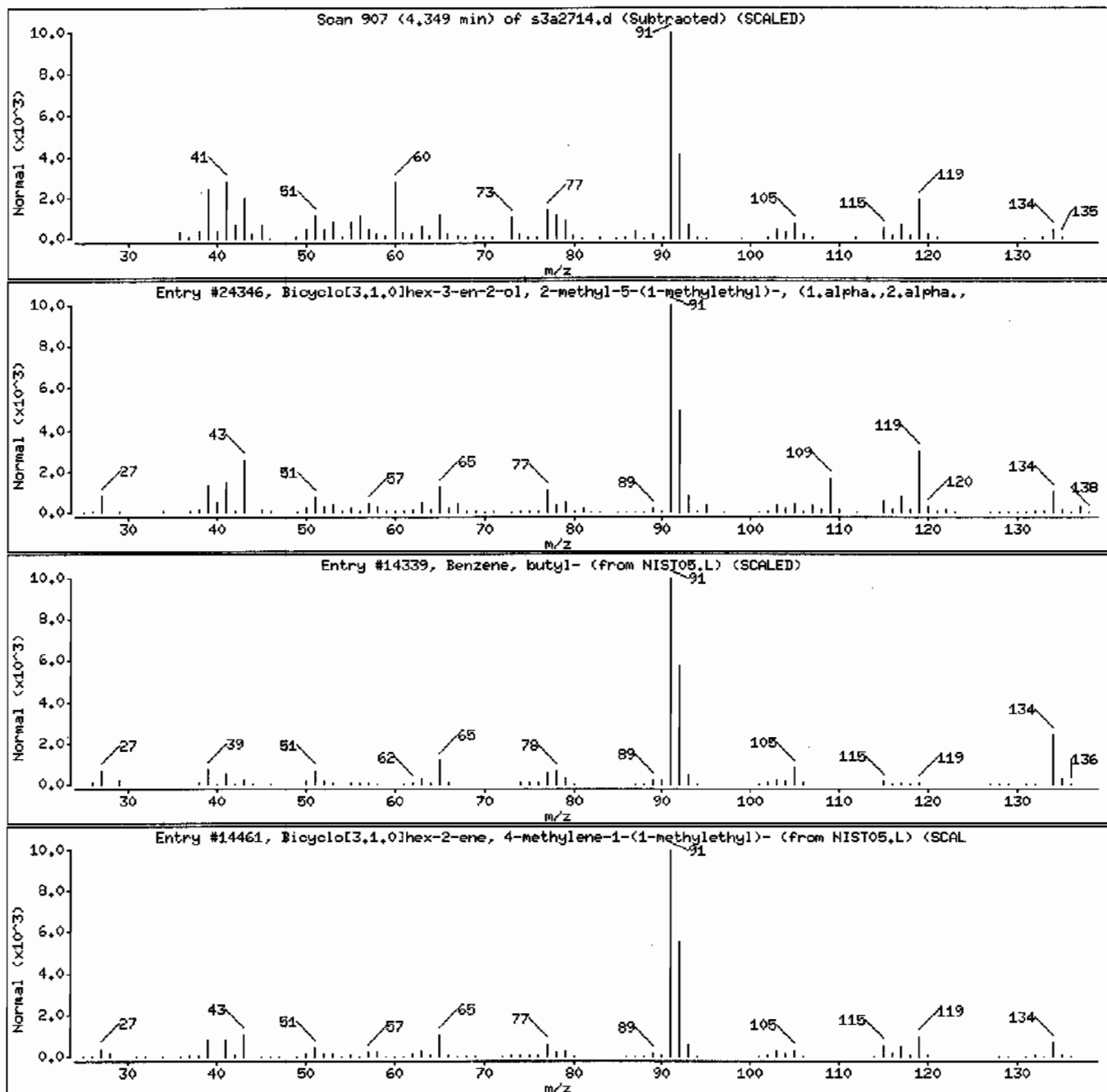
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--|------------|----------|-------|---------|---------|--------|
| Unknown                                  |            |          |       |         |         |        |
| Bicyclo[3.1.0]hex-3-en-2-ol, 2-methyl-5- | 97631-68-0 | NIST05.L | 24346 | 50      | C10H16O | 152    |
| Benzene, butyl-                          | 104-51-8   | NIST05.L | 14339 | 49      | C10H14  | 134    |
| Bicyclo[3.1.0]hex-2-ene, 4-methylene-1-( | 36262-09-6 | NIST05.L | 14461 | 49      | C10H14  | 134    |



Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.i

Sample Info: 12451140021944874111SVHF111LANL

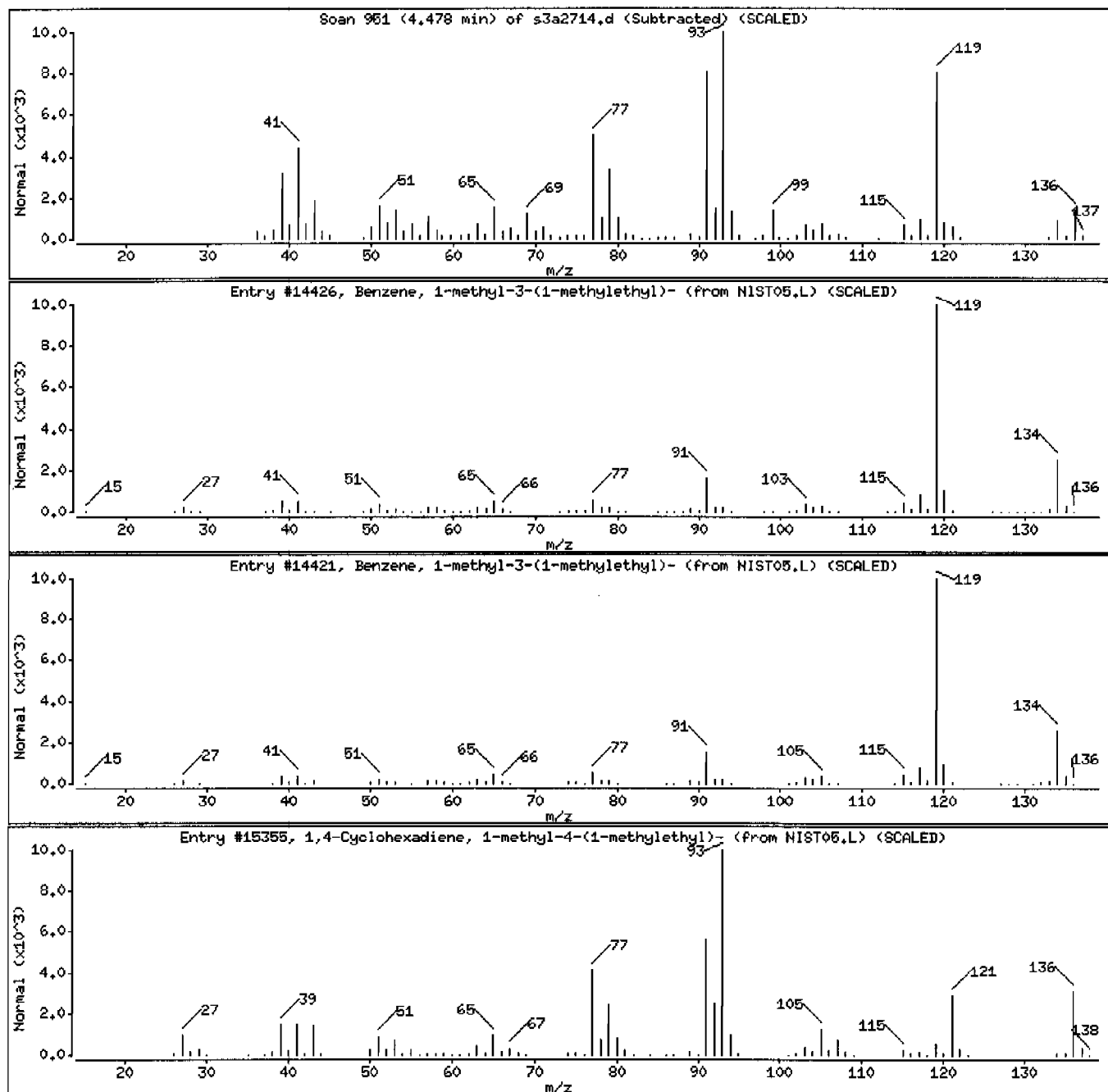
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--|------------|----------|-------|---------|---------|--------|
| Unknown                                  |            |          |       |         |         |        |
| Benzene, 1-methyl-3-(1-methylethyl)-     | 535-77-3   | NIST05.L | 14426 | 70      | C10H14  | 134    |
| Benzene, 1-methyl-3-(1-methylethyl)-     | 535-77-3   | NIST05.L | 14421 | 70      | C10H14  | 134    |
| 1,4-Cyclohexadiene, 1-methyl-4-(1-methyl | 99-85-4    | NIST05.L | 15355 | 60      | C10H16  | 136    |



Date: 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.1

Sample Info: 1245114002194487411|SVHF11|LANL

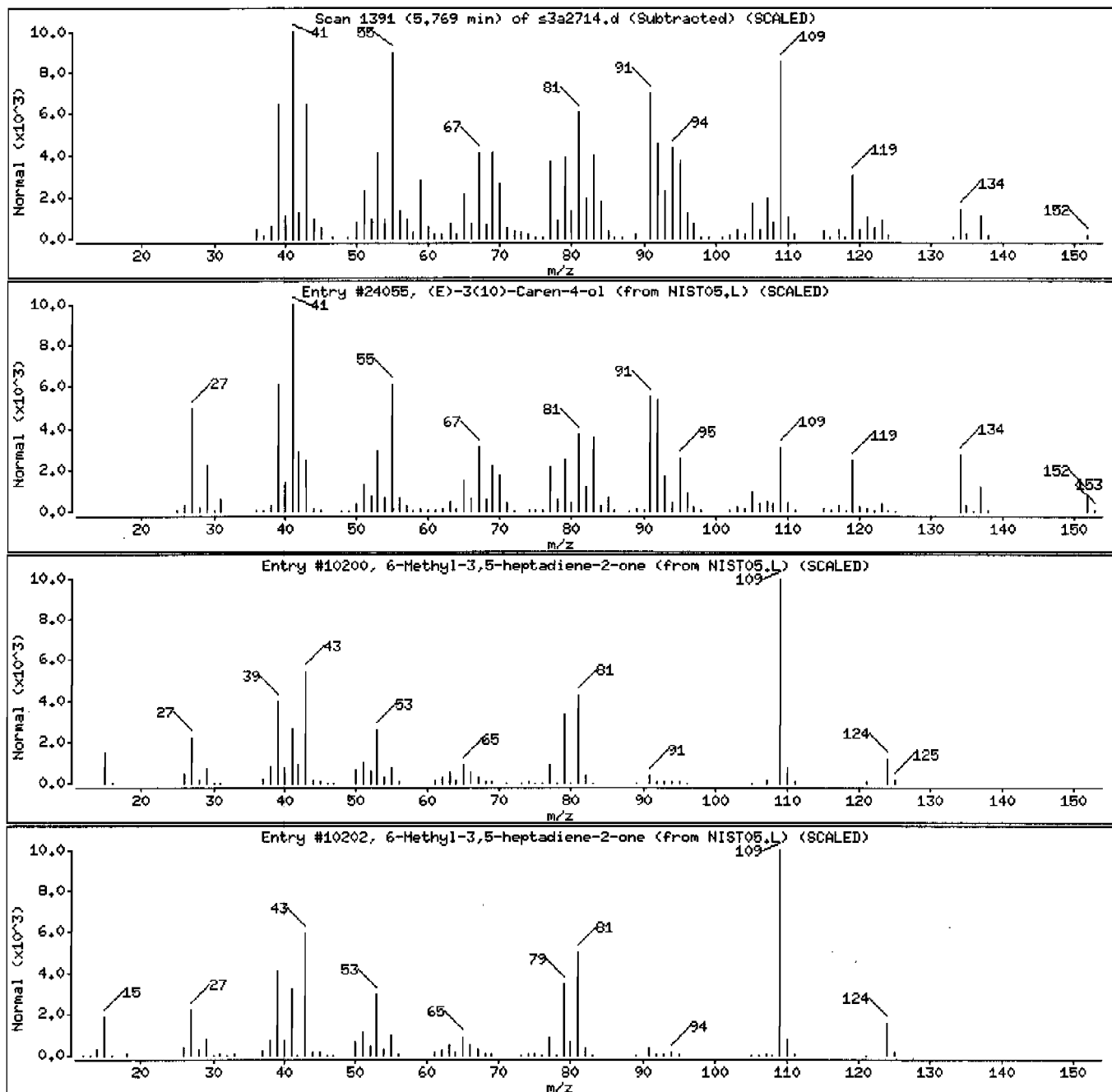
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown                       |            |          |       |         |         |        |
| (E)-3(10)-Caren-4-ol          | 1753-35-1  | NIST05.L | 24055 | 60      | C10H16O | 152    |
| 6-Methyl-3,5-heptadiene-2-one | 1604-28-0  | NIST05.L | 10200 | 43      | C8H12O  | 124    |
| 6-Methyl-3,6-heptadiene-2-one | 1604-28-0  | NIST05.L | 10202 | 37      | C8H12O  | 124    |





Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.i

Sample Info: 1245114002194487411SVMF111LANL

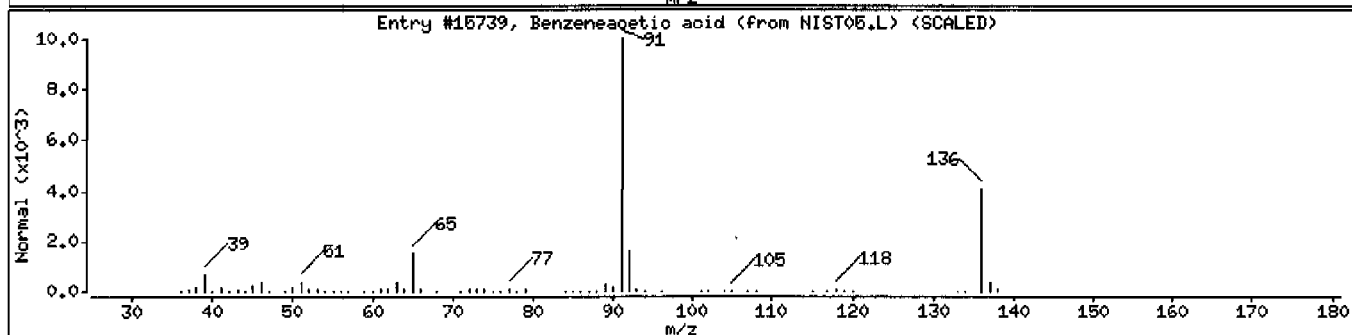
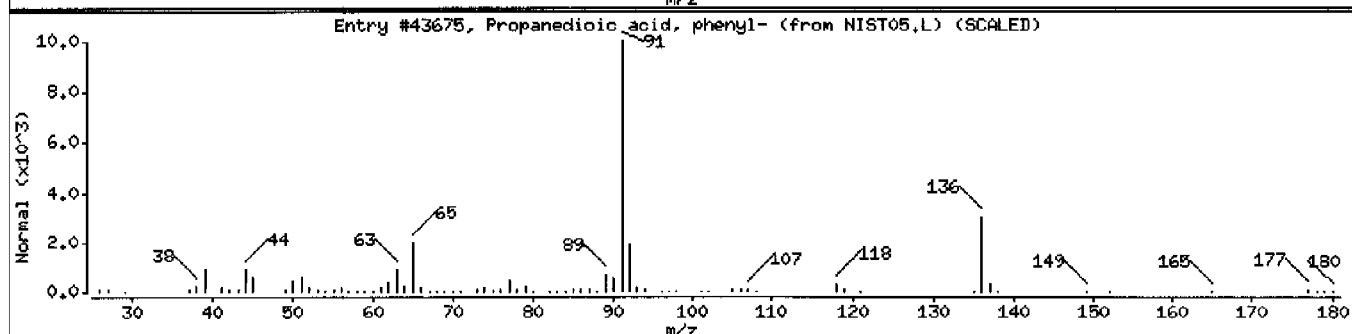
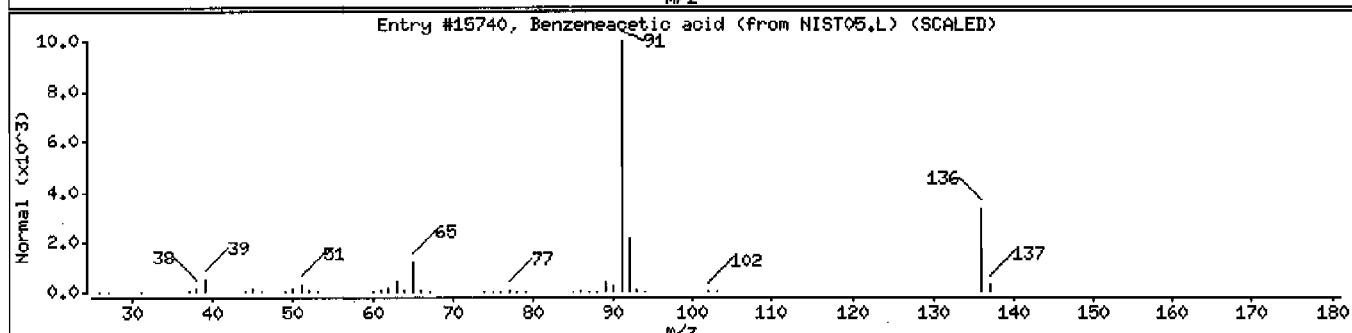
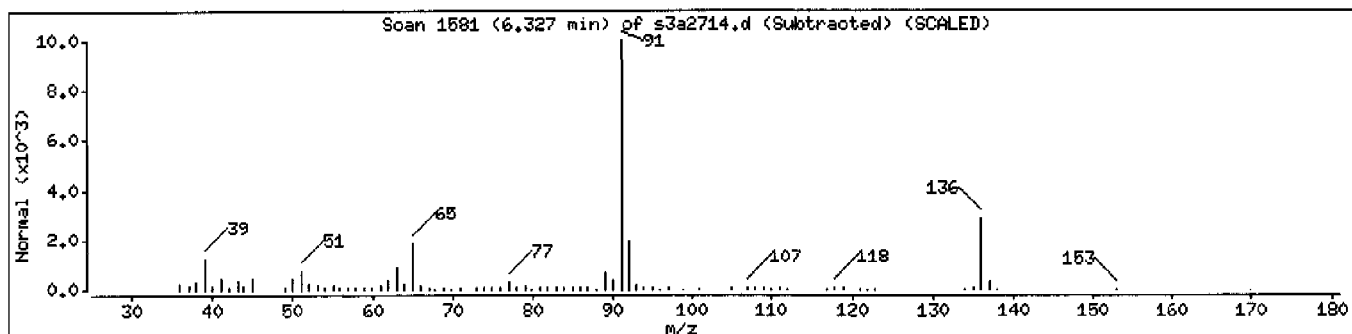
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Benzeneacetic acid            | 103-82-2   | NIST05.L | 15740 | 91      | C8H8O2  | 136    |
| Propanedioic acid, phenyl-    | 2613-89-0  | NIST05.L | 43675 | 90      | C9H8O4  | 180    |
| Benzeneacetic acid            | 103-82-2   | NIST05.L | 15739 | 87      | C8H8O2  | 136    |



Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.i

Sample Info: 1245114002194487411SVHF111LANL

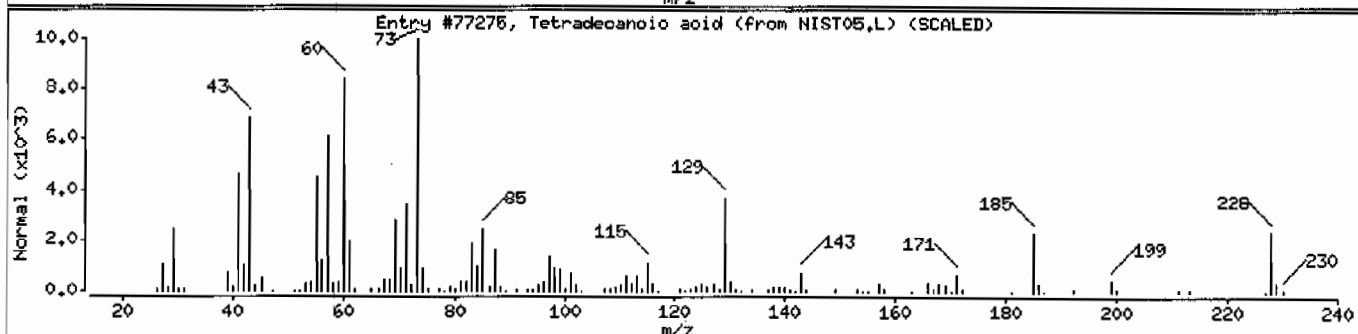
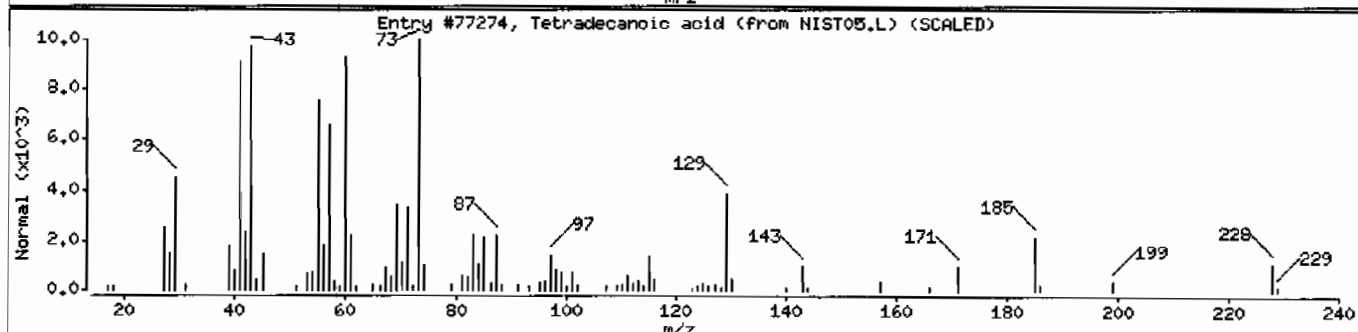
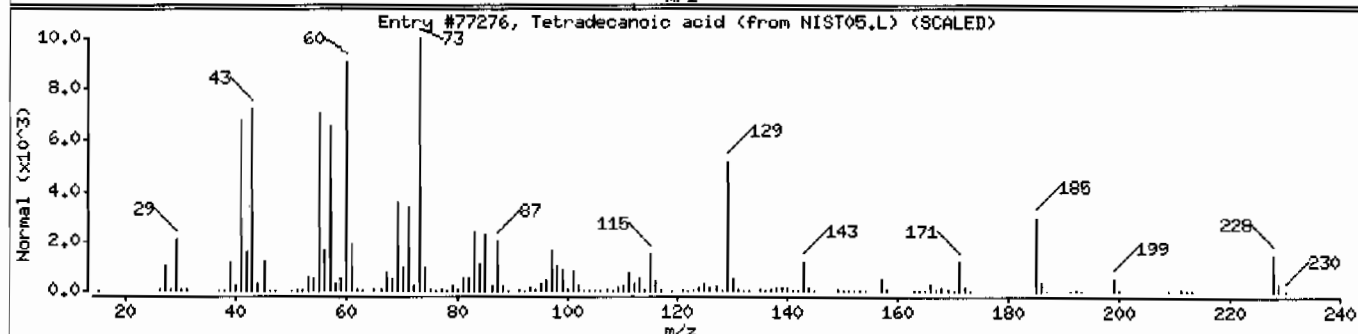
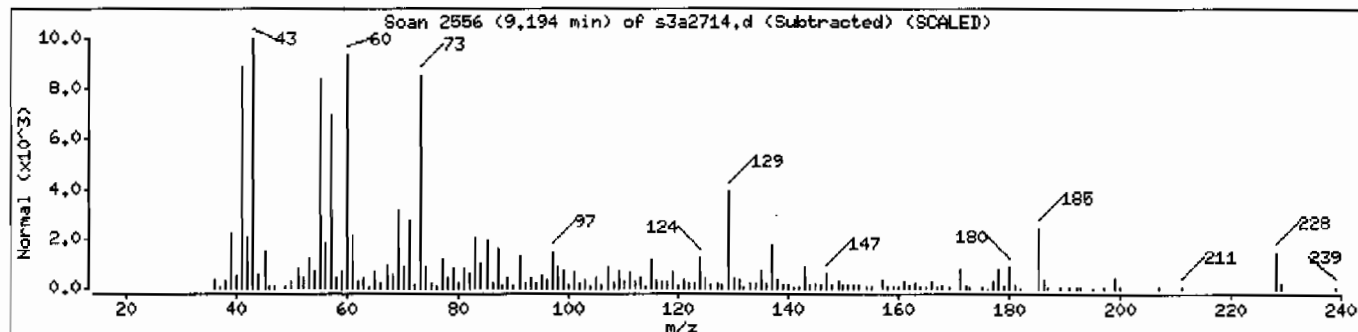
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula  | Weight |
|-------------------------------|------------|----------|-------|---------|----------|--------|
| Tetradecanoic acid            | 544-63-8   | NIST05.L | 77276 | 99      | C14H28O2 | 228    |
| Tetradecanoic acid            | 544-63-8   | NIST05.L | 77274 | 99      | C14H28O2 | 228    |
| Tetradecanoic acid            | 544-63-8   | NIST05.L | 77275 | 95      | C14H28O2 | 228    |



Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.1

Sample Info: 1245114002194487411SVHF111LANL

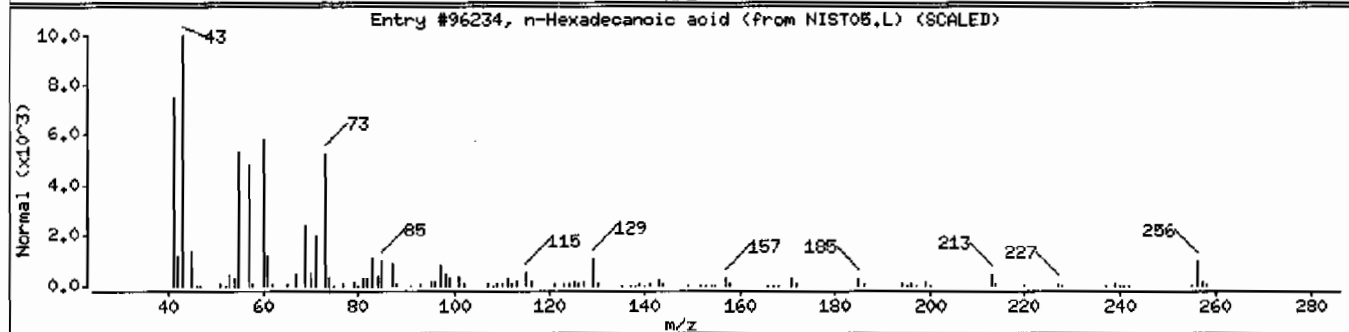
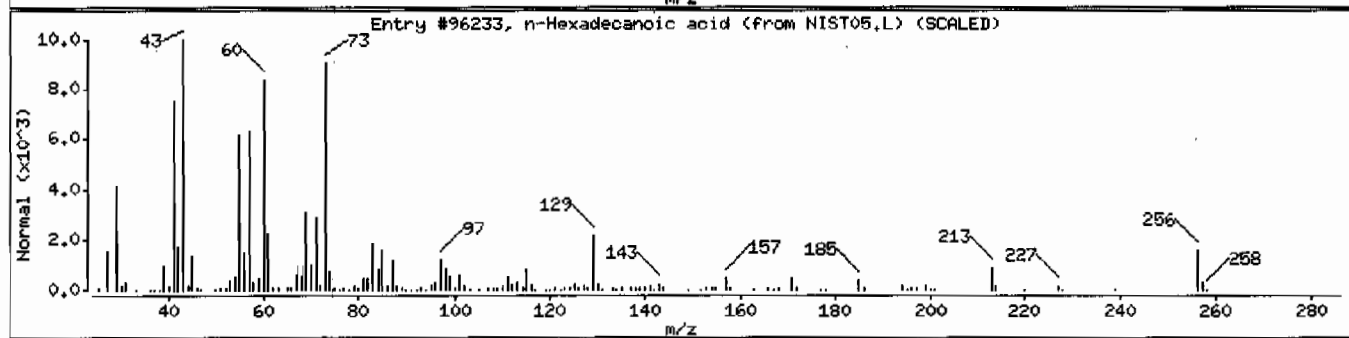
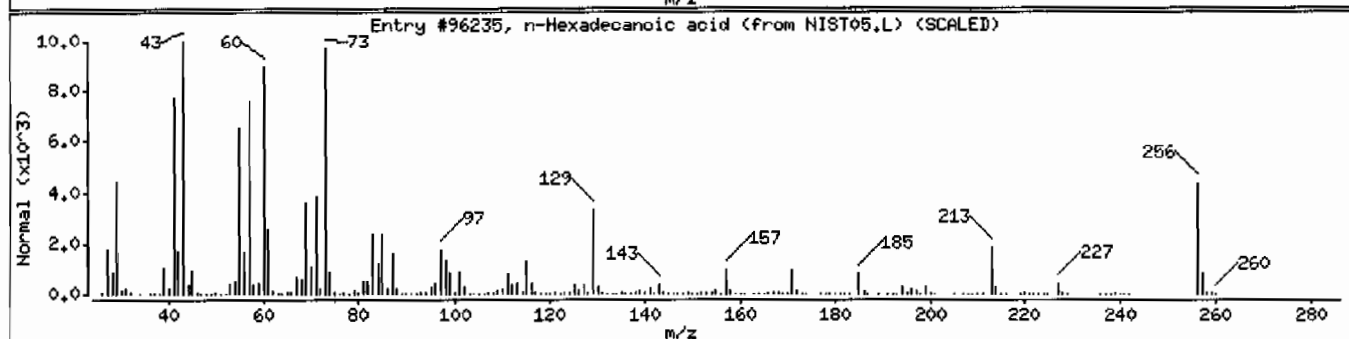
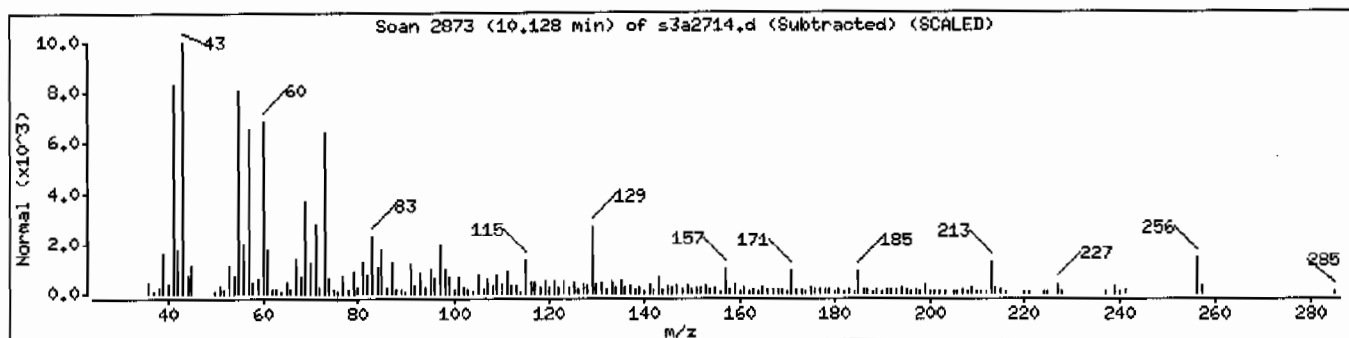
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula  | Weight |
|-------------------------------|------------|----------|-------|---------|----------|--------|
| n-Hexadecanoic acid           | 57-10-3    | NIST05.L | 96235 | 98      | C16H32O2 | 256    |
| n-Hexadecanoic acid           | 57-10-3    | NIST05.L | 96233 | 93      | C16H32O2 | 256    |
| n-Hexadecanoic acid           | 57-10-3    | NIST05.L | 96234 | 92      | C16H32O2 | 256    |



Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.i

Sample Info: 12451140021944874111SVHF111LANL

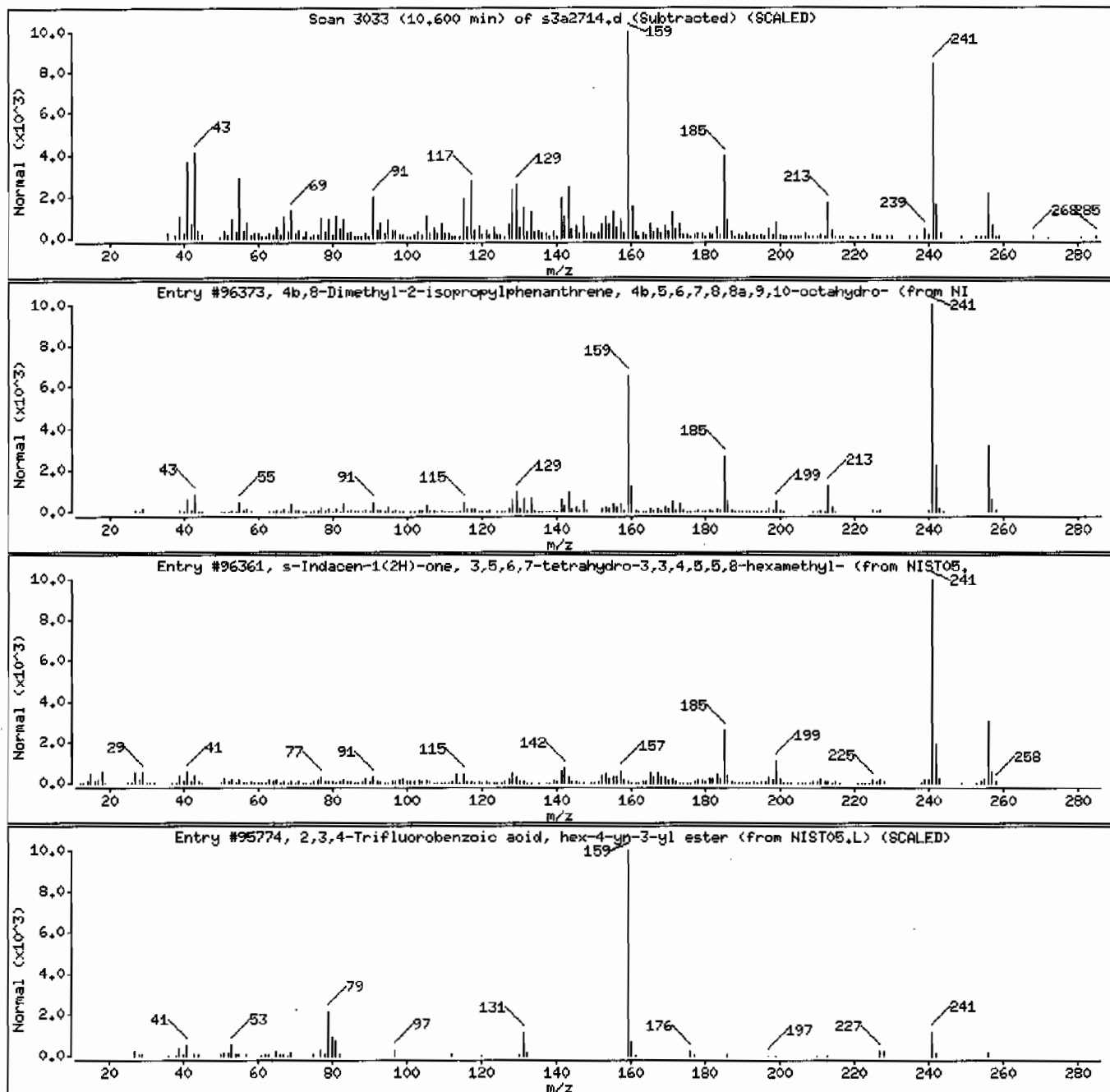
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula    | Weight |
|--|--------------|----------|-------|---------|------------|--------|
| 4b,8-Dimethyl-2-isopropylphenanthrene, 4 | 1000197-14-1 | NIST05.L | 96373 | 98      | C19H28     | 256    |
| s-Indacen-1(2H)-one, 3,5,6,7-tetrahydro- | 38754-94-8   | NIST05.L | 96361 | 70      | C18H24O    | 256    |
| 2,3,4-Trifluorobenzoic acid, hex-4-yn-3- | 1000292-55-4 | NIST05.L | 95774 | 43      | C13H11F3O2 | 256    |



Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.1

Sample Info: 1245114002194487411SVHF111LANL

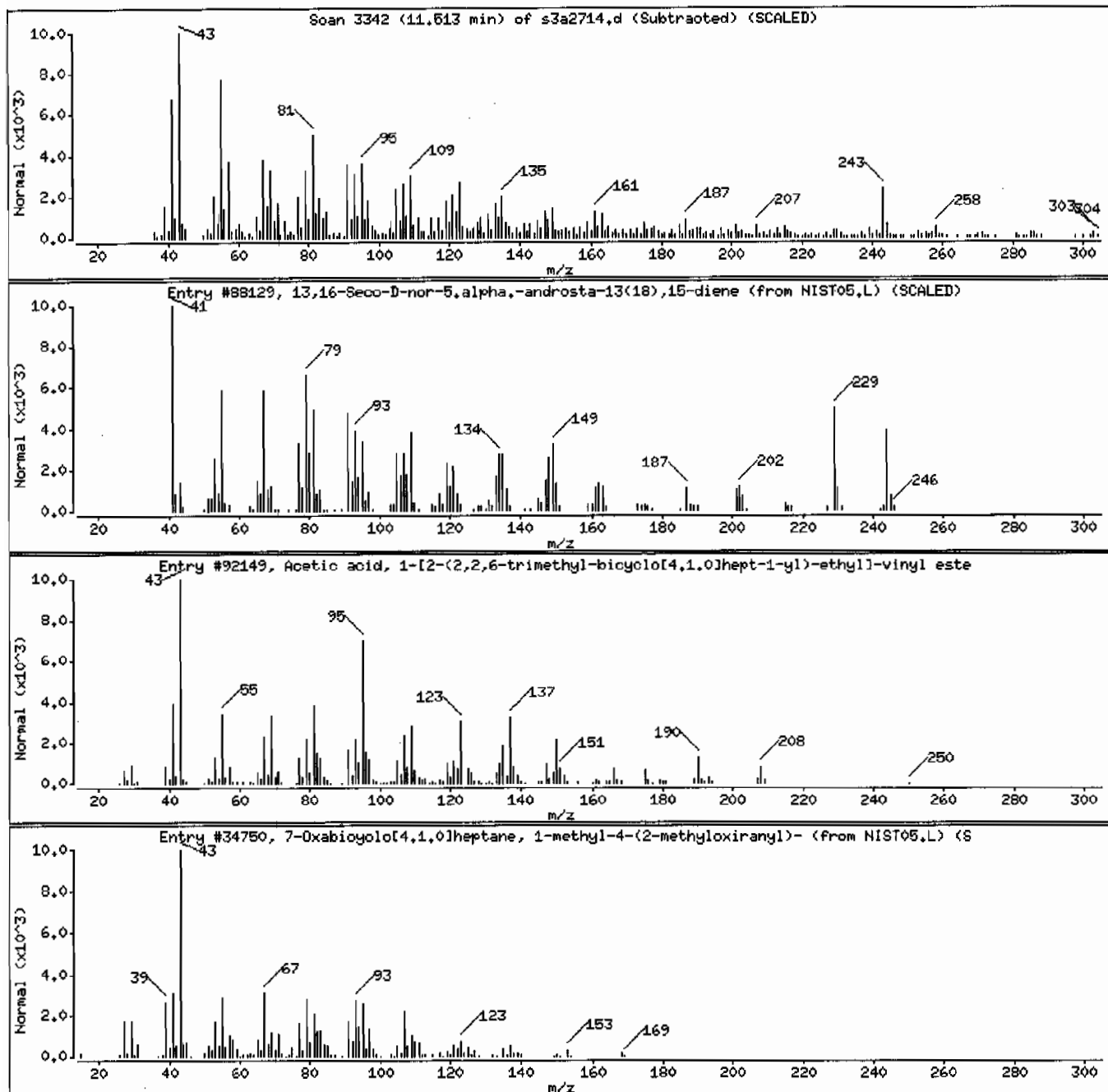
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula  | Weight |
|--|------------|----------|-------|---------|----------|--------|
| Unknown                                  |            |          |       |         |          |        |
| 13,16-Seco-D-nor-5.alpha.-androsta-13(18 | 31239-26-6 | NIST05.L | 88129 | 53      | C18H28   | 244    |
| Acetic acid, 1-[2-(2,2,6-trimethyl-bicyc | 77143-23-8 | NIST05.L | 92149 | 43      | C16H26O2 | 250    |
| 7-Oxabicyclo[4.1.0]heptane, 1-methyl-4-( | 96-08-2    | NIST05.L | 34750 | 42      | C10H16O2 | 168    |



Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.i

Sample Info: 12451140021944874111SVHF111LANL

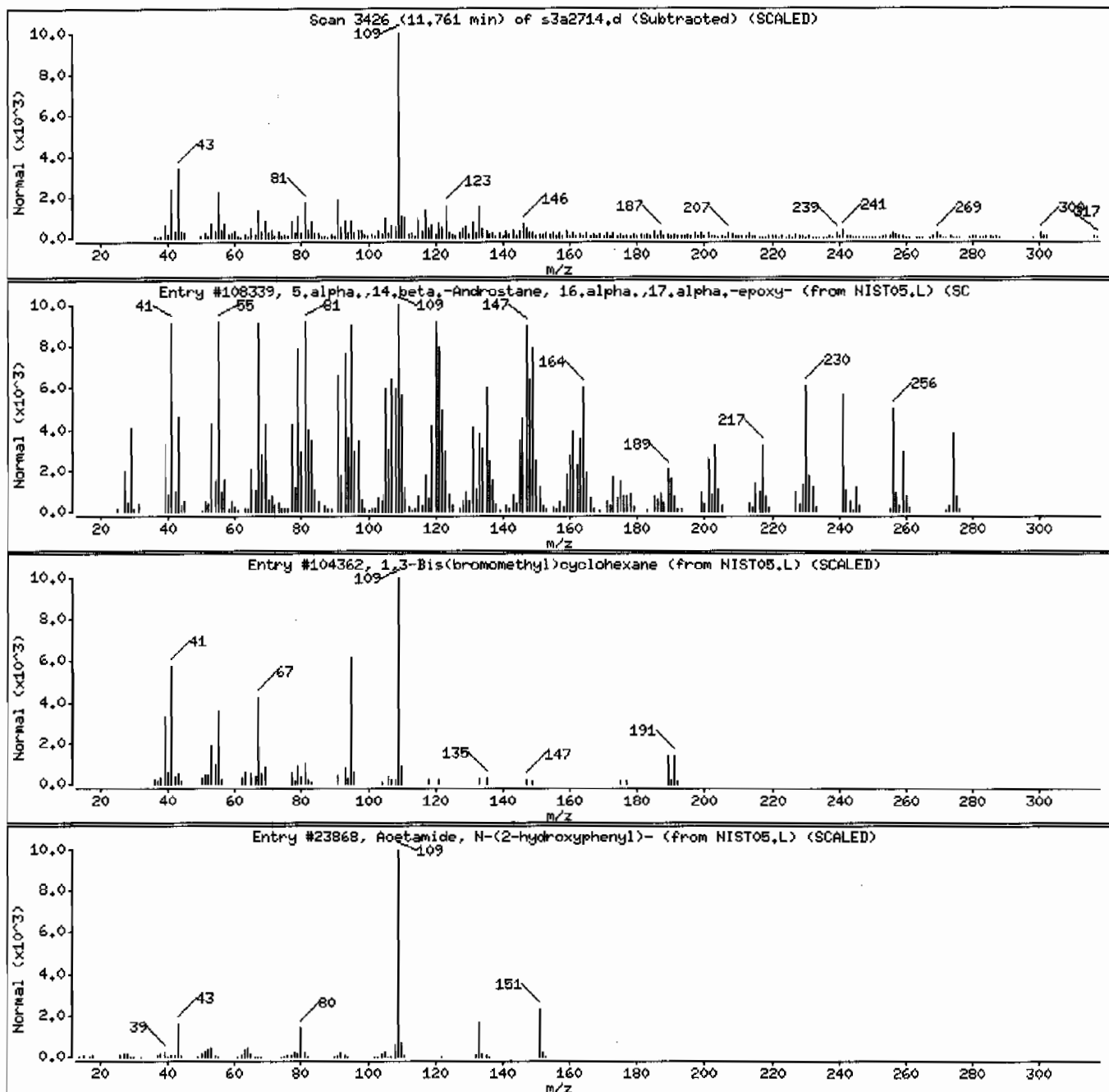
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;H DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|--|--------------|----------|--------|---------|----------|--------|
| Unknown                                  |              |          |        |         |          |        |
| 5.alpha.,14.beta.-Androstane, 16.alpha., | 24174-25-2   | NIST05.L | 108339 | 56      | C19H30O  | 274    |
| 1,3-Bis(bromomethyl)cyclohexane          | 1000216-89-9 | NIST05.L | 104362 | 50      | CBH14Br2 | 268    |
| Acetamide, N-(2-hydroxyphenyl)-          | 614-80-2     | NIST05.L | 23868  | 50      | CBH9NO2  | 151    |



Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.i

Sample Info: 1245114002194487411SVHF111LANL

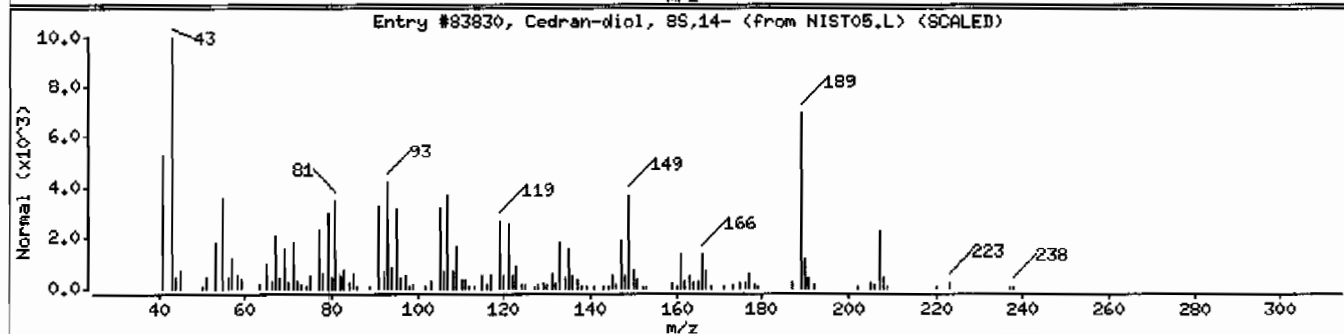
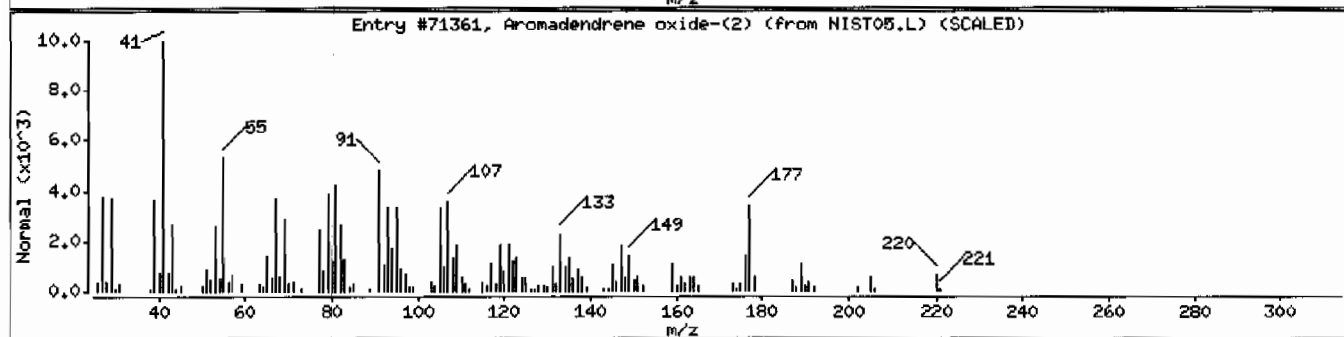
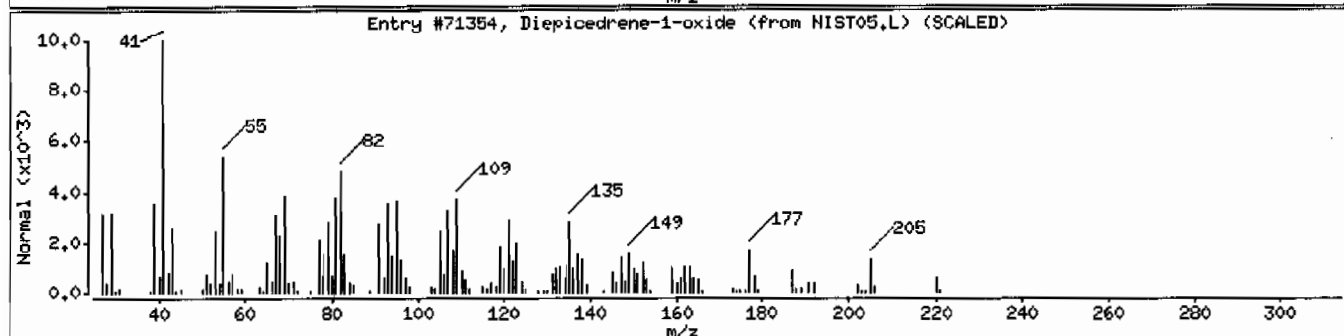
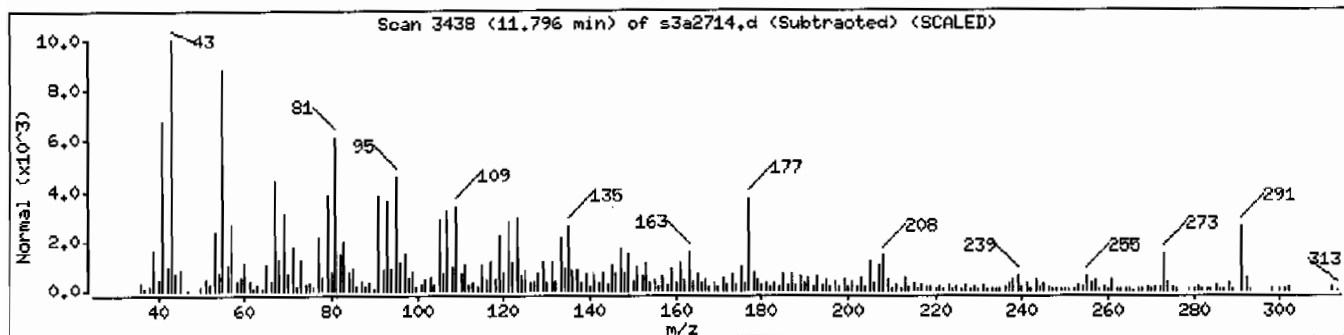
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number   | Library  | Entry | Quality | Formula  | Weight |
|-------------------------------|--------------|----------|-------|---------|----------|--------|
| Unknown                       |              |          |       |         |          |        |
| Diepicedrene-1-oxide          | 1000156-11-0 | NIST05.L | 71354 | 32      | C15H24O  | 220    |
| Aromadendrene oxide-(2)       | 1000151-98-6 | NIST05.L | 71361 | 27      | C15H24O  | 220    |
| Cedran-diol, 8S,14-           | 62600-05-9   | NIST05.L | 83830 | 25      | C15H26O2 | 238    |



Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.i

Sample Info: 1245114002194487411SVHF111LANL

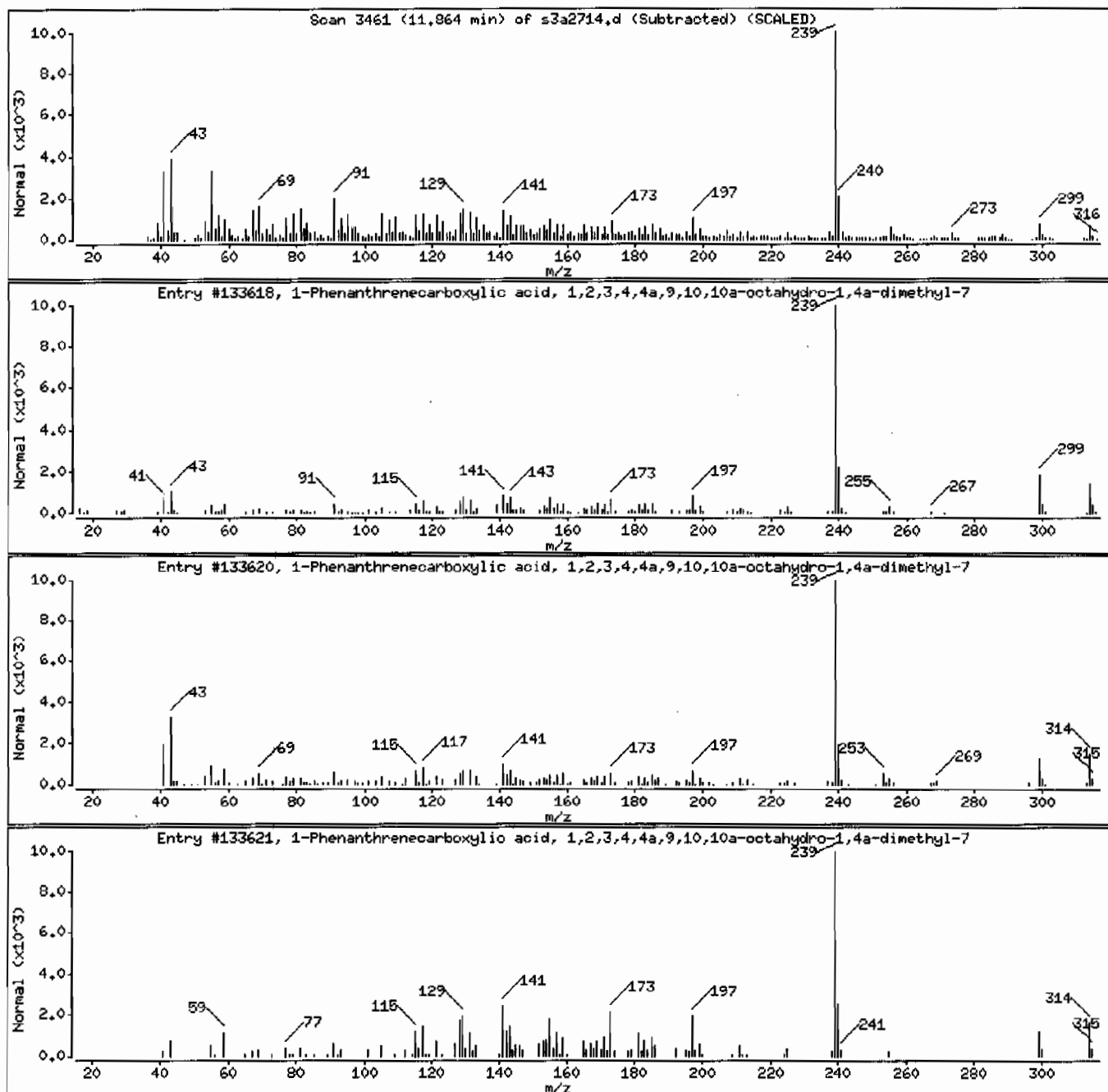
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133618 | 99      | C21H30O2 | 314    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133620 | 94      | C21H30O2 | 314    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133621 | 80      | C21H30O2 | 314    |





Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.1

Sample Info: 1245114002194487411SVHF11ILANL

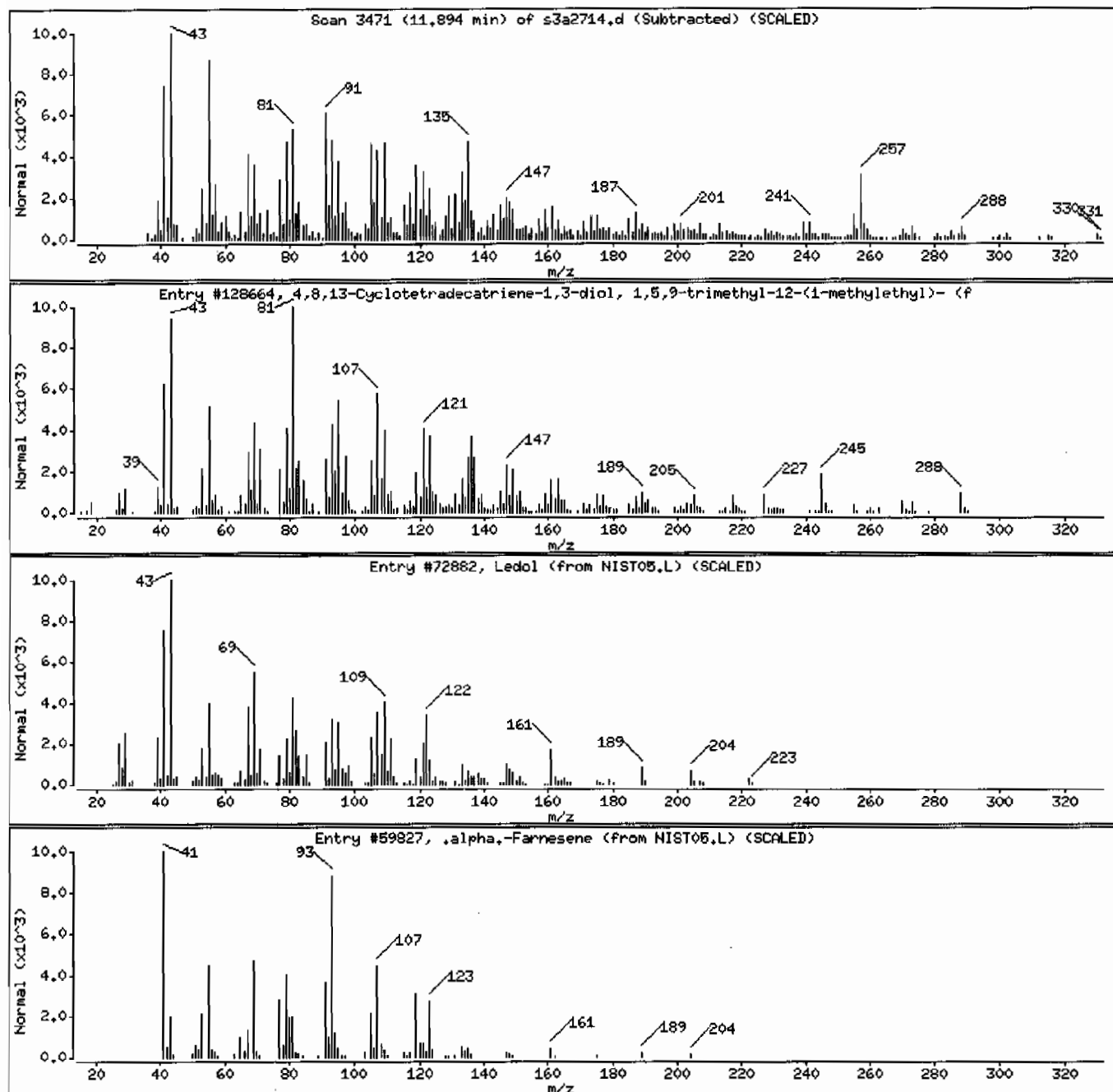
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| Unknown                                  |            |          |        |         |          |        |
| 4,8,13-Cyclotetradecatriene-1,3-diol, 1, | 7220-78-2  | NIST05.L | 128664 | 35      | C20H34O2 | 306    |
| Ledol                                    | 577-27-5   | NIST05.L | 72882  | 35      | C15H26O  | 222    |
| ,alpha,-Farnesene                        | 502-61-4   | NIST05.L | 59827  | 30      | C15H24   | 204    |



Date : 27-JAN-2010 14:35

Client ID: RE16-10-8410

Instrument: MSD3.1

Sample Info: 12451140021944874111SVHF111LANL

Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

## Library Search Compound Match

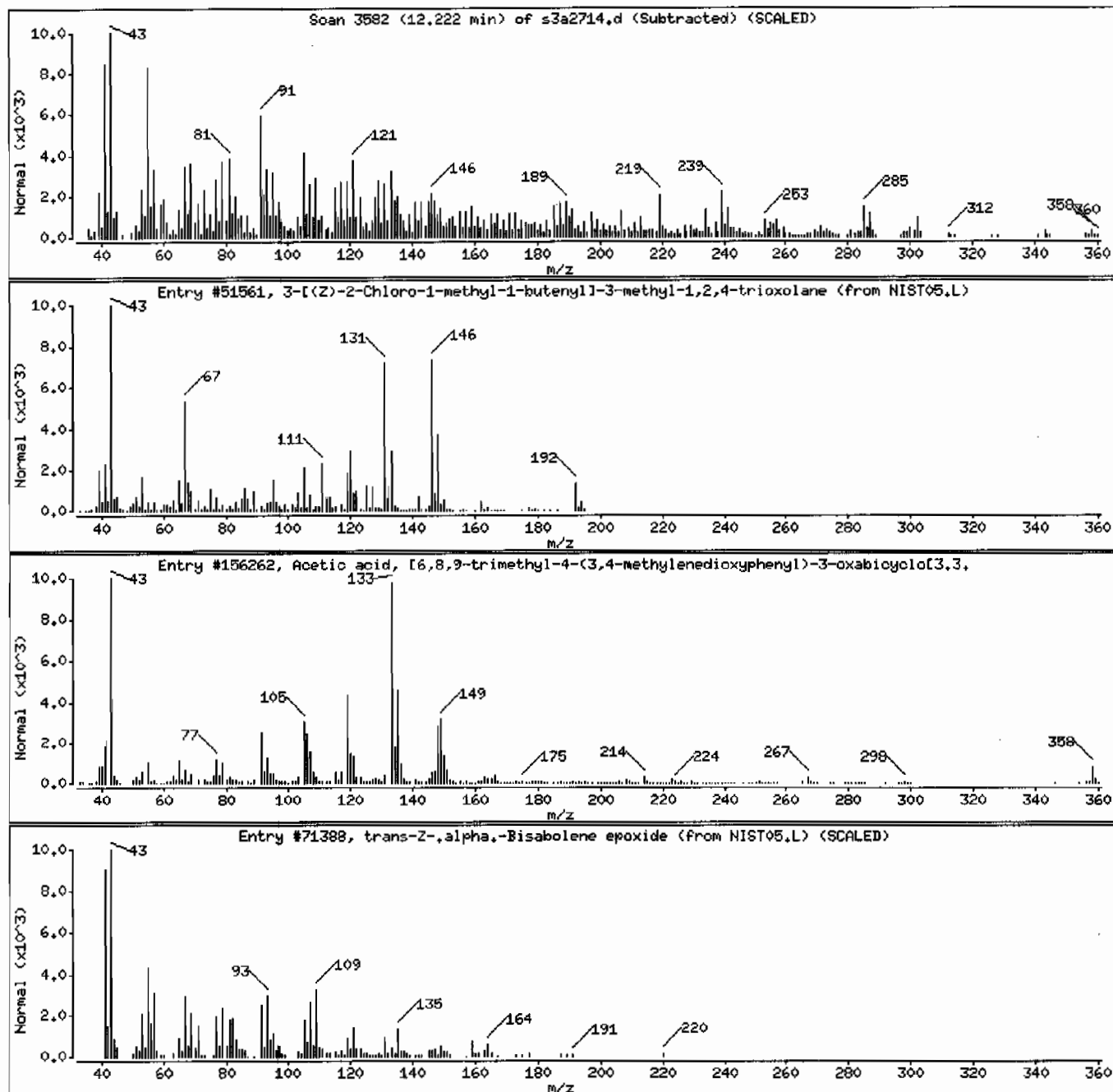
Unknown

3-[(2)-2-Chloro-1-methyl-1-butenyl]-3-me

| CAS Number   | Library  | Entry  | Quality | Formula   | Weight |
|--------------|----------|--------|---------|-----------|--------|
| 105949-79-9  | NIST05.L | 51561  | 25      | C8H13ClO3 | 192    |
| 1000265-64-7 | NIST05.L | 156262 | 25      | C21H26O5  | 358    |
| 1000131-71-1 | NIST05.L | 71388  | 15      | C15H24O   | 220    |

Acetic acid, [6,8,9-trimethyl-4-(3,4-met

trans-2-.alpha.-Bisabolene epoxide



Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.i

Sample Info: I245114002194487411SVHF11ILANL

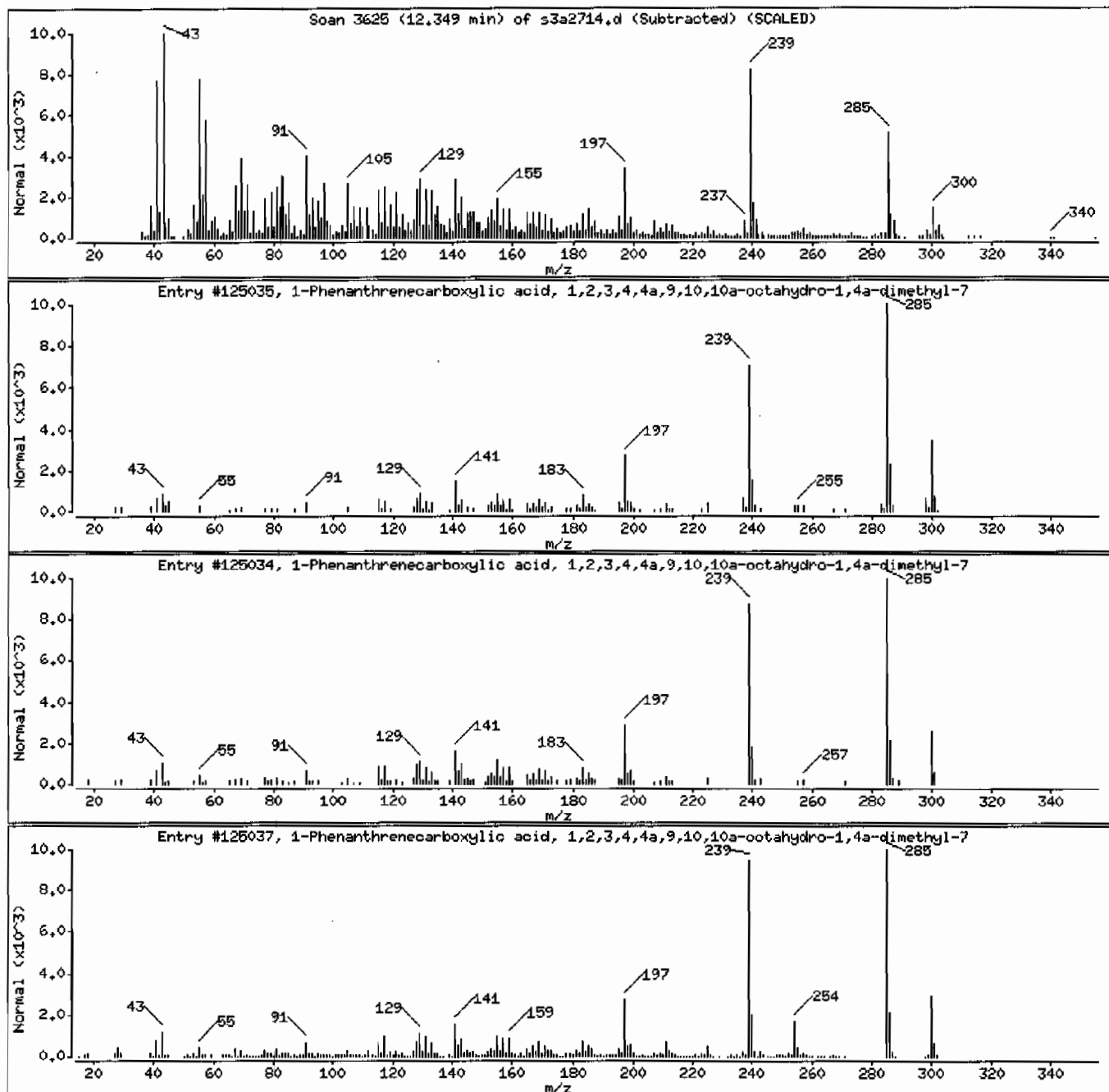
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| Unknown                                  |            |          |        |         |          |        |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 5155-70-4  | NIST05.L | 125035 | 97      | C20H28O2 | 300    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1740-19-8  | NIST05.L | 125034 | 90      | C20H28O2 | 300    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1740-19-8  | NIST05.L | 125037 | 74      | C20H28O2 | 300    |



Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.i

Sample Info: 1245114002194487411SVHF11ILANL

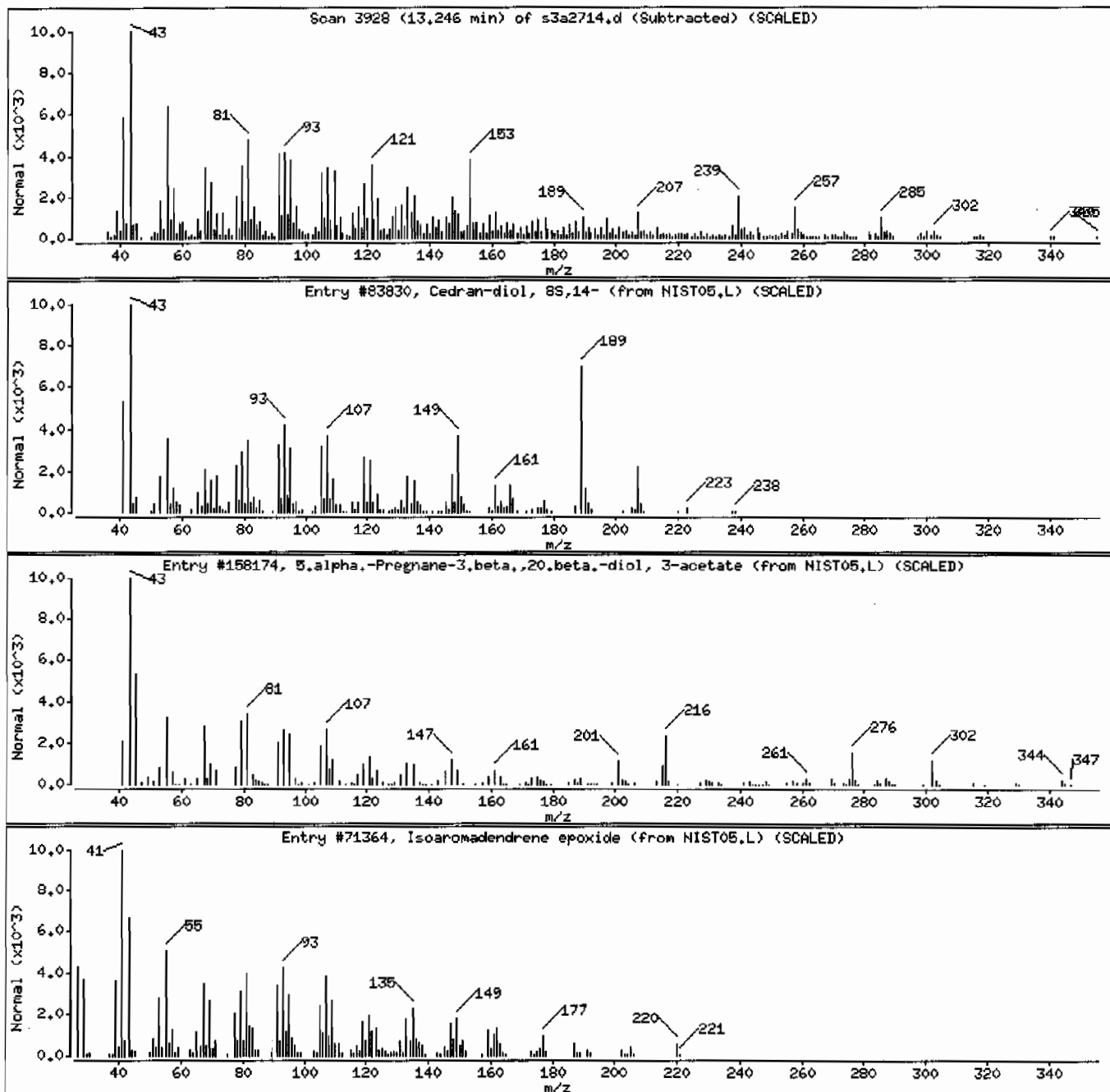
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|--|--------------|----------|--------|---------|----------|--------|
| Unknown                                  |              |          |        |         |          |        |
| Cedran-diol, 8S,14-                      | 62600-05-9   | NIST05.L | 83830  | 70      | C15H26O2 | 238    |
| 5.alpha.-Pregnane-3.beta.,20.beta.-diol, | 17182-23-9   | NIST05.L | 158174 | 38      | C23H38O3 | 362    |
| Isoaromadendrene epoxide                 | 1000159-36-6 | NIST05.L | 71364  | 38      | C15H24O  | 220    |



Date: 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.i

Sample Info: 1245114002194487411SVHF11ILANL

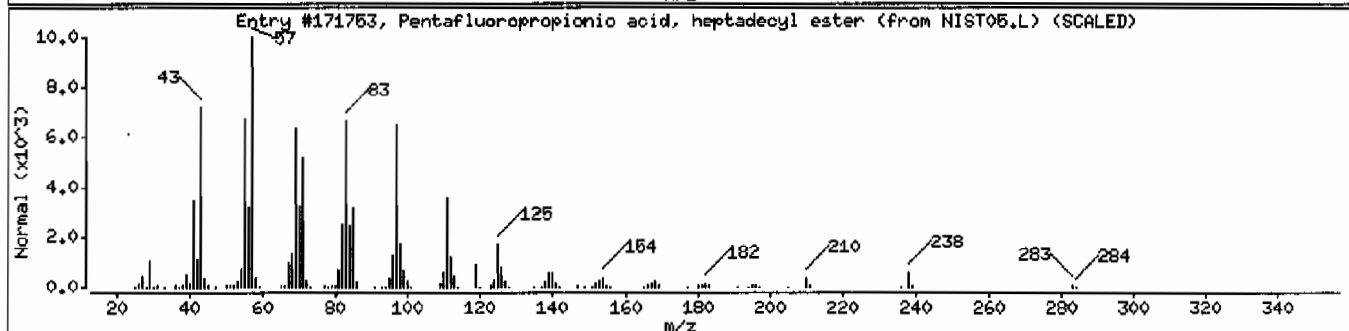
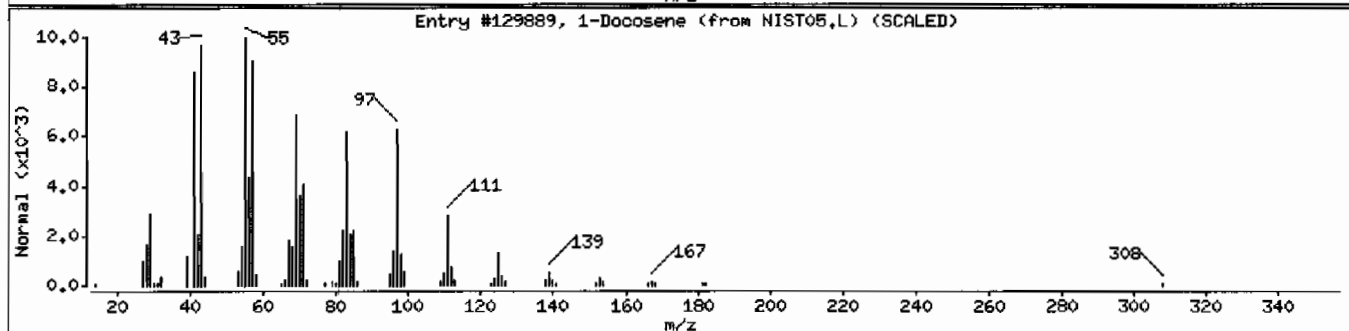
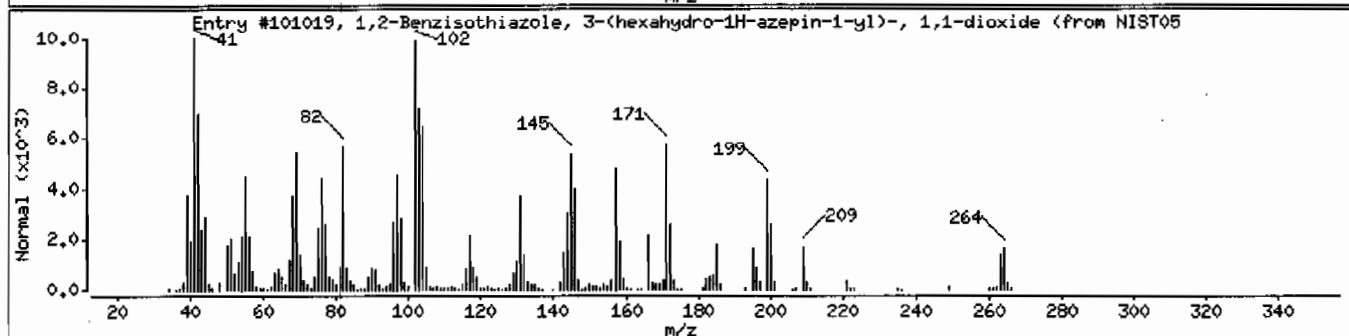
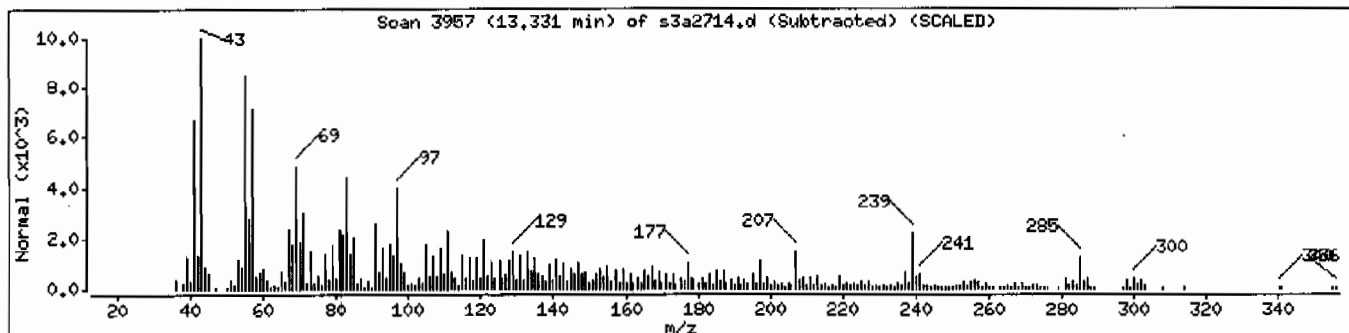
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match                                   | CAS Number   | Library  | Entry  | Quality | Formula     | Weight |
|---|--------------|----------|--------|---------|-------------|--------|
| 1,2-Benzisothiazole, 3-(hexahydro-1H-azepin-1-yl)-, 1,1-dioxide | 309735-29-3  | NIST05.L | 101019 | 91      | C13H16N2O2S | 264    |
| 1-Docosene  | 1599-67-3    | NIST05.L | 129889 | 90      | C22H44      | 308    |
| Pentafluoropropionic acid, heptadecyl ester                     | 1000283-04-2 | NIST05.L | 171753 | 70      | C20H35F6O2  | 402    |



Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.i

Sample Info: 1245114002194487411SVHF111LANL

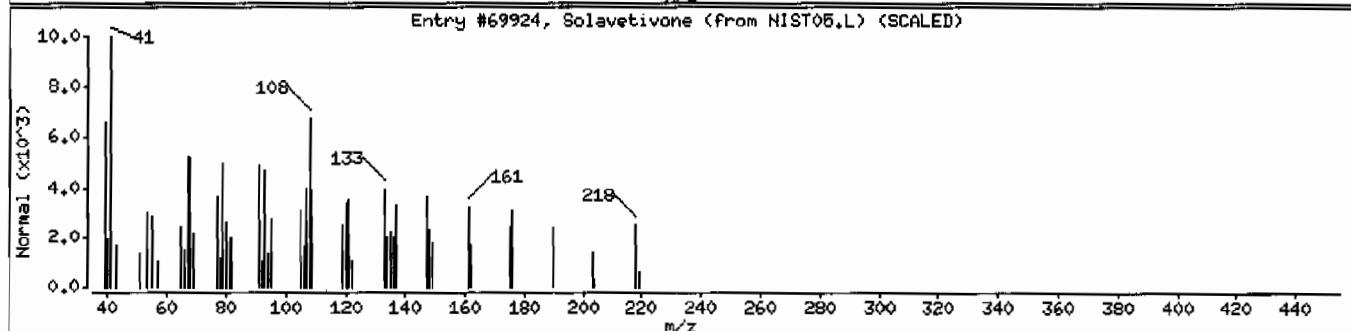
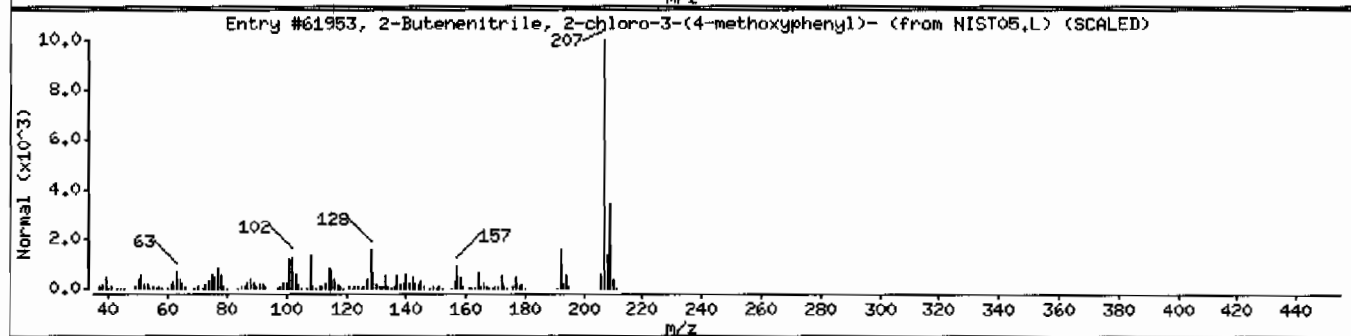
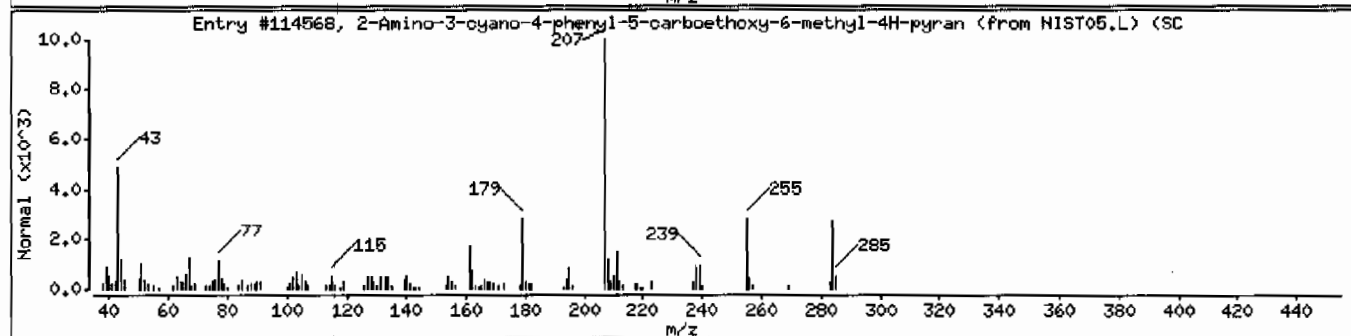
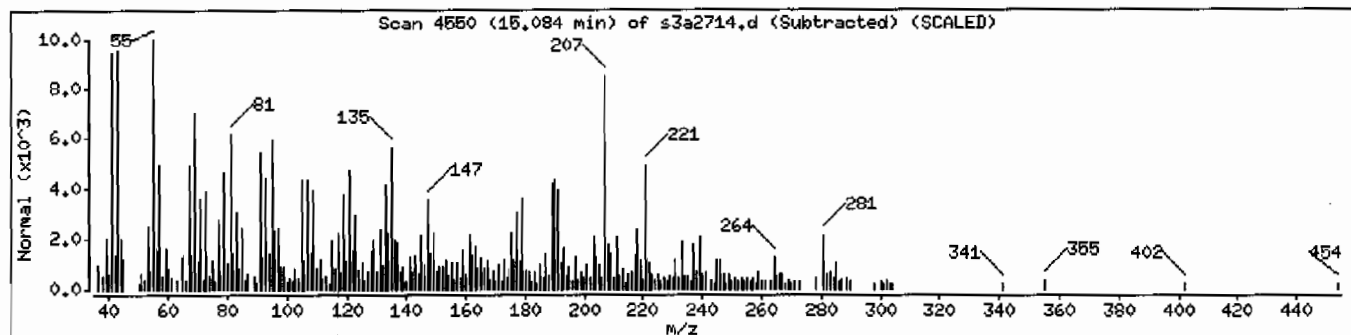
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula    | Weight |
|--|--------------|----------|--------|---------|------------|--------|
| Unknown                                  |              |          |        |         |            |        |
| 2-Amino-3-cyano-4-phenyl-5-carboethoxy-6 | 1000301-54-4 | NIST05.L | 114568 | 45      | C16H16N2O3 | 284    |
| 2-Butenenitrile, 2-chloro-3-(4-methoxyph | 1000305-66-7 | NIST05.L | 61953  | 43      | C11H10ClNO | 207    |
| Solavetivone                             | 54878-25-0   | NIST05.L | 69924  | 38      | C15H22O    | 218    |



Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.i

Sample Info: 1245114002194487411ISVMF111LANL

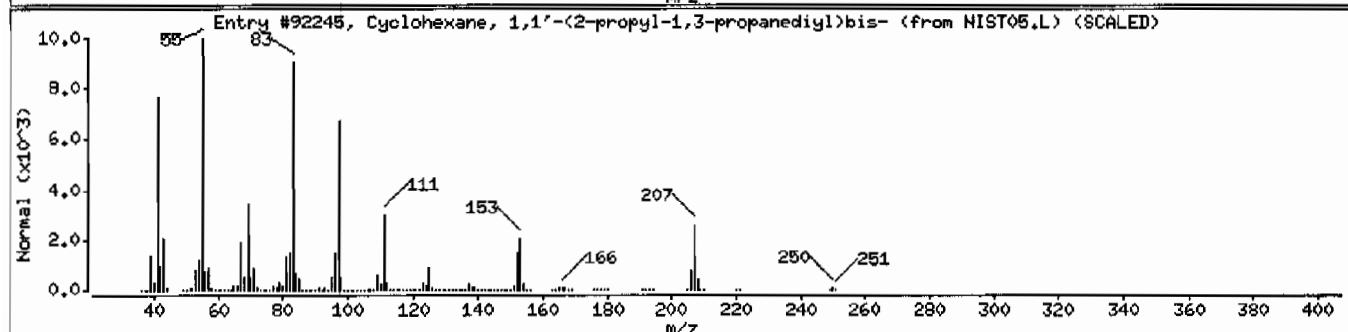
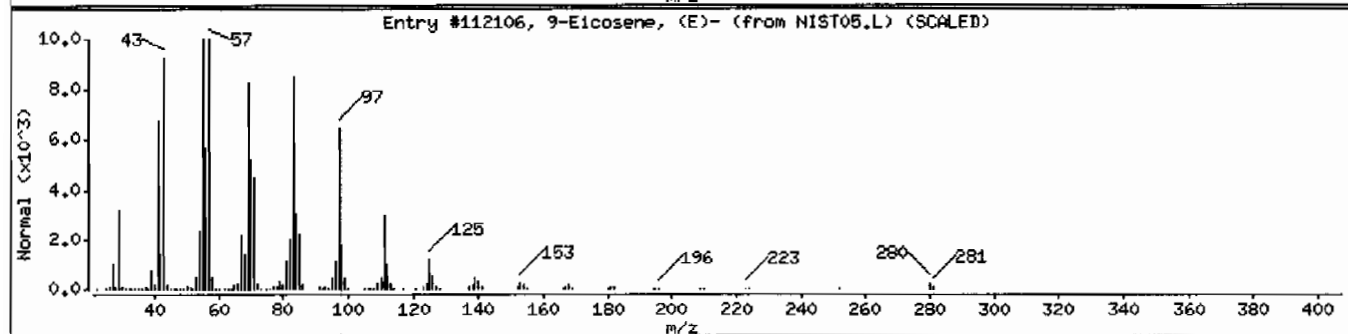
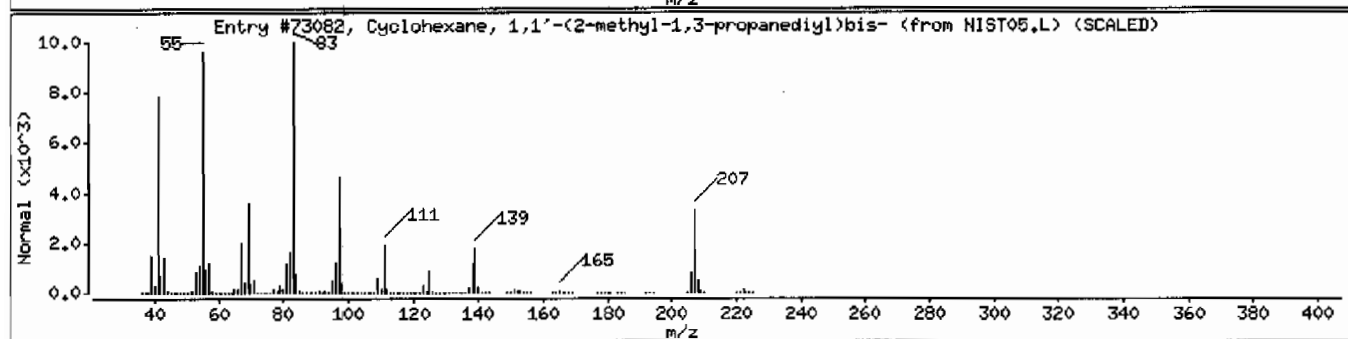
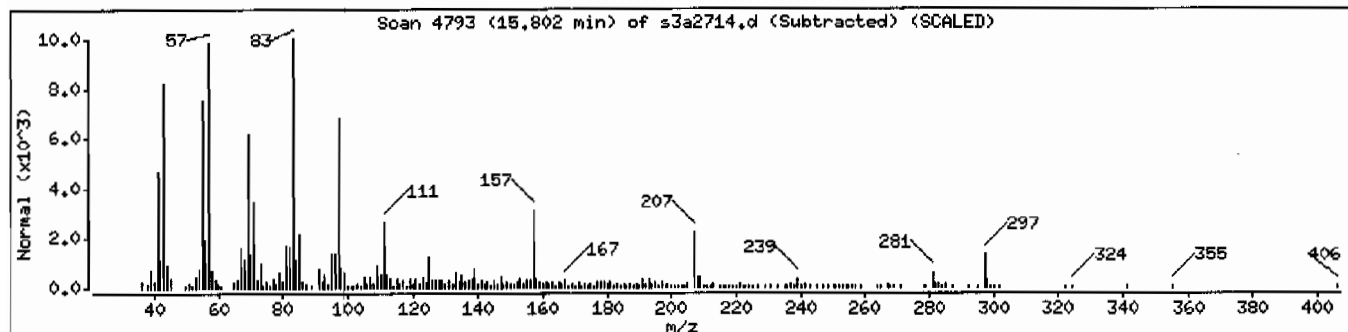
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match                 | CAS Number | Library  | Entry  | Quality | Formula | Weight |
|---|------------|----------|--------|---------|---------|--------|
| Cyclohexane, 1,1'-(2-methyl-1,3-propanediyl)- | 2883-08-1  | NIST05.L | 73082  | 89      | C16H30  | 222    |
| 9-Eicosene, (E)-                              | 74685-29-3 | NIST05.L | 112106 | 46      | C20H40  | 280    |
| Cyclohexane, 1,1'-(2-propyl-1,3-propanediyl)- | 55030-21-2 | NIST05.L | 92245  | 46      | C18H34  | 250    |



Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.i

Sample Info: 12451140021944874111SVHF111LANL

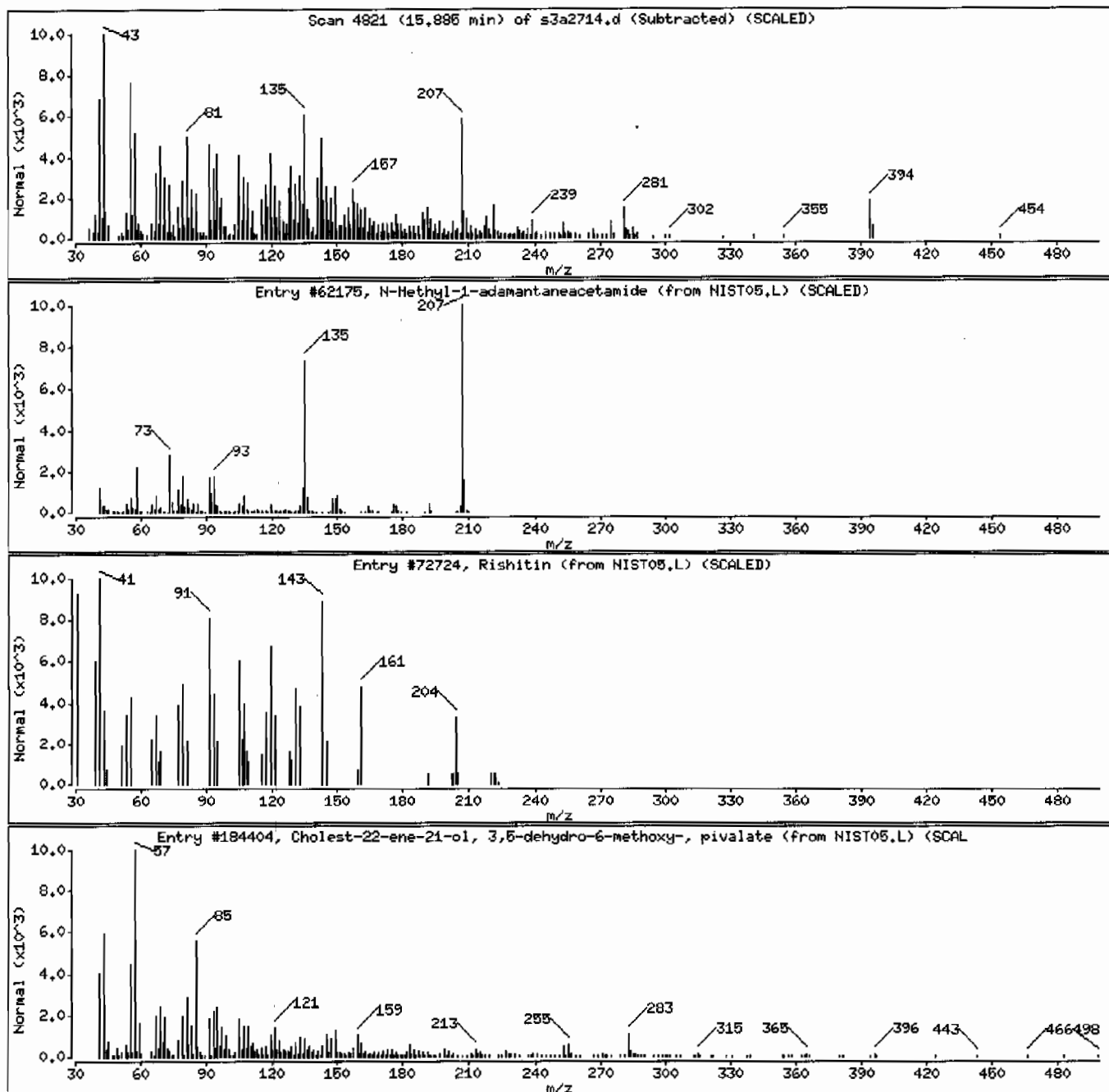
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|--|--------------|----------|--------|---------|----------|--------|
| Unknown                                  |              |          |        |         |          |        |
| N-Methyl-1-adamantaneacetamide           | 31897-93-5   | NIST05.L | 62175  | 30      | C13H21NO | 207    |
| Rishitin                                 | 18178-54-6   | NIST05.L | 72724  | 20      | C14H22O2 | 222    |
| Cholest-22-ene-21-ol, 3,5-dehydro-6-meth | 1000124-60-2 | NIST05.L | 184404 | 18      | C33H54O3 | 498    |





Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.i

Sample Info: 1245114002194487411SVMF11LANL

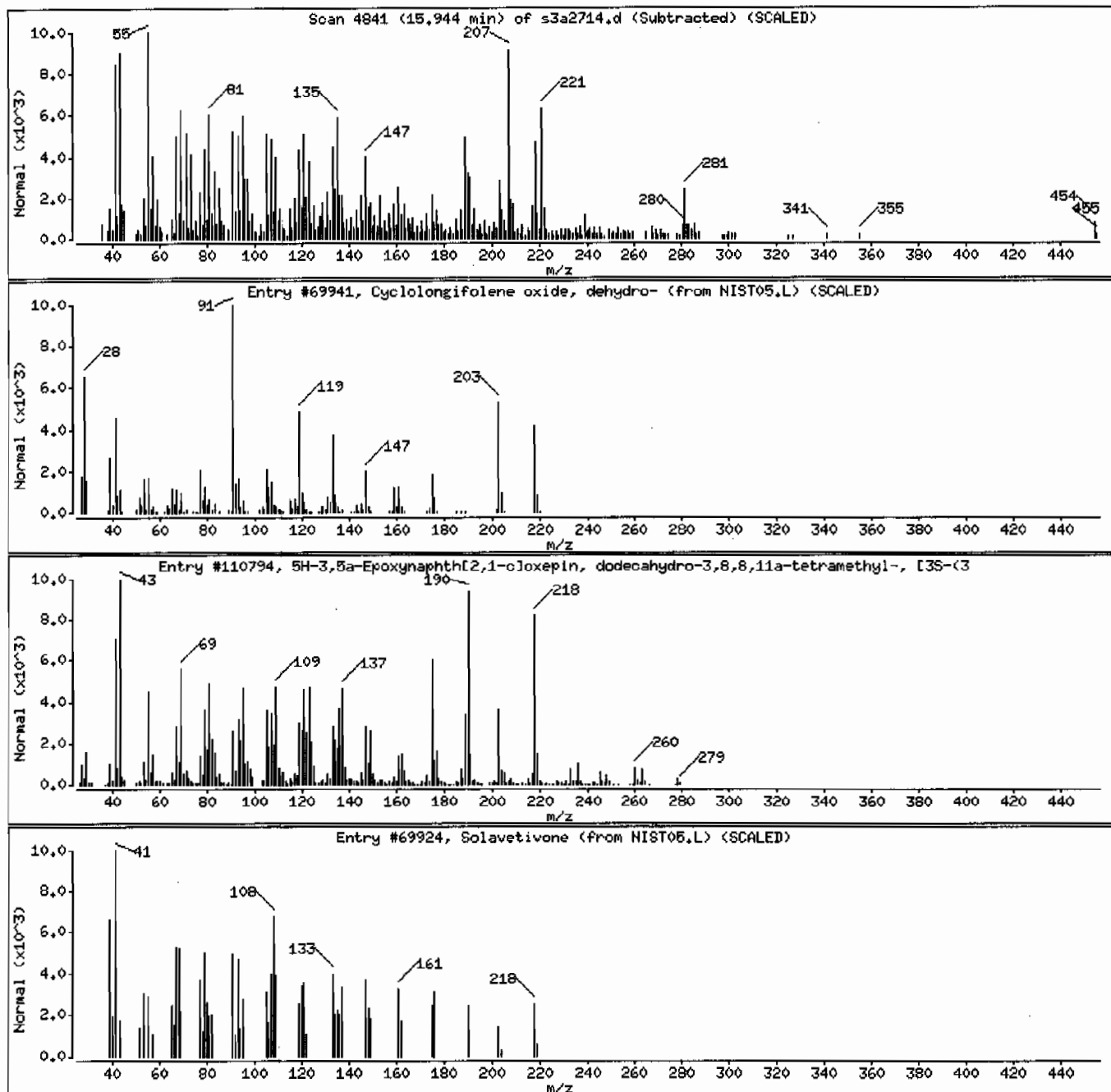
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match              | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|--|--------------|----------|--------|---------|----------|--------|
| Unknown                                    |              |          |        |         |          |        |
| Cyclolongifolene oxide, dehydro-           | 1000156-11-4 | NIST05.L | 69941  | 45      | C15H22O  | 218    |
| 5H-3,5a-Epoxy-naphth[2,1-c]oxepin, dodeca- | 1153-34-0    | NIST05.L | 110794 | 41      | C18H30O2 | 278    |
| Solavetivone                               | 54878-25-0   | NIST05.L | 69924  | 38      | C16H22O  | 218    |



Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.i

Sample Info: 12451140021944874111SVHF111LANL

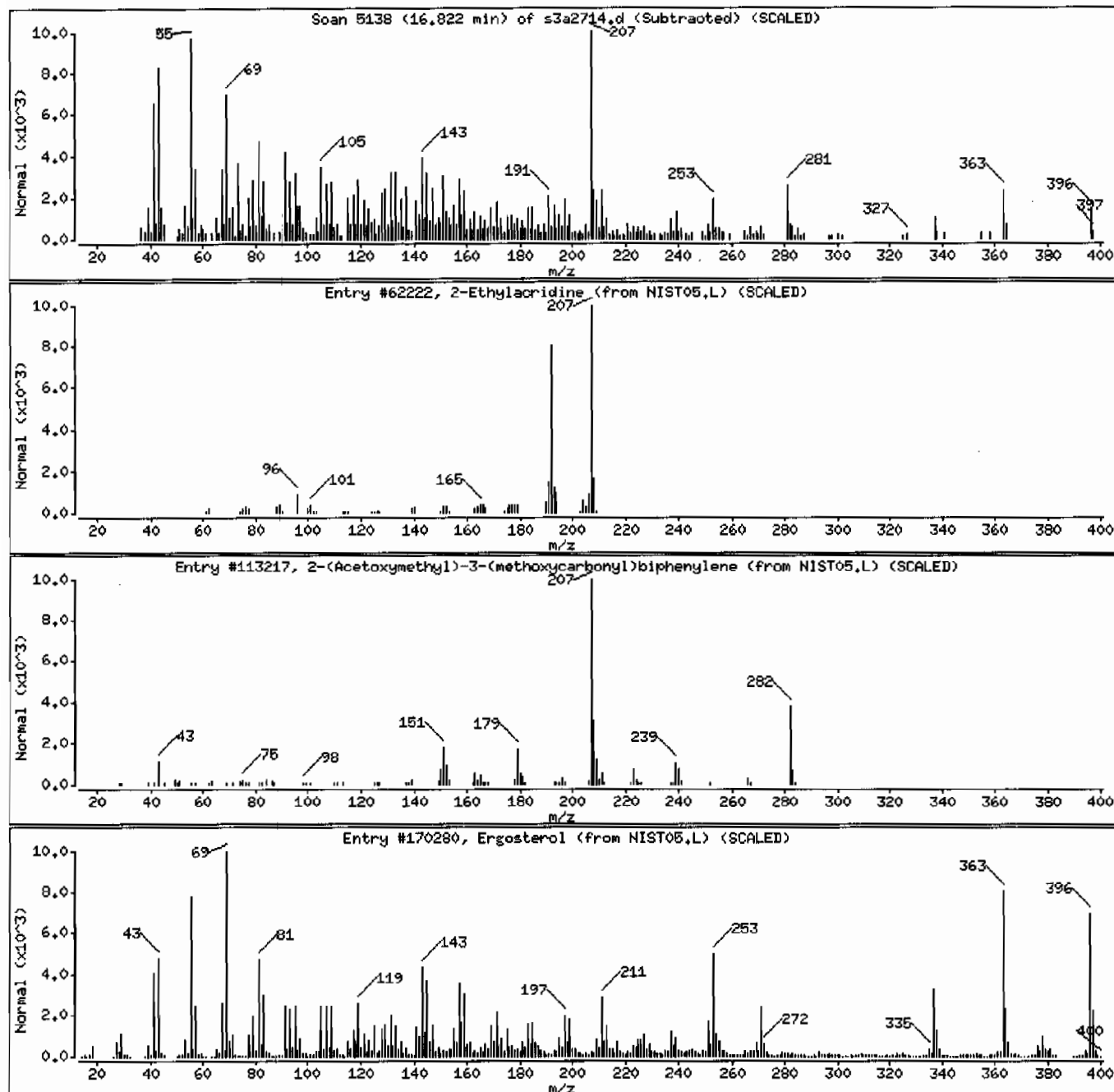
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| Unknown                                  |            |          |        |         |          |        |
| 2-Ethylacridine                          | 55751-83-2 | NIST05.L | 62222  | 42      | C15H13N  | 207    |
| 2-(Acetoxymethyl)-3-(methoxycarbonyl)bip | 93103-70-9 | NIST05.L | 113217 | 42      | C17H14O4 | 282    |
| Ergosterol                               | 57-87-4    | NIST05.L | 170280 | 38      | C28H44O  | 396    |



Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.i

Sample Info: 12451140021944874111SVMF111LANL

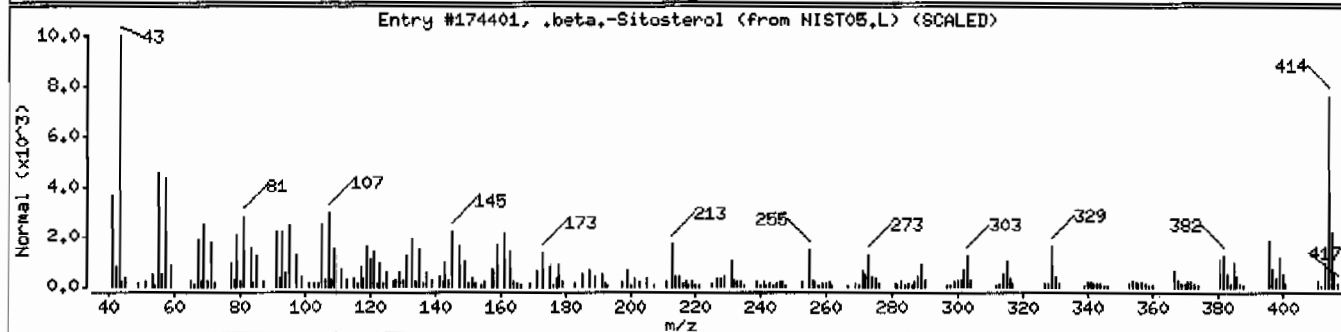
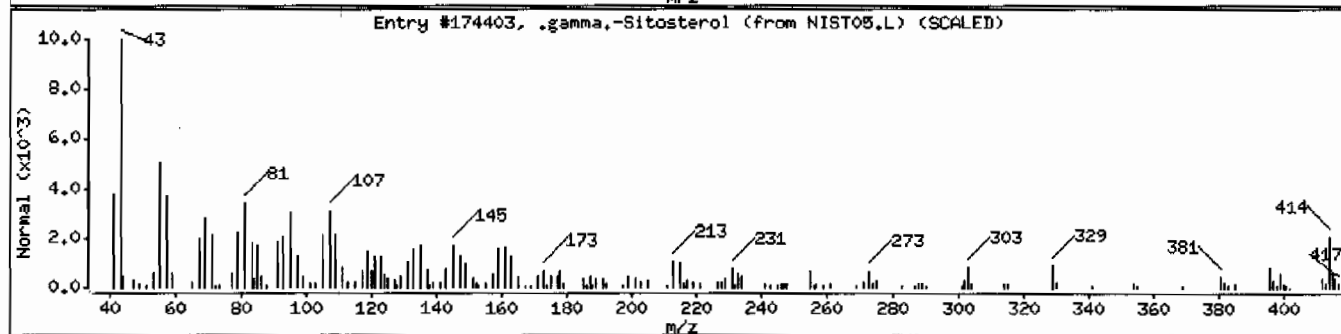
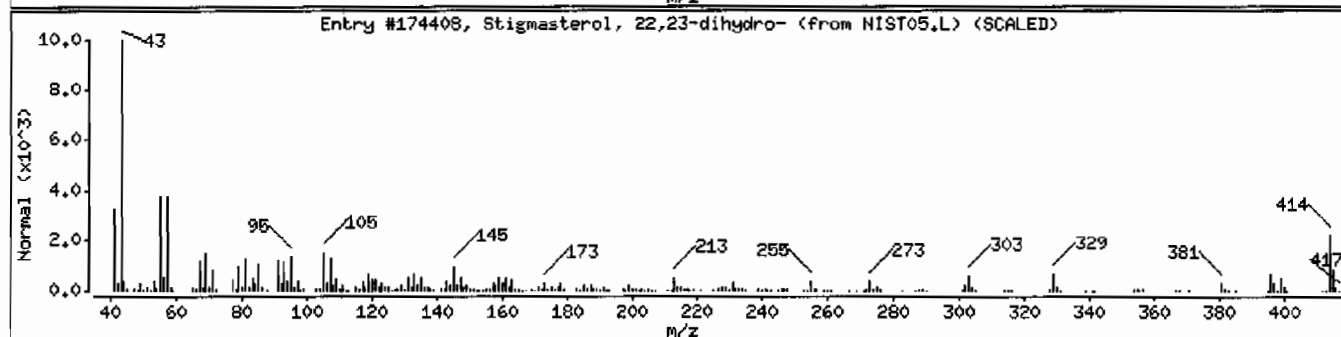
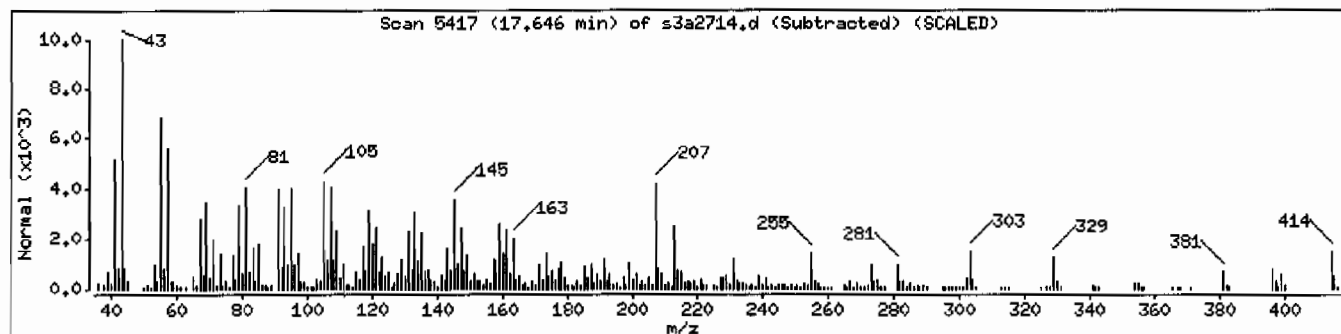
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number   | Library  | Entry  | Quality | Formula | Weight |
|-------------------------------|--------------|----------|--------|---------|---------|--------|
| Stigmasterol, 22,23-dihydro-  | 1000214-20-7 | NIST05.L | 174408 | 95      | C29H50O | 414    |
| .gamma.-Sitosterol            | 83-47-6      | NIST05.L | 174403 | 93      | C29H50O | 414    |
| .beta.-Sitosterol             | 83-46-5      | NIST05.L | 174401 | 66      | C29H50O | 414    |



Date : 27-JAN-2010 14:35

Client ID: RE15-10-8410

Instrument: MSD3.i

Sample Info: 12451140021944874111SVHF111LANL

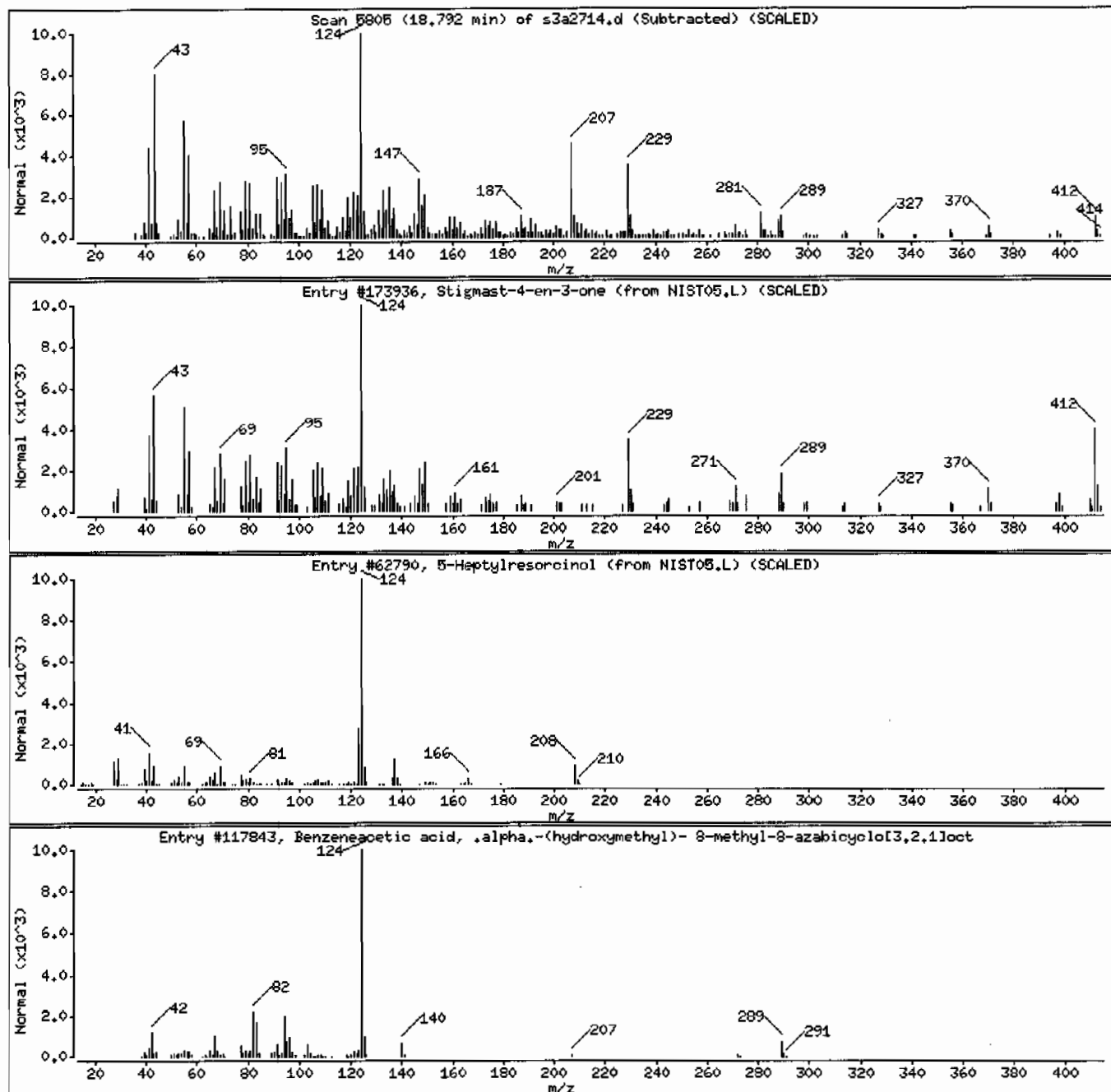
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match           | CAS Number | Library  | Entry  | Quality | Formula   | Weight |
|---|------------|----------|--------|---------|-----------|--------|
| Stigmast-4-en-3-one                     | 1058-61-3  | NIST05.L | 173936 | 93      | C29H48O   | 412    |
| 5-Heptylresorcinol                      | 500-67-4   | NIST05.L | 62790  | 30      | C13H20O2  | 208    |
| Benzenecetic acid, .alpha.-(hydroxymeth | 51-55-8    | NIST05.L | 117843 | 30      | C17H23NO3 | 289    |



Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1324  
Lab Sample ID: 245114003

Client ID: RE15-10-8411  
Batch ID: 944874  
Run Date: 01/27/2010 15:52  
Prep Date: 01/25/2010 21:06  
Data File: s3a2717.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 15.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 392    | ug/kg | 78.4    | 392     |
| 108-95-2   | Phenol                        | U         | 392    | ug/kg | 78.4    | 392     |
| 95-57-8    | 2-Chlorophenol                | U         | 392    | ug/kg | 78.4    | 392     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 392    | ug/kg | 78.4    | 392     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 392    | ug/kg | 78.4    | 392     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 392    | ug/kg | 78.4    | 392     |
| 83-32-9    | Acenaphthene                  | U         | 39.2   | ug/kg | 12.9    | 39.2    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 392    | ug/kg | 39.2    | 392     |
| 100-02-7   | 4-Nitrophenol                 | U         | 392    | ug/kg | 129     | 392     |
| 87-86-5    | Pentachlorophenol             | U         | 392    | ug/kg | 98.0    | 392     |
| 129-00-0   | Pyrene                        | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 110-86-1   | Pyridine                      | U         | 392    | ug/kg | 78.4    | 392     |
| 62-53-3    | Aniline                       | U         | 392    | ug/kg | 118     | 392     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 392    | ug/kg | 78.4    | 392     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 392    | ug/kg | 78.4    | 392     |
| 100-51-6   | Benzyl alcohol                | U         | 392    | ug/kg | 118     | 392     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 392    | ug/kg | 78.4    | 392     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 392    | ug/kg | 78.4    | 392     |
| 95-48-7    | o-Cresol                      | U         | 392    | ug/kg | 78.4    | 392     |
| 65794-96-9 | m,p-Cresols                   | U         | 392    | ug/kg | 118     | 392     |
| 67-72-1    | Hexachloroethane              | U         | 392    | ug/kg | 78.4    | 392     |
| 98-95-3    | Nitrobenzene                  | U         | 392    | ug/kg | 78.4    | 392     |
| 78-59-1    | Isophorone                    | U         | 392    | ug/kg | 78.4    | 392     |
| 88-75-5    | 2-Nitrophenol                 | U         | 392    | ug/kg | 78.4    | 392     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 392    | ug/kg | 137     | 392     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 392    | ug/kg | 78.4    | 392     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 392    | ug/kg | 78.4    | 392     |
| 65-85-0    | Benzoic acid                  | U         | 784    | ug/kg | 196     | 784     |
| 91-20-3    | Naphthalene                   | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 106-47-8   | 4-Chloroaniline               | U         | 392    | ug/kg | 78.4    | 392     |
| 87-68-3    | Hexachlorobutadiene           | U         | 392    | ug/kg | 78.4    | 392     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 39.2   | ug/kg | 7.84    | 39.2    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 392    | ug/kg | 78.4    | 392     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 392    | ug/kg | 78.4    | 392     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 392    | ug/kg | 78.4    | 392     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 39.2   | ug/kg | 12.9    | 39.2    |
| 88-74-4    | 2-Nitroaniline                | U         | 392    | ug/kg | 78.4    | 392     |
| 99-09-2    | <i>o</i> -Nitroaniline        |           |        |       |         |         |
|            | 3-Nitroaniline                | U         | 392    | ug/kg | 78.4    | 392     |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114003

Client ID: RE15-10-8411  
Batch ID: 944874  
Run Date: 01/27/2010 15:52  
Prep Date: 01/25/2010 21:06  
Data File: s3a2717.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
% Moisture: 15.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|----------------------------|-----------|--------|-------|---------|---------|
|           | <i>m</i> -Nitroaniline     |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate          | U         | 392    | ug/kg | 78.4    | 392     |
| 606-20-2  | 2,6-Dinitrotoluene         | U         | 392    | ug/kg | 39.2    | 392     |
| 208-96-8  | Acenaphthylene             | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 51-28-5   | 2,4-Dinitrophenol          | U         | 784    | ug/kg | 149     | 784     |
| 132-64-9  | Dibenzofuran               | U         | 392    | ug/kg | 78.4    | 392     |
| 84-66-2   | Diethylphthalate           | U         | 392    | ug/kg | 78.4    | 392     |
| 86-73-7   | Fluorene                   | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 7005-72-3 | 4-Chlorophenylphenylether  | U         | 392    | ug/kg | 78.4    | 392     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol | U         | 392    | ug/kg | 78.4    | 392     |
| 100-01-6  | 4-Nitroaniline             | U         | 392    | ug/kg | 118     | 392     |
|           | <i>p</i> -Nitroaniline     |           |        |       |         |         |
| 122-39-4  | Diphenylamine              | U         | 392    | ug/kg | 78.4    | 392     |
| 122-66-7  | Azobenzene                 | U         | 392    | ug/kg | 78.4    | 392     |
|           | 1,2-Diphenylhydrazine      |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether   | U         | 392    | ug/kg | 78.4    | 392     |
| 118-74-1  | Hexachlorobenzene          | U         | 392    | ug/kg | 78.4    | 392     |
| 85-01-8   | Phenanthrene               | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 120-12-7  | Anthracene                 | U         | 39.2   | ug/kg | 7.84    | 39.2    |
| 84-74-2   | Di-n-butylphthalate        | U         | 392    | ug/kg | 78.4    | 392     |
| 206-44-0  | Fluoranthene               | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 85-68-7   | Butylbenzylphthalate       | U         | 392    | ug/kg | 78.4    | 392     |
| 56-55-3   | Benzo(a)anthracene         | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 91-94-1   | 3,3'-Dichlorobenzidine     | U         | 392    | ug/kg | 118     | 392     |
| 218-01-9  | Chrysene                   | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | U         | 392    | ug/kg | 78.4    | 392     |
| 117-84-0  | Di-n-octylphthalate        | U         | 392    | ug/kg | 78.4    | 392     |
| 205-99-2  | Benzo(b)fluoranthene       | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 207-08-9  | Benzo(k)fluoranthene       | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 50-32-8   | Benzo(a)pyrene             | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene     | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 53-70-3   | Dibenzo(a,h)anthracene     | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 191-24-2  | Benzo(ghi)perylene         | U         | 39.2   | ug/kg | 11.8    | 39.2    |
| 120-82-1  | 1,2,4-Trichlorobenzene     | U         | 392    | ug/kg | 78.4    | 392     |

**Tentatively Identified Compound Summary**

| CAS No.   | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|-----------|---------------------------------------|------|-----------|-------|-----|------|
| 7785-70-8 | 1R-.alpha.-Pinene                     | 4.2  | 15600     | ug/kg | 96  | NJ   |
|           | Unknown                               | 6.06 | 1160      | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114003

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 15.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8411  
Batch ID: 944874  
Run Date: 01/27/2010 15:52  
Prep Date: 01/25/2010 21:06  
Data File: s3a2717.d

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |  |       |           |       |     |      |
|---|--|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC)    | RT    | Estimated | Units | Fit | Qual |
| 629-74-3                                | 1-Hexadecyne                             | 10.93 | 2990      | ug/kg | 94  | NJ   |
| 112-80-1                                | Oleic Acid                               | 10.95 | 2560      | ug/kg | 98  | NJ   |
|   | Unknown                                  | 11.65 | 245       | ug/kg |     | J    |
|   | Unknown                                  | 11.76 | 1140      | ug/kg |     | J    |
|   | Unknown                                  | 11.79 | 253       | ug/kg |     | J    |
|   | Unknown                                  | 11.88 | 238       | ug/kg |     | J    |
|   | Unknown                                  | 11.91 | 325       | ug/kg |     | J    |
|   | Unknown                                  | 12.07 | 445       | ug/kg |     | J    |
|   | Unknown                                  | 12.11 | 446       | ug/kg |     | J    |
|   | Unknown                                  | 12.33 | 3690      | ug/kg |     | J    |
| 1740-19-8                               | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 12.49 | 2190      | ug/kg | 99  | NJ   |
| 514-10-3                                | Abietic acid                             | 12.76 | 1640      | ug/kg | 91  | NJ   |
|   | Unknown                                  | 12.79 | 292       | ug/kg |     | J    |
| 848-62-4                                | Pregnan-20-one, (5.alpha.)-              | 12.83 | 449       | ug/kg | 80  | NJ   |
| 1000268-22-7                            | Benzaldehyde, 4-methoxy-, (4-bicyclo[2.2 | 12.87 | 860       | ug/kg | 91  | NJ   |
|   | Unknown                                  | 13.01 | 691       | ug/kg |     | J    |
|   | Unknown                                  | 13.14 | 251       | ug/kg |     | J    |
|   | Unknown                                  | 13.31 | 224       | ug/kg |     | J    |
| 34444-37-6                              | (-)-Nortrachlogenin                      | 16.51 | 3800      | ug/kg | 90  | NJ   |
| 83-46-5                                 | .beta.-Sitosterol                        | 17.68 | 3150      | ug/kg | 98  | NJ   |

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2717.d  
Lab Smp Id: 245114003 Client Smp ID: RE15-10-8411  
Inj Date : 27-JAN-2010 15:52  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |245114003|944874|1|SVMF|1|LANL  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m  
Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 17  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1324.sub  
Target Version: 3.50  
Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.14000  | weight of sample          |
| M    | 15.35810  | % moisture                |

Cpnd Variable Local Compound Variable

| Compounds                   | QUANT SIG |        |        |         | RESPONSE | CONCENTRATIONS       |                  |
|-----------------------------|-----------|--------|--------|---------|----------|----------------------|------------------|
|                             | MASS      | RT     | EXP RT | REL RT  |          | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/Kg) |
| * 10 1,4-Dichlorobenzene-d4 | 152       | 4.822  | 4.817  | (1.000) | 240803   | 40.0000              |                  |
| * 29 Naphthalene-d8         | 136       | 6.100  | 6.100  | (1.000) | 1155876  | 40.0000              |                  |
| * 46 Acenaphthene-d10       | 164       | 7.973  | 7.973  | (1.000) | 542499   | 40.0000              |                  |
| * 67 Phenanthrene-d10       | 188       | 9.591  | 9.588  | (1.000) | 891250   | 40.0000              |                  |
| * 91 Chrysene-d12           | 240       | 12.646 | 12.610 | (1.000) | 989280   | 40.0000              |                  |
| * 98 Perylene-d12           | 264       | 15.001 | 14.945 | (1.000) | 321381   | 40.0000              |                  |
| \$ 3 2-Fluorophenol         | 112       | 3.642  | 3.633  | (0.755) | 385407   | 61.5077              | 2410             |
| \$ 5 Phenol-d5              | 99        | 4.425  | 4.418  | (0.918) | 460297   | 58.4502              | 2290             |
| \$ 20 Nitrobenzene-d5       | 82        | 5.356  | 5.357  | (0.878) | 211958   | 24.8244              | 973              |
| \$ 39 2-Fluorobiphenyl      | 172       | 7.229  | 7.227  | (0.907) | 474634   | 33.8481              | 1330             |
| \$ 60 2,4,6-Tribromophenol  | 329       | 8.828  | 8.825  | (1.107) | 121803   | 78.3204              | 3070             |
| \$ 81 p-Terphenyl-d14       | 244       | 11.304 | 11.297 | (0.894) | 498442   | 29.3135              | 1150             |



## ION RATIO REPORT

## SV REPORT

Data file: s3a2717.d

Report Date: 01/27/2010 16:33

Lab. ID: 245114003

SampleType: SAMPLE

Injection Date: 27-JAN-2010 15:52

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245114003|944874|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1324

Sample Matrix: SOIL

| MASS                       | RESPONSE | RT             | EXPECT RT | TARGET RANGE | RATIO | QUAL |
|----------------------------|----------|----------------|-----------|--------------|-------|------|
| =====                      |          |                |           |              |       |      |
| 4 Aniline                  |          | CAS#: 62-53-3  |           |              |       |      |
| 66                         | 27361    | 4.43           | 4.50      | 80-120       | 100   | (T)  |
| 93                         | 307420   | 4.48           | 4.50      | 205-265      | 1124  | (Q)  |
| -----                      |          |                |           |              |       |      |
| 6 Phenol                   |          | CAS#: 108-95-2 |           |              |       |      |
| 94                         | 41702    | 4.48           | 4.43      | 80-120       | 100   | ( )  |
| 66                         | 8153     | 4.48           | 4.43      | 18- 78       | 20    | ( )  |
| 65                         | 32910    | 4.48           | 4.43      | 5- 65        | 79    | (Q)  |
| -----                      |          |                |           |              |       |      |
| 7 bis(2-Chloroethyl) ether |          | CAS#: 111-44-4 |           |              |       |      |
| 63                         | 89330    | 4.77           | 4.54      | 80-120       | 100   | (T)  |
| 93                         | 3402176  | 4.77           | 4.54      | 95-155       | 3809  | (QT) |
| 95                         | 55557    | 4.77           | 4.54      | 9- 69        | 62    | (T)  |
| -----                      |          |                |           |              |       |      |
| 12 Benzyl alcohol          |          | CAS#: 100-51-6 |           |              |       |      |
| 108                        | 44930    | 4.91           | 4.93      | 80-120       | 100   | ( )  |
| 79                         | 260752   | 4.91           | 4.93      | 102-162      | 580   | (Q)  |
| 77                         | 154750   | 4.91           | 4.93      | 55-115       | 344   | (Q)  |
| -----                      |          |                |           |              |       |      |
| 15 o-Cresol                |          | CAS#: 95-48-7  |           |              |       |      |
| 107                        | 147961   | 4.91           | 5.01      | 80-120       | 100   | (T)  |
| 108                        | 44930    | 4.91           | 5.01      | 87-147       | 30    | (QT) |
| 77                         | 154750   | 4.91           | 5.01      | 19- 79       | 105   | (QT) |
| -----                      |          |                |           |              |       |      |
| 17 N-Nitrosodipropylamine  |          | CAS#: 621-64-7 |           |              |       |      |
| 70                         | 37777    | 5.36           | 5.19      | 80-120       | 100   | (T)  |
| 42                         | 25765    | 5.35           | 5.19      | 43-103       | 68    | (T)  |
| -----                      |          |                |           |              |       |      |

| MASS                          | RESPONSE | RT   | EXPECT RT        | TARGET RANGE | RATIO | QUAL |
|-------------------------------|----------|------|------------------|--------------|-------|------|
| <hr/>                         |          |      |                  |              |       |      |
| 18 m,p-Cresols                |          |      | CAS#: 65794-96-9 |              |       |      |
| 107                           | 52085    | 5.32 | 5.16             | 80-120       | 100   | (T)  |
| 108                           | 15513    | 5.32 | 5.16             | 61-121       | 30    | (QT) |
| 77                            | 113496   | 5.32 | 5.16             | 5- 65        | 218   | (QT) |
| <hr/>                         |          |      |                  |              |       |      |
| 21 Nitrobenzene               |          |      | CAS#: 98-95-3    |              |       |      |
| 77                            | 112631   | 5.32 | 5.38             | 80-120       | 100   | ( )  |
| 65                            | 37801    | 5.32 | 5.38             | 0- 46        | 34    | ( )  |
| 123                           | 1309     | 5.32 | 5.38             | 18- 78       | 1     | (Q)  |
| <hr/>                         |          |      |                  |              |       |      |
| 25 bis(2-Chloroethoxy)methane |          |      | CAS#: 111-91-1   |              |       |      |
| 93                            | 24043    | 5.83 | 5.81             | 80-120       | 100   | ( )  |
| 123                           | 1985     | 5.83 | 5.81             | 0- 49        | 8     | ( )  |
| 95                            | 162936   | 5.83 | 5.81             | 2- 62        | 678   | (Q)  |
| <hr/>                         |          |      |                  |              |       |      |
| 40 2-Chloronaphthalene        |          |      | CAS#: 91-58-7    |              |       |      |
| 162                           | 8828     | 7.36 | 7.37             | 80-120       | 100   | ( )  |
| 164                           | 1493     | 7.36 | 7.37             | 2- 62        | 17    | ( )  |
| 127                           | 2543     | 7.36 | 7.37             | 9- 69        | 29    | ( )  |
| <hr/>                         |          |      |                  |              |       |      |
| 42 o-Nitroaniline             |          |      | CAS#: 88-74-4    |              |       |      |
| 65                            | 13996    | 7.43 | 7.47             | 80-120       | 100   | ( )  |
| 92                            | 22095    | 7.43 | 7.47             | 33- 93       | 158   | (Q)  |
| 138                           | 520      | 7.39 | 7.47             | 72-132       | 4     | (QT) |
| <hr/>                         |          |      |                  |              |       |      |
| 41 m-Nitroaniline             |          |      | CAS#: 99-09-2    |              |       |      |
| 138                           | 1969     | 7.97 | 7.92             | 80-120       | 100   | ( )  |
| 92                            | 7987     | 7.98 | 7.92             | 79-139       | 406   | (QT) |
| 108                           | 21114    | 7.97 | 7.92             | 0- 40        | 1072  | (Q)  |
| <hr/>                         |          |      |                  |              |       |      |
| 43 Dimethylphthalate          |          |      | CAS#: 131-11-3   |              |       |      |
| 163                           | 157445   | 7.60 | 7.66             | 80-120       | 100   | ( )  |
| 164                           | 19512    | 7.60 | 7.66             | 0- 40        | 12    | ( )  |
| <hr/>                         |          |      |                  |              |       |      |
| 44 2,6-Dinitrotoluene         |          |      | CAS#: 606-20-2   |              |       |      |
| 165                           | 70796    | 7.97 | 7.73             | 80-120       | 100   | (T)  |
| 63                            | 2392     | 7.97 | 7.73             | 35- 95       | 3     | (QT) |
| <hr/>                         |          |      |                  |              |       |      |
| 50 2,4-Dinitrotoluene         |          |      | CAS#: 121-14-2   |              |       |      |
| 165                           | 8557     | 8.23 | 8.16             | 80-120       | 100   | (T)  |
| 89                            | 199      | 8.20 | 8.16             | 42-102       | 2     | (Q)  |
| 63                            | 858      | 8.22 | 8.16             | 20- 80       | 10    | (Q)  |
| <hr/>                         |          |      |                  |              |       |      |
| 53 Fluorene                   |          |      | CAS#: 86-73-7    |              |       |      |
| 166                           | 5589     | 8.55 | 8.56             | 80-120       | 100   | ( )  |
| 165                           | 641      | 8.59 | 8.56             | 63-123       | 11    | (Q)  |
| 167                           | 698      | 8.55 | 8.56             | 0- 43        | 13    | ( )  |
| <hr/>                         |          |      |                  |              |       |      |

| MASS                          | RESPONSE | RT    | EXPECT RT | TARGET RANGE    | RATIO | QUAL |
|-------------------------------|----------|-------|-----------|-----------------|-------|------|
| =====                         |          |       |           |                 |       |      |
| 54 4-Chlorophenylphenylether  |          |       |           | CAS#: 7005-72-3 |       |      |
| 204                           | 29333    | 8.67  | 8.55      | 80-120          | 100   | (T)  |
| 141                           | 352      | 8.67  | 8.55      | 31- 91          | 1     | (QT) |
| 206                           | 746      | 8.67  | 8.55      | 3- 63           | 3     | (QT) |
| -----                         |          |       |           |                 |       |      |
| 56 p-Nitroaniline             |          |       |           | CAS#: 100-01-6  |       |      |
| 138                           | 5090     | 8.55  | 8.58      | 80-120          | 100   | ( )  |
| 108                           | 11055    | 8.59  | 8.58      | 41-101          | 217   | (Q)  |
| 92                            | 1143     | 8.52  | 8.58      | 17- 77          | 22    | ( )  |
| -----                         |          |       |           |                 |       |      |
| 79 Pyrene                     |          |       |           | CAS#: 129-00-0  |       |      |
| 202                           | 9559     | 11.30 | 11.16     | 80-120          | 100   | (T)  |
| 200                           | 8018     | 11.30 | 11.16     | 0- 51           | 84    | (QT) |
| 101                           | 2207     | 11.30 | 11.16     | 0- 46           | 23    | (T)  |
| -----                         |          |       |           |                 |       |      |
| 85 Butylbenzylphthalate       |          |       |           | CAS#: 85-68-7   |       |      |
| 149                           | 30444    | 12.00 | 11.83     | 80-120          | 100   | (T)  |
| 91                            | 190260   | 12.00 | 11.83     | 40-100          | 625   | (QT) |
| 206                           | 15493    | 12.00 | 11.83     | 0- 52           | 51    | (T)  |
| -----                         |          |       |           |                 |       |      |
| 89 Benzo(a)anthracene         |          |       |           | CAS#: 56-55-3   |       |      |
| 228                           | 9040     | 12.63 | 12.59     | 80-120          | 100   | ( )  |
| 226                           | 1747     | 12.64 | 12.59     | 0- 56           | 19    | ( )  |
| 229                           | 7548     | 12.63 | 12.59     | 0- 50           | 83    | (Q)  |
| -----                         |          |       |           |                 |       |      |
| 90 3,3'-Dichlorobenzidine     |          |       |           | CAS#: 91-94-1   |       |      |
| 252                           | 449      | 12.55 | 12.53     | 80-120          | 100   | ( )  |
| 254                           | 10127    | 12.54 | 12.53     | 35- 95          | 2255  | (Q)  |
| 126                           | 8018     | 12.49 | 12.53     | 0- 45           | 1785  | (Q)  |
| -----                         |          |       |           |                 |       |      |
| 92 Chrysene                   |          |       |           | CAS#: 218-01-9  |       |      |
| 228                           | 9040     | 12.63 | 12.65     | 80-120          | 100   | ( )  |
| 229                           | 7631     | 12.63 | 12.65     | 0- 50           | 84    | (Q)  |
| 226                           | 1747     | 12.64 | 12.65     | 0- 59           | 19    | ( )  |
| -----                         |          |       |           |                 |       |      |
| 93 bis(2-Ethylhexyl)phthalate |          |       |           | CAS#: 117-81-7  |       |      |
| 149                           | 40282    | 12.55 | 12.55     | 80-120          | 100   | ( )  |
| 167                           | 213027   | 12.49 | 12.55     | 3- 63           | 529   | (Q)  |

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2717.d  
Lab Smp Id: 245114003 Client Smp ID: RE15-10-8411  
Inj Date : 27-JAN-2010 15:52  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |245114003|944874|1|SVMF|1|LANL  
Misc Info : |MSD8270 S|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m  
Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 17  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1324.sub  
Target Version: 3.50  
Processing Host: hpc1p1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.14000  | weight of sample          |
| M    | 15.35810  | % moisture                |

Cpnd Variable

Local Compound Variable

| ISTD                        | RT     | AREA     | AMOUNT |
|-----------------------------|--------|----------|--------|
| =====                       | =====  | =====    | =====  |
| * 10 1,4-Dichlorobenzene-d4 | 4.822  | 1852467  | 40.000 |
| * 29 Naphthalene-d8         | 6.100  | 5288475  | 40.000 |
| * 67 Phenanthrene-d10       | 9.591  | 2283214  | 40.000 |
| * 91 Chrysene-d12           | 12.646 | 28775078 | 40.000 |
| * 98 Perylene-d12           | 15.001 | 931201   | 40.000 |

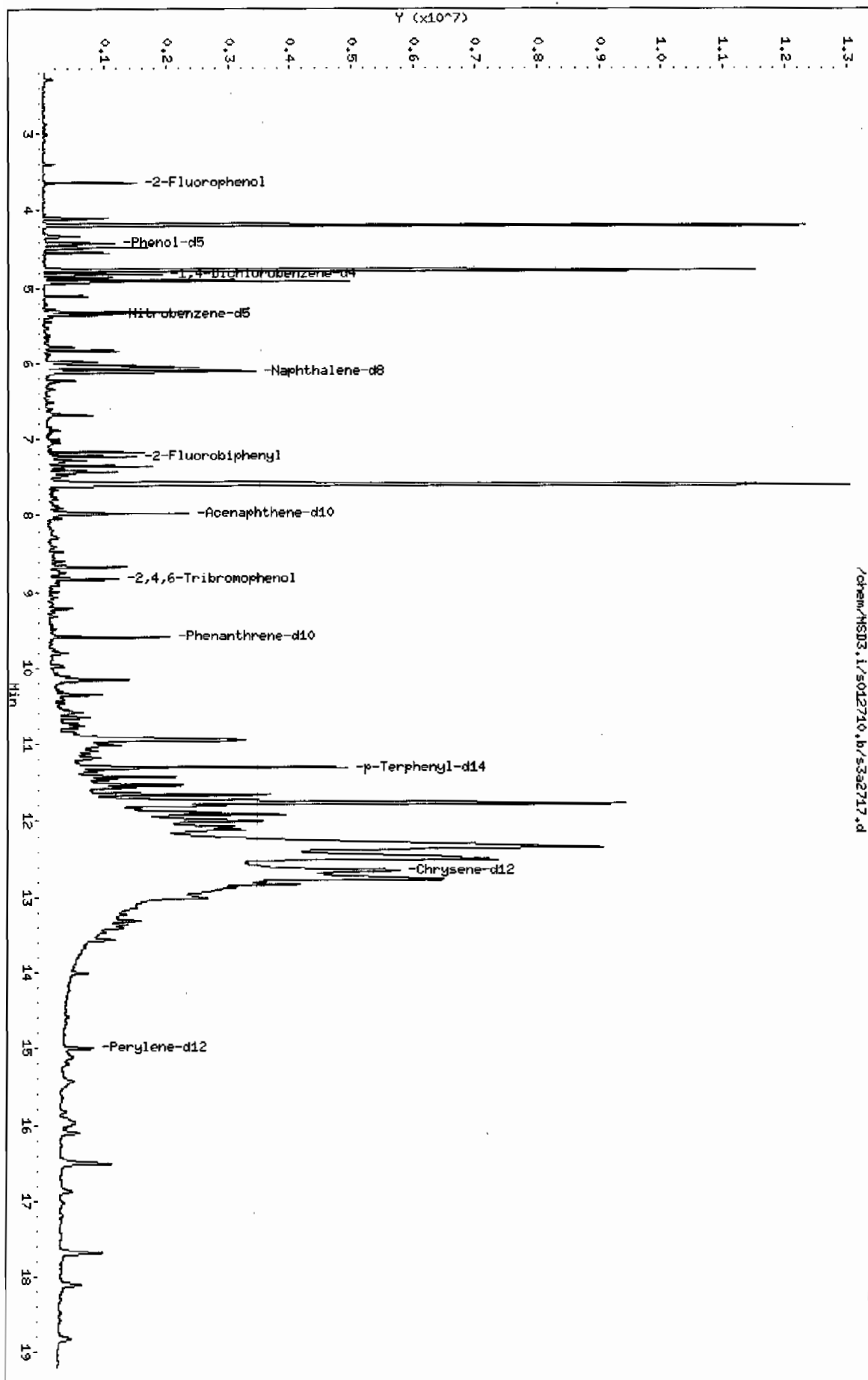
| CONCENTRATIONS |       |               |              | QUANT |         |           |        |
|----------------|-------|---------------|--------------|-------|---------|-----------|--------|
| RT             | AREA  | ON-COL(ng/ul) | FINAL(ug/Kg) | QUAL  | LIBRARY | LIB ENTRY | CPND # |
| =====          | ===== | =====         | =====        | ===== | =====   | =====     | =====  |

| RT                                       | CONCENTRATIONS |                |               | QUAL | QUANT            |           | CPND # |
|--|----------------|----------------|---------------|------|------------------|-----------|--------|
|  | AREA           | ON-COL (ng/ul) | FINAL (ug/Kg) |      | LIBRARY          | LIB ENTRY |        |
| 1R-.alpha.-Pinene                        |                |                |               |      | CAS #: 7785-70-8 |           |        |
| 4.199                                    | 18397101       | 397.245321     | 15600         | 96   | NIST05.L         | 15186     | 10     |
| Unknown                                  |                |                |               |      | CAS #:           |           |        |
| 6.056                                    | 3903120        | 29.5217022     | 1160          | 0    |                  | 0         | 29     |
| 1-Hexadecyne                             |                |                |               |      | CAS #: 629-74-3  |           |        |
| 10.932                                   | 4355642        | 76.3071742     | 2990          | 94   | NIST05.L         | 73057     | 67     |
| Oleic Acid                               |                |                |               |      | CAS #: 112-80-1  |           |        |
| 10.949                                   | 3730047        | 65.3472762     | 2560          | 98   | NIST05.L         | 113353    | 67     |
| Unknown                                  |                |                |               |      | CAS #:           |           |        |
| 11.650                                   | 4490411        | 6.24208297     | 245           | 0    |                  | 0         | 91     |
| Unknown                                  |                |                |               |      | CAS #:           |           |        |
| 11.763                                   | 20867088       | 29.0071675     | 1140          | 0    |                  | 0         | 91     |
| Unknown                                  |                |                |               |      | CAS #:           |           |        |
| 11.790                                   | 4636969        | 6.44581192     | 253           | 0    |                  | 0         | 91     |
| Unknown                                  |                |                |               |      | CAS #:           |           |        |
| 11.881                                   | 4370722        | 6.07570460     | 238           | 0    |                  | 0         | 91     |
| Unknown                                  |                |                |               |      | CAS #:           |           |        |
| 11.911                                   | 5963351        | 8.28960480     | 325           | 0    |                  | 0         | 91     |
| Unknown                                  |                |                |               |      | CAS #:           |           |        |
| 12.071                                   | 8174787        | 11.3637044     | 445           | 0    |                  | 0         | 91     |
| Unknown                                  |                |                |               |      | CAS #:           |           |        |
| 12.113                                   | 8187635        | 11.3815637     | 446           | 0    |                  | 0         | 91     |
| Unknown                                  |                |                |               |      | CAS #:           |           |        |
| 12.332                                   | 67651003       | 94.0411043     | 3690          | 0    |                  | 0         | 91     |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 |                |                |               |      | CAS #: 1740-19-8 |           |        |
| 12.492                                   | 40120320       | 55.7709280     | 2190          | 99   | NIST05.L         | 125034    | 91     |
| Abietic acid                             |                |                |               |      | CAS #: 514-10-3  |           |        |
| 12.759                                   | 30175687       | 41.9469757     | 1640          | 91   | NIST05.L         | 126143    | 91     |
| Unknown                                  |                |                |               |      | CAS #:           |           |        |
| 12.794                                   | 5366005        | 7.45924001     | 292           | 0    |                  | 0         | 91     |

| RT                                       | CONCENTRATIONS |                |               | QUAL | QUANT               |           | CPND # |
|--|----------------|----------------|---------------|------|---------------------|-----------|--------|
|  | AREA           | ON-COL (ng/ul) | FINAL (ug/Kg) |      | LIBRARY             | LIB ENTRY |        |
| Pregnan-20-one, (5.alpha.)-              |                |                |               |      | CAS #: 848-62-4     |           |        |
| 12.830                                   | 8241595        | 11.4565732     | 449           | 80   | NIST05.L            | 126216    | 91     |
| Benzaldehyde, 4-methoxy-, (4-bicyclo[2.2 |                |                |               |      | CAS #: 1000268-22-7 |           |        |
| 12.869                                   | 15789445       | 21.9487775     | 860           | 91   | NIST05.L            | 126551    | 91     |
| Unknown                                  |                |                |               |      | CAS #:              |           |        |
| 13.011                                   | 12682318       | 17.6295857     | 691           | 0    |                     | 0         | 91     |
| Unknown                                  |                |                |               |      | CAS #:              |           |        |
| 13.141                                   | 4609573        | 6.40772994     | 251           | 0    |                     | 0         | 91     |
| Unknown                                  |                |                |               |      | CAS #:              |           |        |
| 13.313                                   | 4106818        | 5.70885437     | 224           | 0    |                     | 0         | 91     |
| (-)-Nortrachelogenin                     |                |                |               |      | CAS #: 34444-37-6   |           |        |
| 16.505                                   | 2259225        | 97.0455870     | 3800          | 90   | NIST05.L            | 162946    | 98     |
| .beta.-Sitosterol                        |                |                |               |      | CAS #: 83-46-5      |           |        |
| 17.678                                   | 1873183        | 80.4630650     | 3150          | 98   | NIST05.L            | 174400    | 98     |

Data File: /chem/MSD3.i/s012710.b/s3a2717.d  
Date : 27-JAN-2010 15:52  
Client ID: RE15-10-841  
Sample Info: 124514003194487411SYNFI11LNL  
Volume Injected (uL): 0.5  
Column phase: J&W DB-5HS

Instrument: MSD3.i  
Operator: JDI  
Column diameter: 0.20



Date : 27-JAN-2010 15:52

Client ID: RE15-10-8411

Instrument: MSD3.i

Sample Info: 1245114003194487411SVMF111LANL

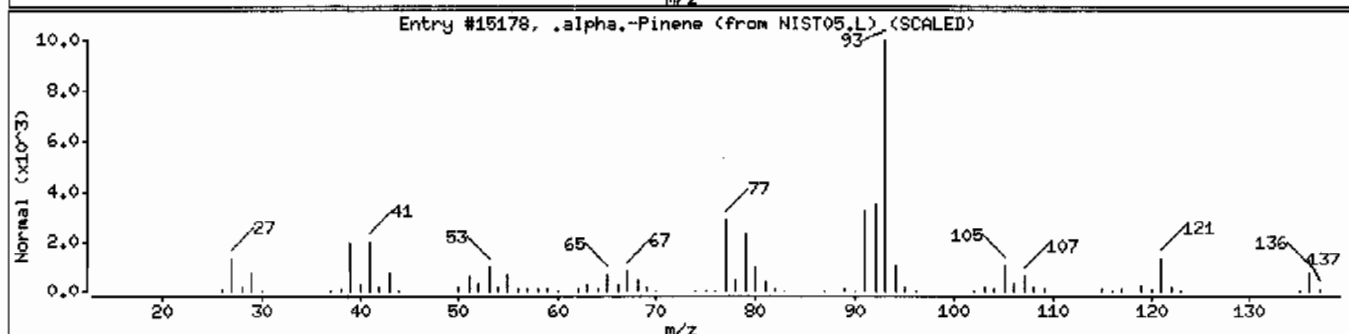
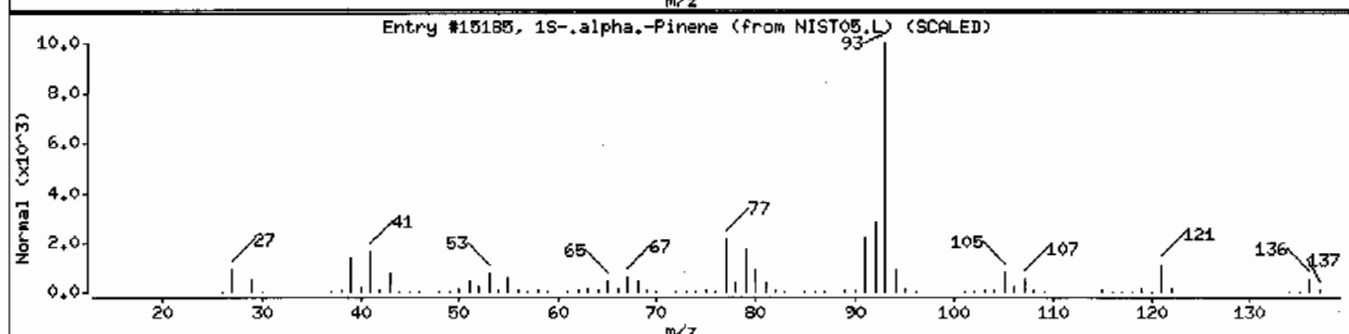
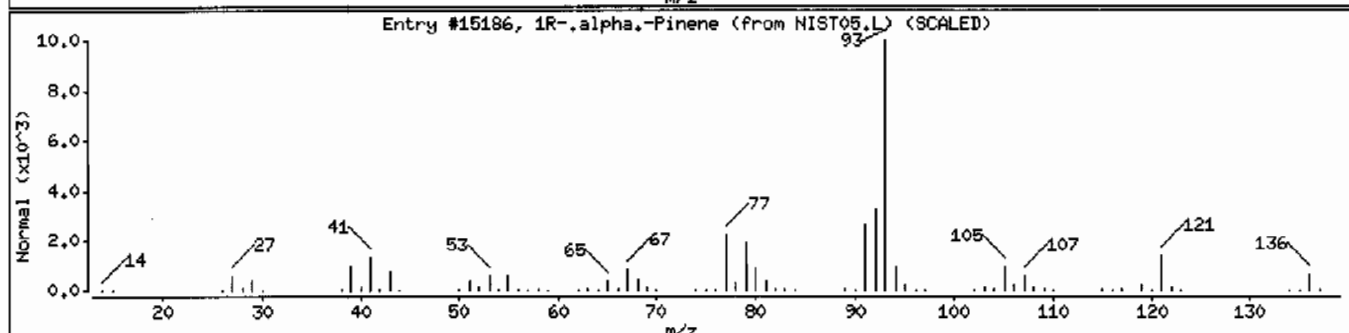
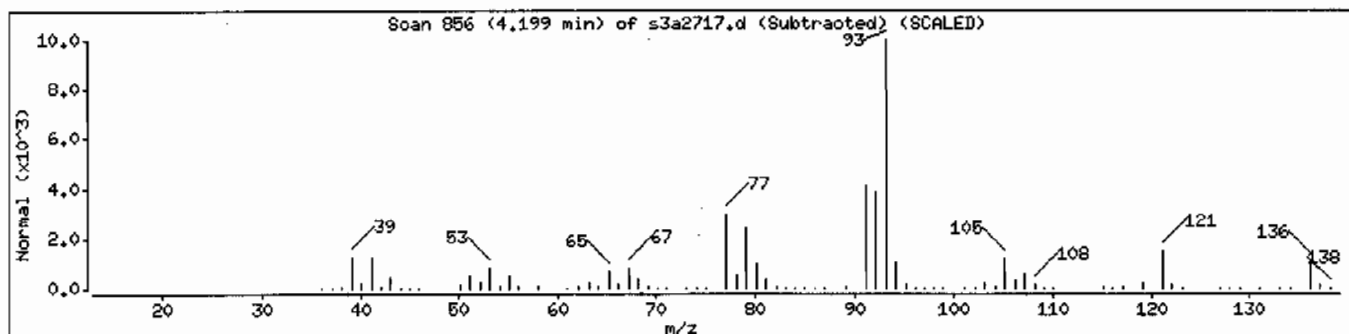
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| 1R-.alpha.-Pinene             | 7785-70-8  | NIST05.L | 15186 | 96      | C10H16  | 136    |
| 1S-.alpha.-Pinene             | 7785-26-4  | NIST05.L | 15185 | 96      | C10H16  | 136    |
| .alpha.-Pinene                | 80-56-8    | NIST05.L | 15178 | 96      | C10H16  | 136    |





Date : 27-JAN-2010 15:52

Client ID: RE15-10-8411

Instrument: MSD3.i

Sample Info: 1245114003194487411|SVHF11|LANL

Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

## Library Search Compound Match

Unknown

Tricyclo[2,2,1,0(2,6)]heptane, 1,3,3-tri

Bicyclo[3,1,1]hept-2-ene, 2,6,6-trimethy

,alpha.-Pinene

CAS Number

Library

Entry

Quality

Formula

Weight

488-97-1

NIST05.L

15356

45

C10H16

136

2437-95-8

NIST05.L

15376

43

C10H16

136

80-56-8

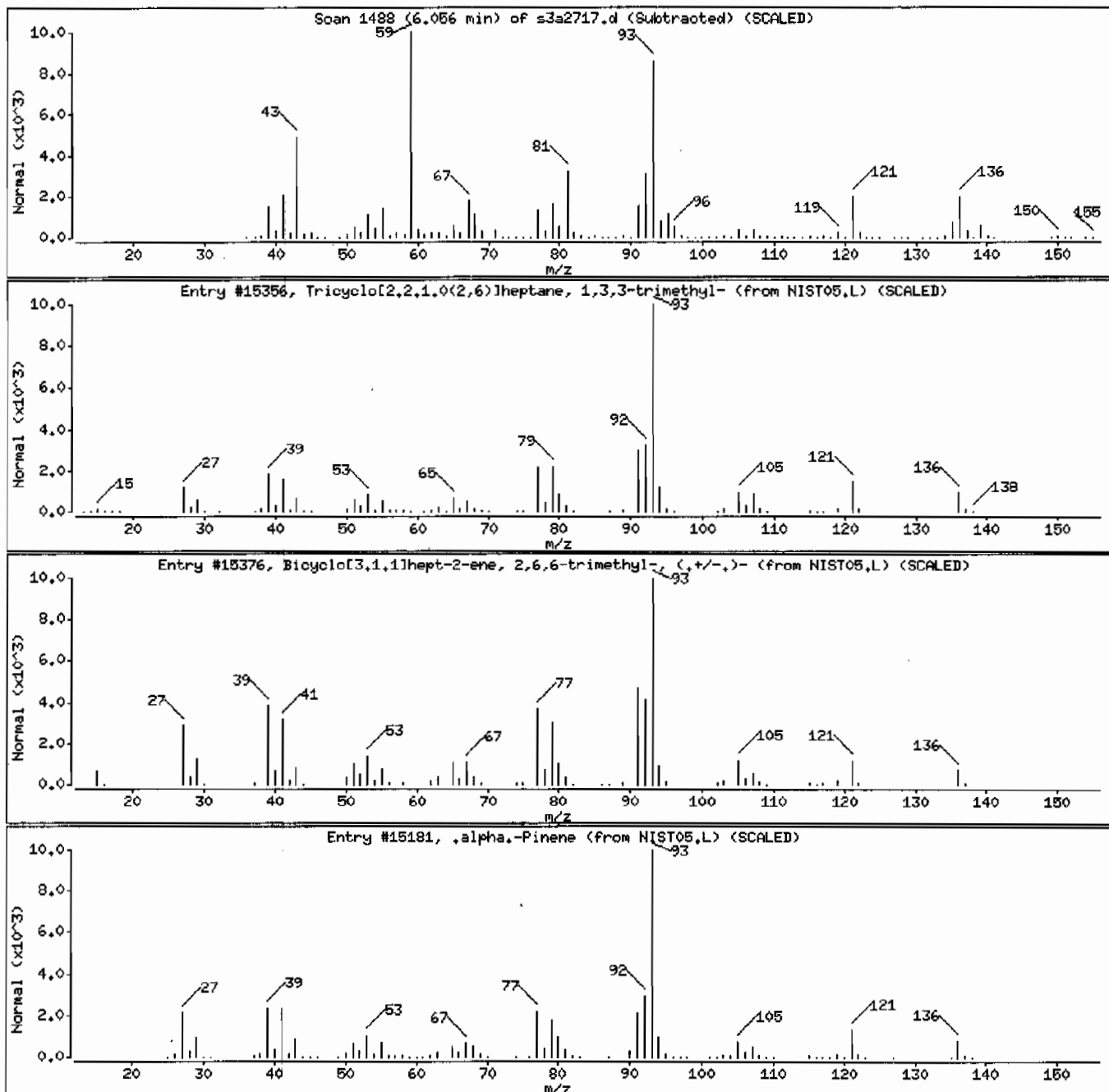
NIST05.L

15181

43

C10H16

136



Date : 27-JAN-2010 15:52

Client ID: RE15-10-8411

Instrument: MSD3.i

Sample Info: 12451140031944874111SVHF111LANL

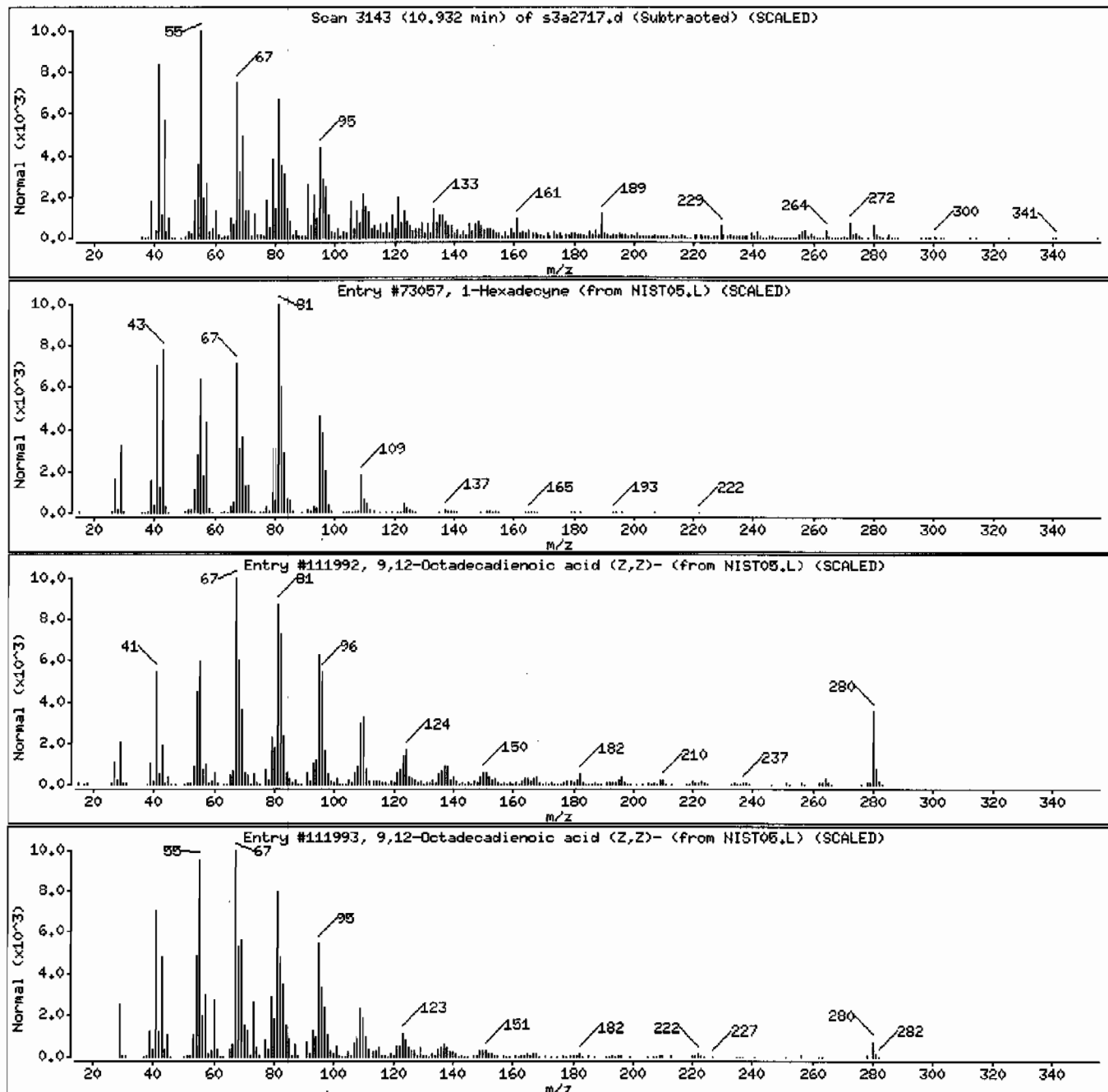
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match    | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|----------------------------------|------------|----------|--------|---------|----------|--------|
| 1-Hexadecyne                     | 629-74-3   | NIST05.L | 73057  | 94      | C16H30   | 222    |
| 9,12-Octadecadienoic acid (Z,Z)- | 60-33-3    | NIST05.L | 111992 | 91      | C18H32O2 | 280    |
| 9,12-Octadecadienoic acid (Z,Z)- | 60-33-3    | NIST05.L | 111993 | 89      | C18H32O2 | 280    |



Date: 27-JAN-2010 15:52

Client ID: RE15-10-8411

Instrument: MSD3.i

Sample Info: 1245114003194487411SVHF111LANL

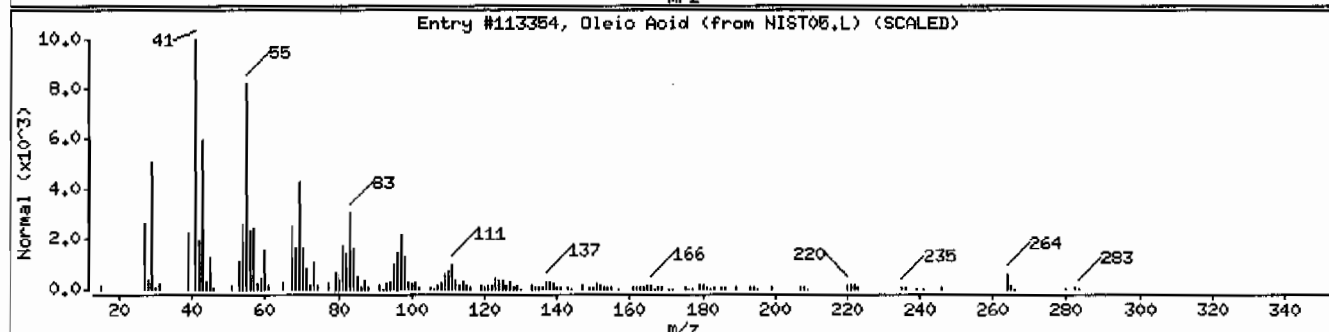
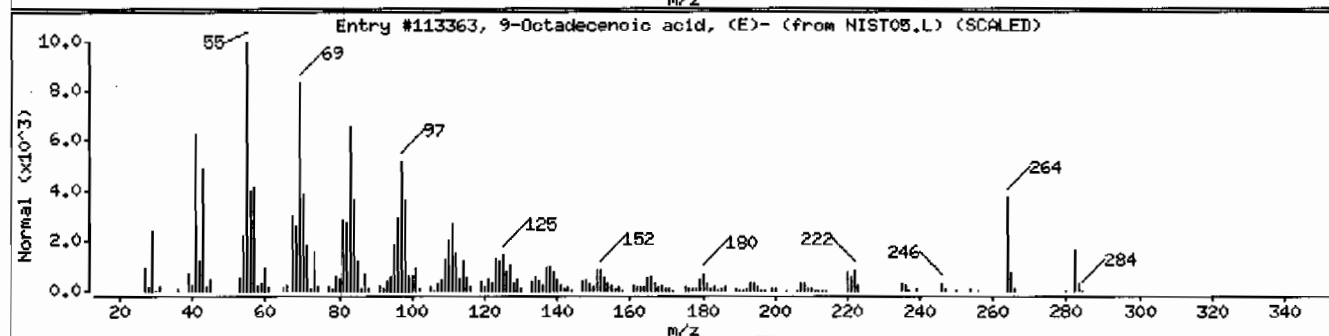
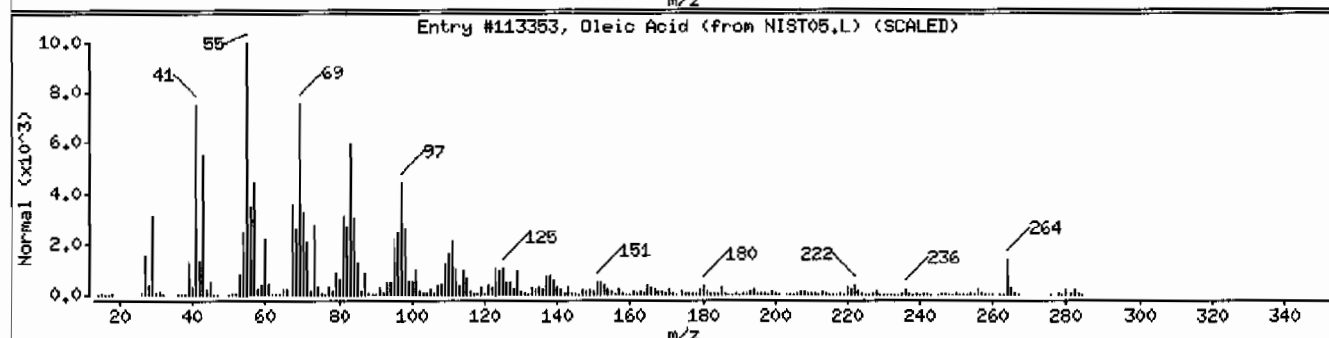
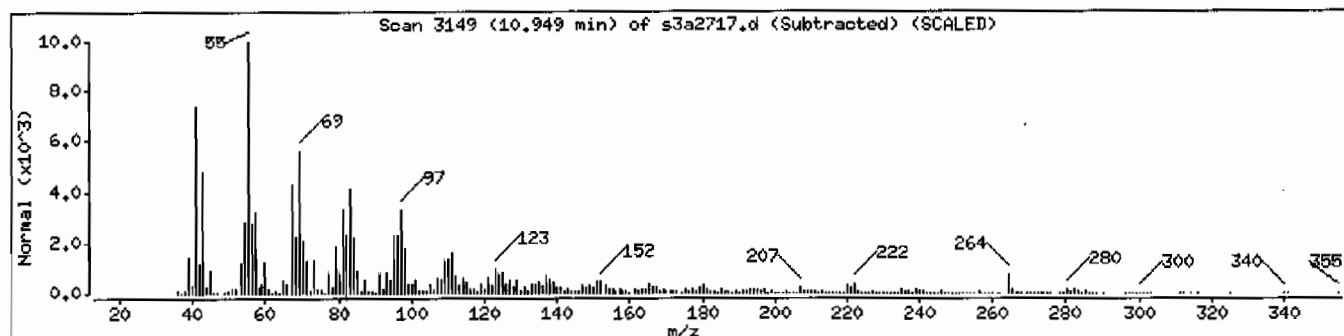
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|-------------------------------|------------|----------|--------|---------|----------|--------|
| Oleic Acid                    | 112-80-1   | NIST05.L | 113353 | 98      | C18H34O2 | 282    |
| 9-Octadecenoic acid, (E)-     | 112-79-8   | NIST05.L | 113363 | 97      | C18H34O2 | 282    |
| Oleic Acid                    | 112-80-1   | NIST05.L | 113354 | 93      | C18H34O2 | 282    |



Date : 27-JAN-2010 15:52

Client ID: RE15-10-8411

Instrument: MSD3.i

Sample Info: 1245114003194487411|SVMF11|LANL

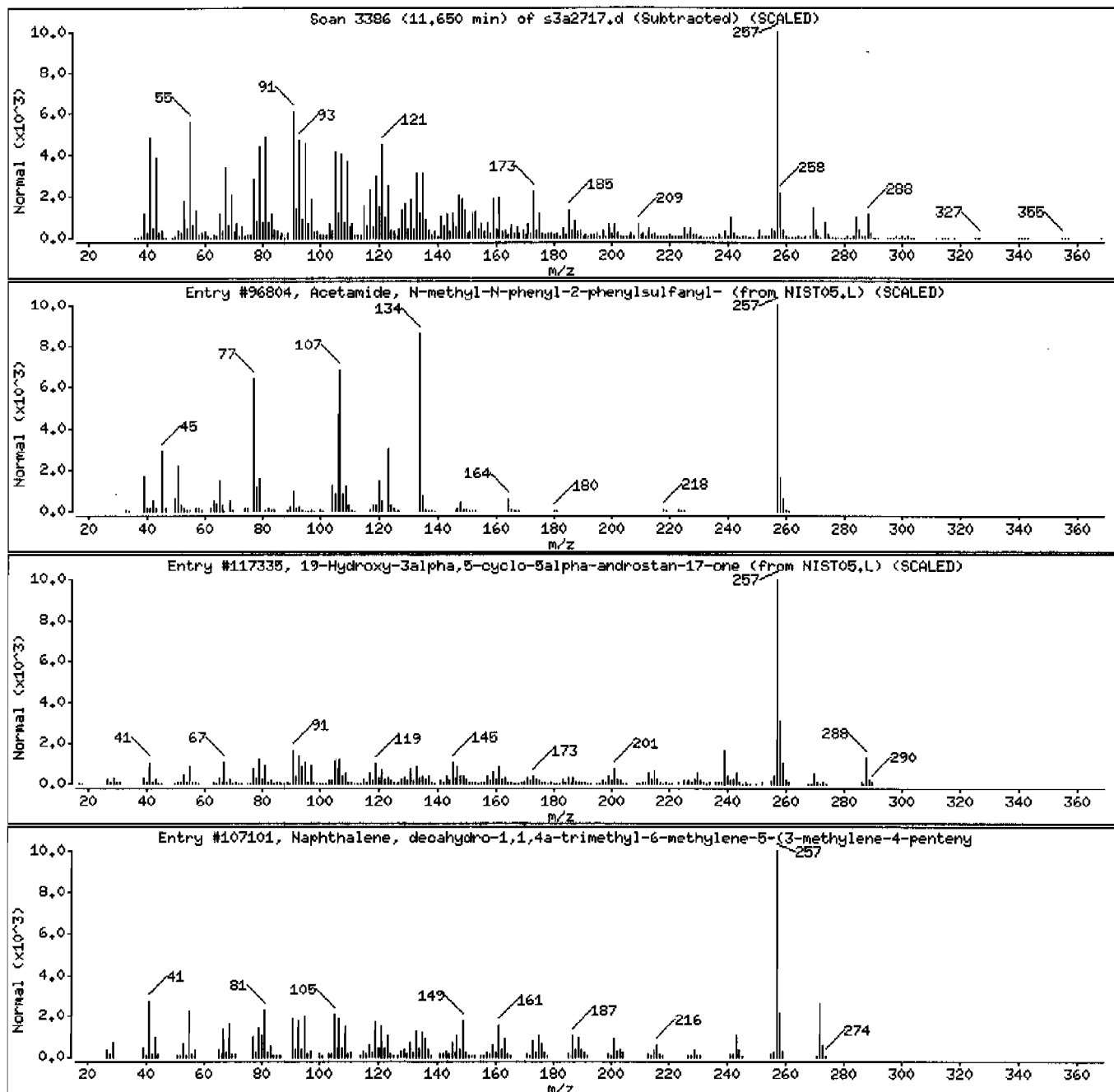
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula   | Weight |
|--|--------------|----------|--------|---------|-----------|--------|
| Unknown                                  |              |          |        |         |           |        |
| Acetamide, N-methyl-N-phenyl-2-phenylsul | 1000310-21-6 | NIST05.L | 96804  | 38      | C15H15NOS | 257    |
| 19-Hydroxy-3alpha,5-cyclo-5alpha-androst | 1000240-61-9 | NIST05.L | 117335 | 38      | C19H28O2  | 288    |
| Naphthalene, decahydro-1,1,4a-trimethyl- | 511-02-4     | NIST05.L | 107101 | 32      | C20H32    | 272    |



Date : 27-JAN-2010 15:52

Client ID: RE15-10-8411

Instrument: MSD3.i

Sample Info: 12451140031944874111SVMF111LANL

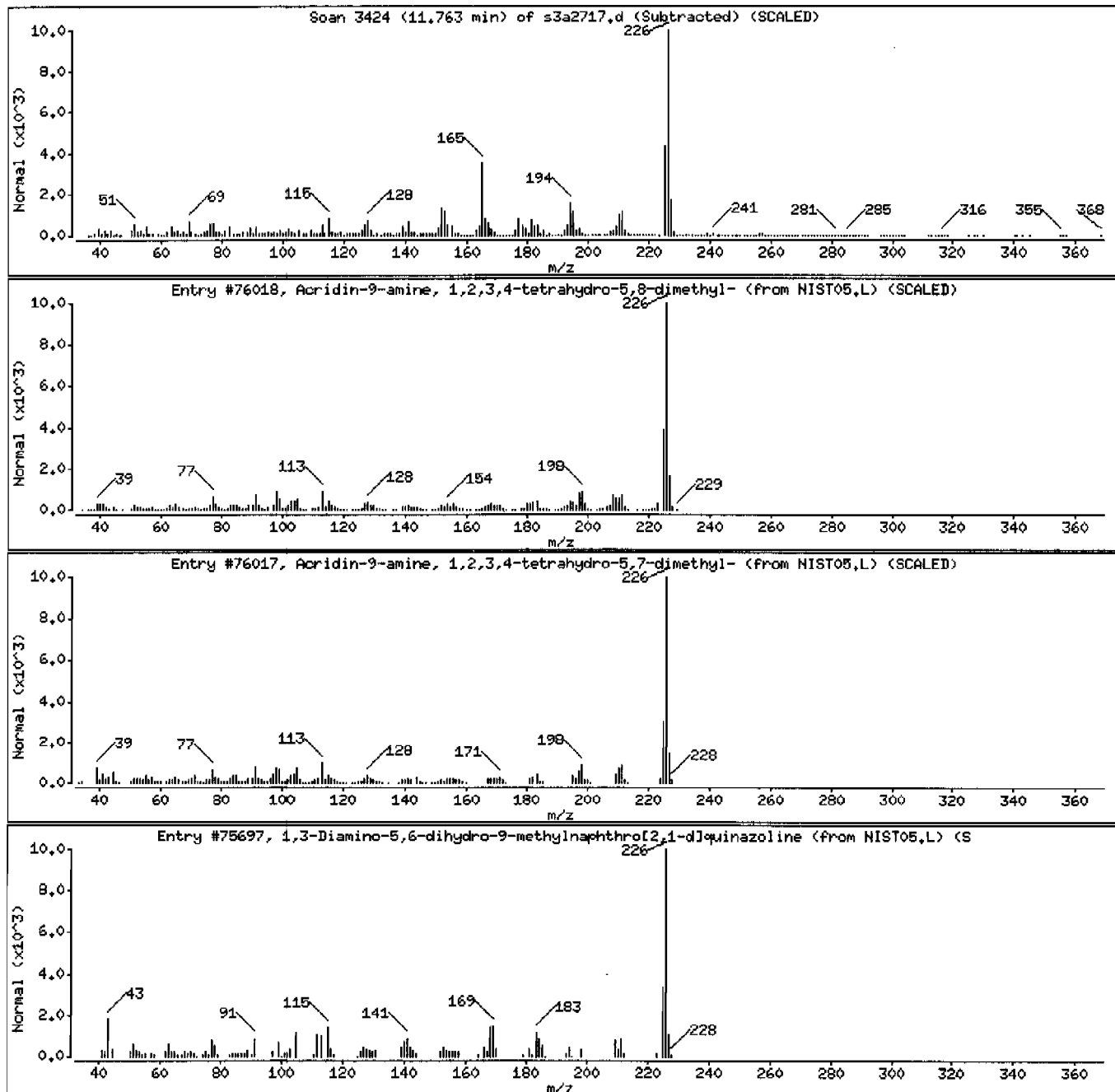
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula  | Weight |
|--|--------------|----------|-------|---------|----------|--------|
| Unknown                                  |              |          |       |         |          |        |
| Acridin-9-amine, 1,2,3,4-tetrahydro-5,8- | 297758-19-1  | NIST05.L | 76018 | 76      | C15H18N2 | 226    |
| Acridin-9-amine, 1,2,3,4-tetrahydro-5,7- | 1000300-57-6 | NIST05.L | 76017 | 70      | C15H18N2 | 226    |
| 1,3-Diamino-5,6-dihydro-9-methylnaphthro | 37436-39-8   | NIST05.L | 75697 | 58      | C13H14N4 | 226    |



Date : 27-JAN-2010 15:52

Client ID: RE15-10-8411

Instrument: MSD3.i

Sample Info: 1245114003|944874|1|SVHF1|1|LANL

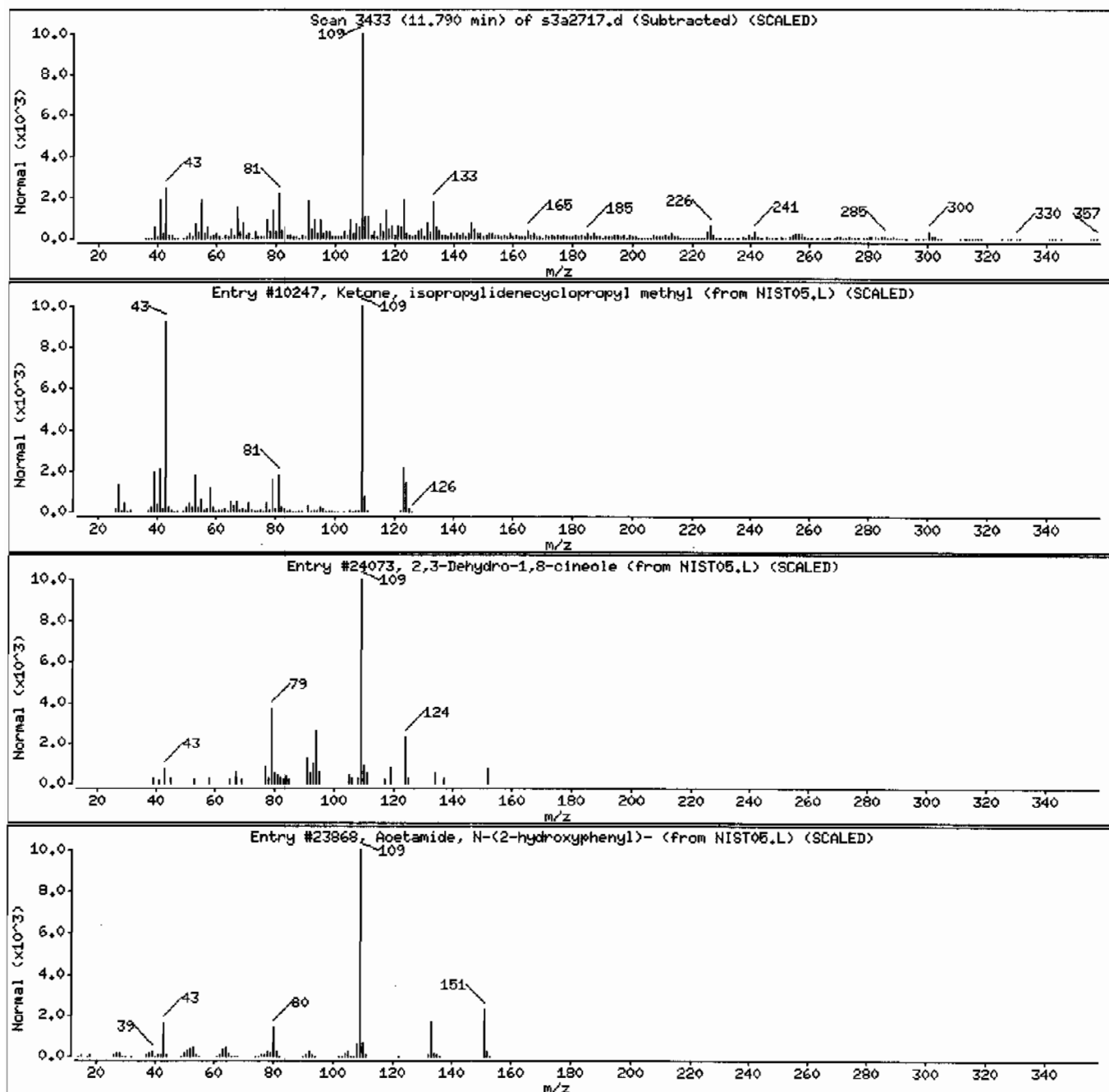
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match             | CAS Number | Library  | Entry | Quality | Formula | Weight |
|---|------------|----------|-------|---------|---------|--------|
| Unknown                                   |            |          |       |         |         |        |
| Ketone, isopropylidene-cyclopropyl methyl | 29765-67-1 | NIST05.L | 10247 | 53      | C8H12O  | 124    |
| 2,3-Dehydro-1,8-cineole                   | 92760-25-3 | NIST05.L | 24073 | 53      | C10H16O | 152    |
| Acetamide, N-(2-hydroxyphenyl)-           | 614-80-2   | NIST05.L | 23868 | 53      | C8H9NO2 | 151    |



Date : 27-JAN-2010 15:52

Client ID: RE15-10-8411

Instrument: MSD3.i

Sample Info: 1245114003194487411|SVHF11|LANL

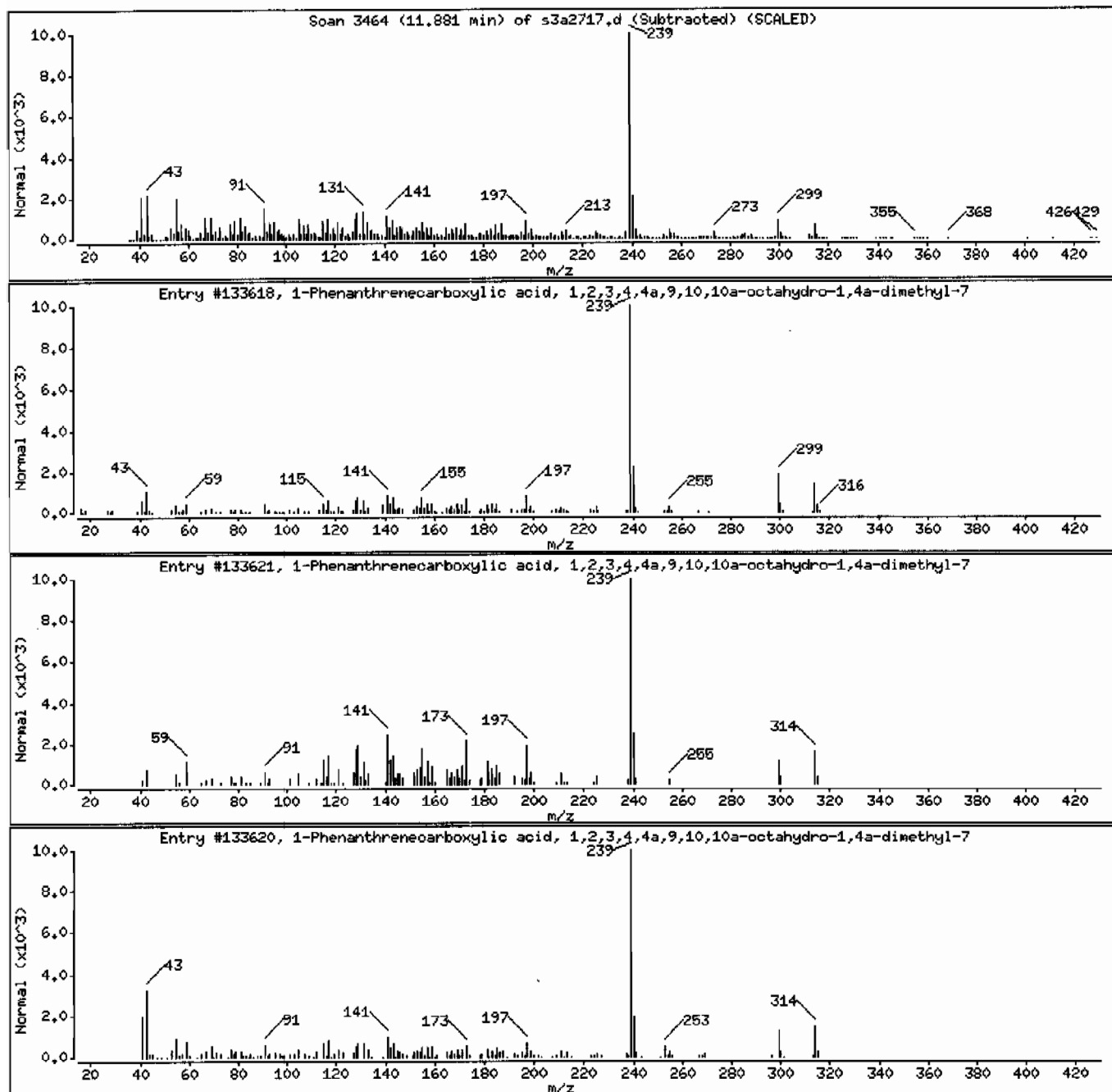
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| Unknown                                  |            |          |        |         |          |        |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133618 | 98      | C21H30O2 | 314    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133621 | 95      | C21H30O2 | 314    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133620 | 93      | C21H30O2 | 314    |



Date : 27-JAN-2010 15:52

Client ID: RE15-10-8411

Instrument: HSD3.i

Sample Info: 12451140031944874111SVHF111LANL

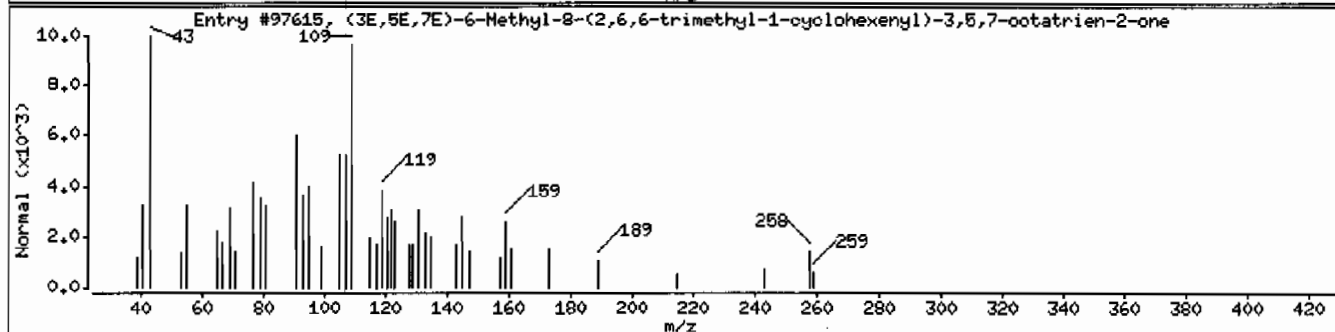
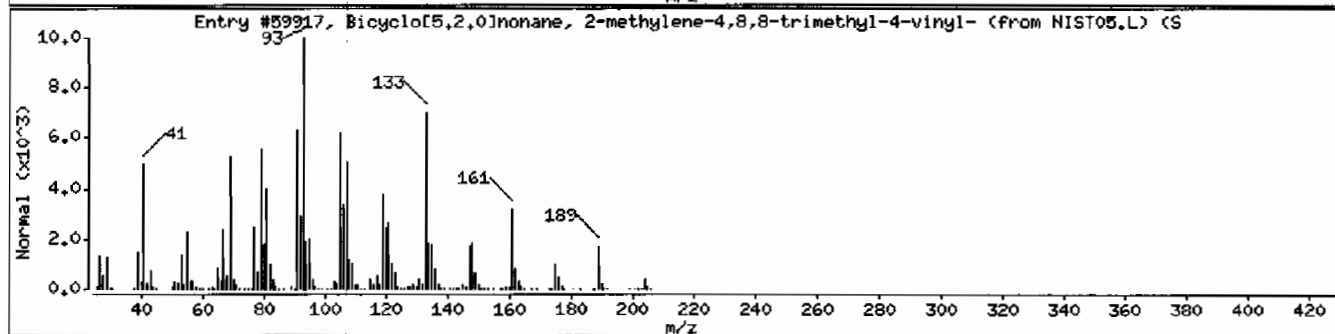
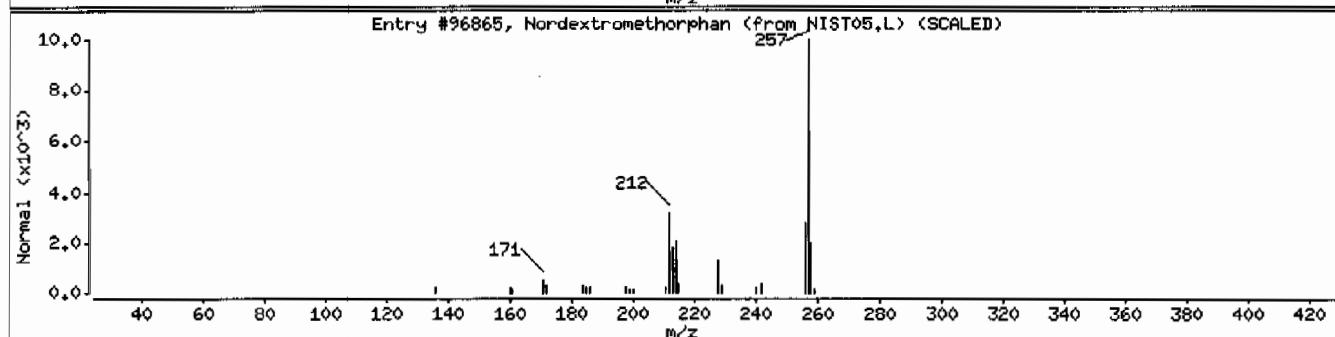
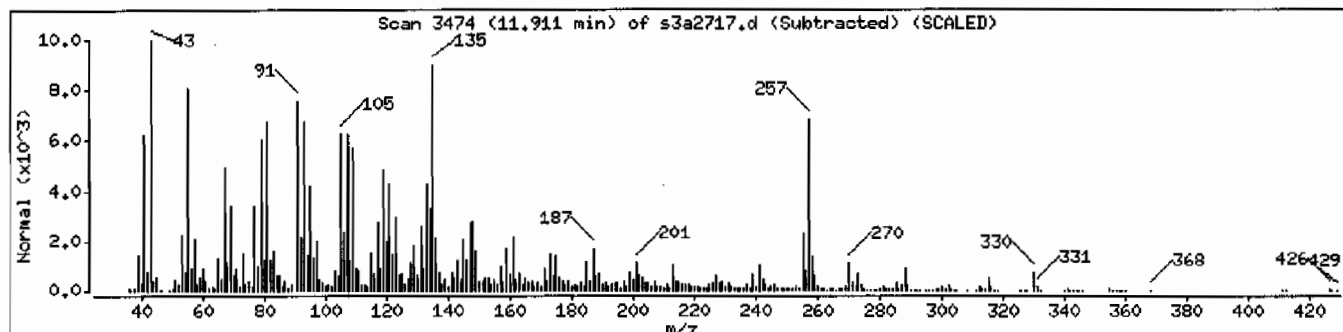
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number  | Library  | Entry | Quality | Formula  | Weight |
|--|-------------|----------|-------|---------|----------|--------|
| Unknown                                  |             |          |       |         |          |        |
| Nordextromethorphan                      | 51195-74-5  | NIST05.L | 96865 | 43      | C17H23NO | 257    |
| Bicyclo[5.2.0]nonane, 2-methylene-4,8,8- | 242794-76-9 | NIST05.L | 59917 | 35      | C15H24   | 204    |
| (3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1 | 17974-57-1  | NIST05.L | 97615 | 35      | C18H26O  | 258    |





Date : 27-JAN-2010 15:52

Client ID: RE15-10-8411

Instrument: MSD3.i

Sample Info: 1245114003|944874|1|SVHF|1|LANL

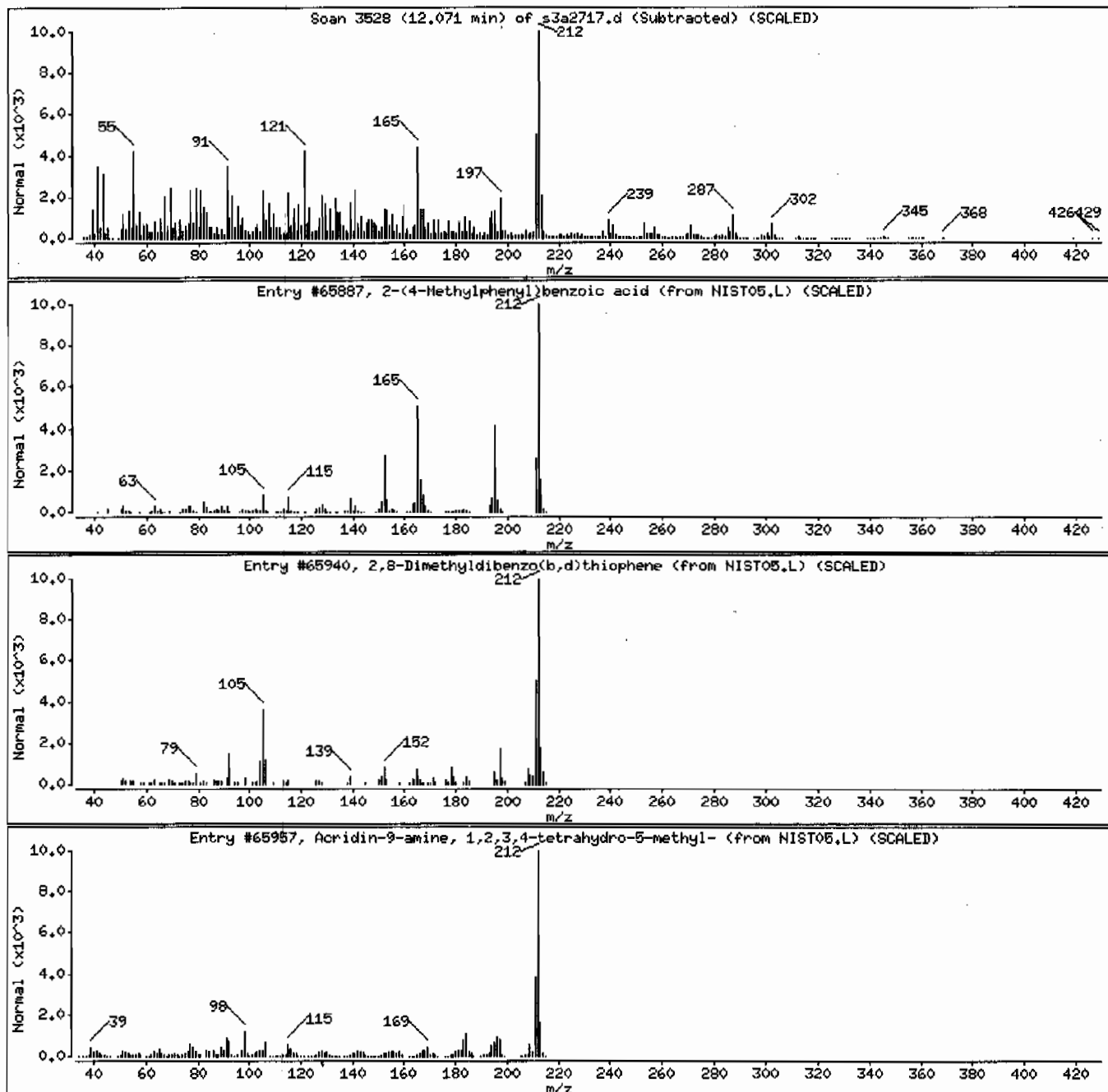
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula  | Weight |
|--|--------------|----------|-------|---------|----------|--------|
| Unknown                                  |              |          |       |         |          |        |
| 2-(4-Methylphenyl)benzoic acid           | 1000305-27-8 | NIST05.L | 65887 | 46      | C14H12O2 | 212    |
| 2,8-Dimethyldibenzo(b,d)thiophene        | 1207-15-4    | NIST05.L | 65940 | 46      | C14H12S  | 212    |
| Acridin-9-amine, 1,2,3,4-tetrahydro-5-me | 5778-78-9    | NIST05.L | 65957 | 45      | C14H16N2 | 212    |



Date: 27-JAN-2010 15:52

Client ID: RE15-10-8411

Instrument: MSD3.i

Sample Info: 1245114003194487411SVMF111LANL

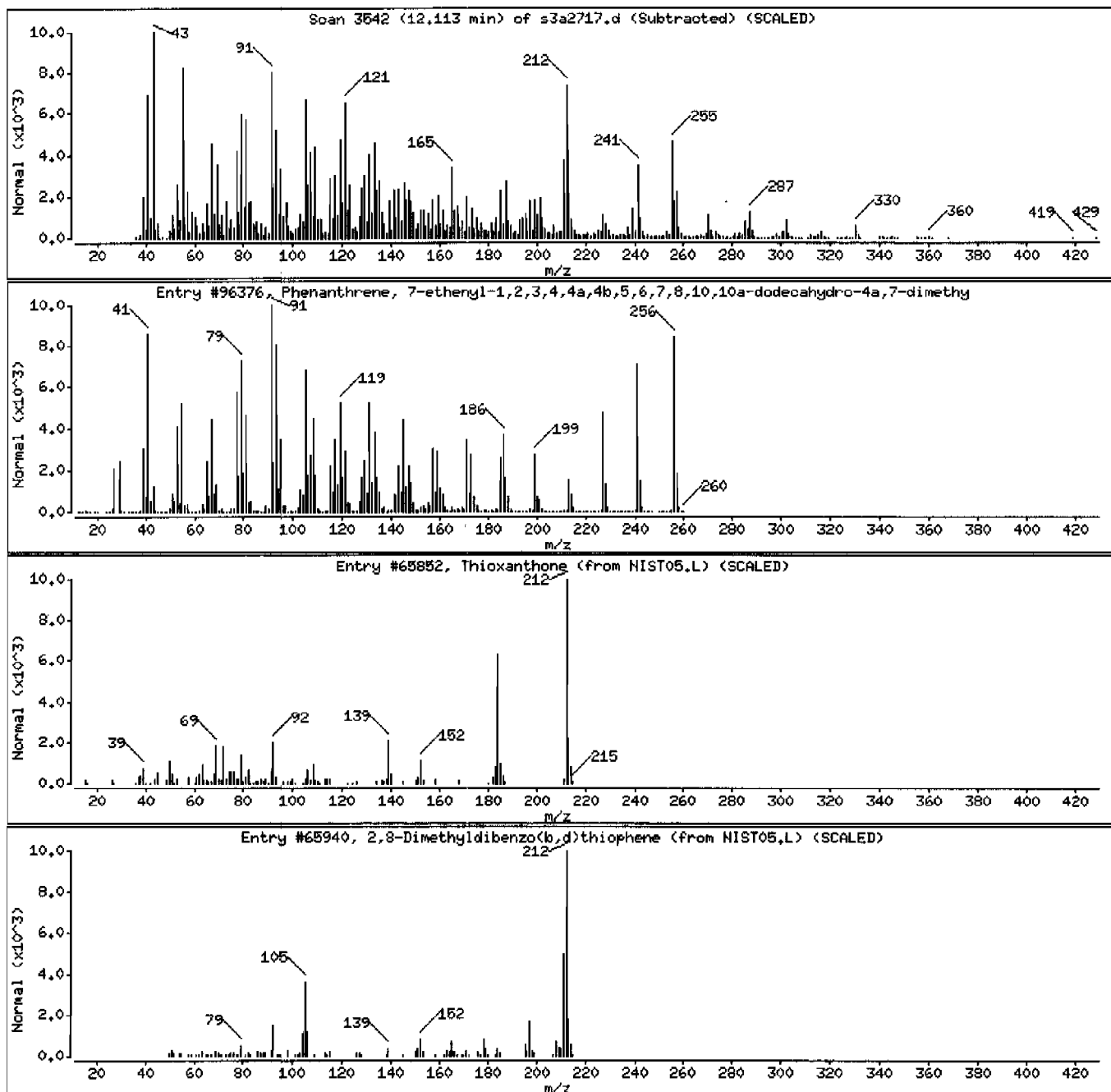
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--|------------|----------|-------|---------|---------|--------|
| Unknown                                  |            |          |       |         |         |        |
| Phenanthrene, 7-ethenyl-1,2,3,4,4a,4b,5, | 26549-04-2 | NIST05.L | 96376 | 46      | C19H28  | 256    |
| Thioxanthone                             | 492-22-8   | NIST05.L | 65852 | 25      | C13H8OS | 212    |
| 2,8-Dimethyldibenzo(b,d)thiophene        | 1207-15-4  | NIST05.L | 65940 | 25      | C14H12S | 212    |



Date: 27-JAN-2010 15:52

Client ID: RE15-10-8411

Instrument: MSD3.i

Sample Info: 1245114003194487411SVHF111LANL

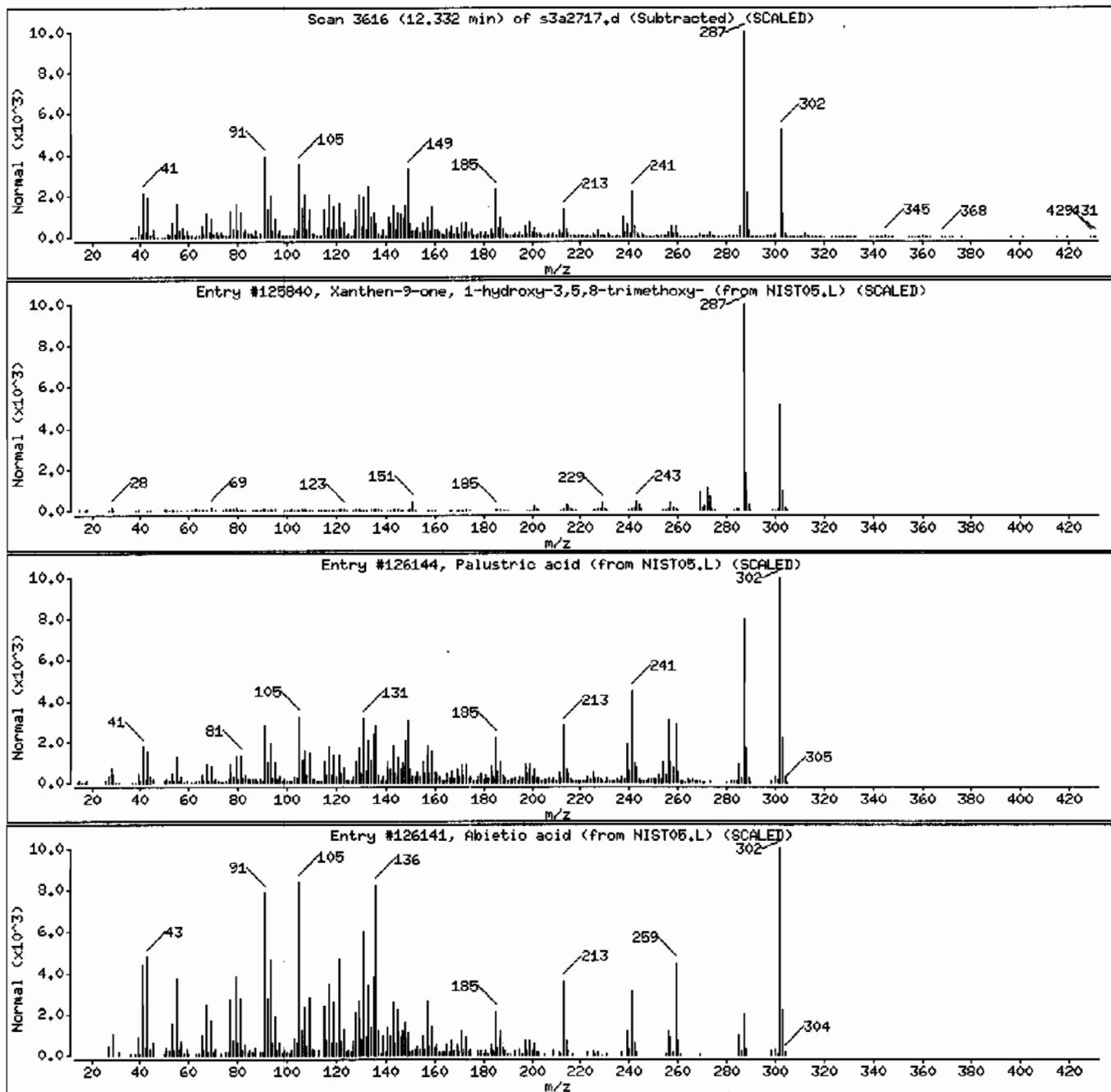
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| Unknown                                  |            |          |        |         |          |        |
| Xanthen-9-one, 1-hydroxy-3,5,8-trimethox | 49599-09-9 | NIST05.L | 125840 | 55      | C16H14O6 | 302    |
| Palustric acid                           | 1945-53-5  | NIST05.L | 126144 | 47      | C20H30O2 | 302    |
| Abietic acid                             | 514-10-3   | NIST05.L | 126141 | 38      | C20H30O2 | 302    |



Date : 27-JAN-2010 15:52

Client ID: RE15-10-8411

Instrument: HSD3.i

Sample Info: 12451140031944874111SVHF111LANL

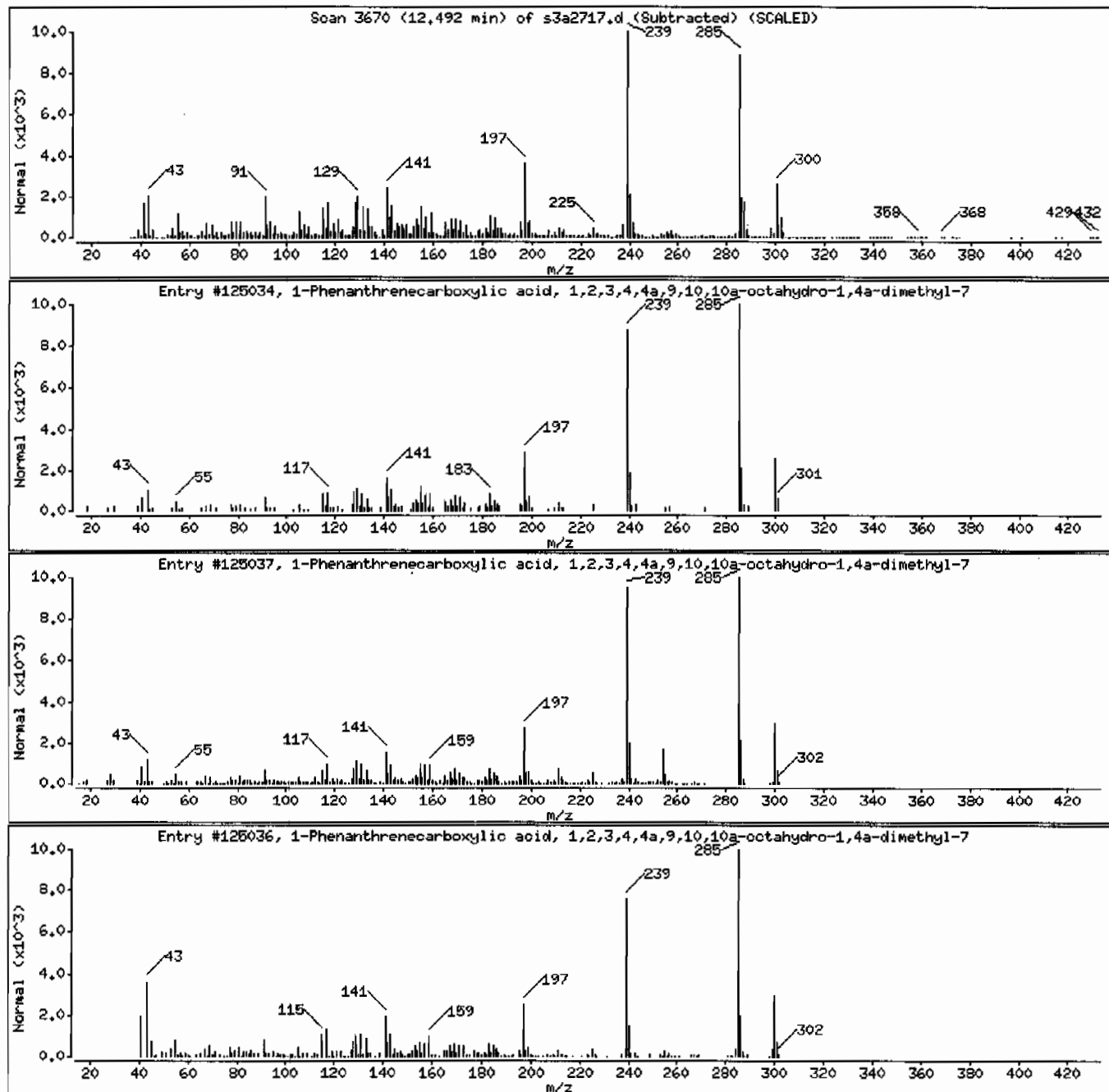
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1740-19-8  | NIST05.L | 125034 | 99      | C20H28O2 | 300    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1740-19-8  | NIST05.L | 125037 | 93      | C20H28O2 | 300    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1740-19-8  | NIST05.L | 125036 | 91      | C20H28O2 | 300    |



Date : 27-JAN-2010 15:52

Client ID: RE15-10-8411

Instrument: MSD3.i

Sample Info: 1245114003|944874|11SVHF11|LANL

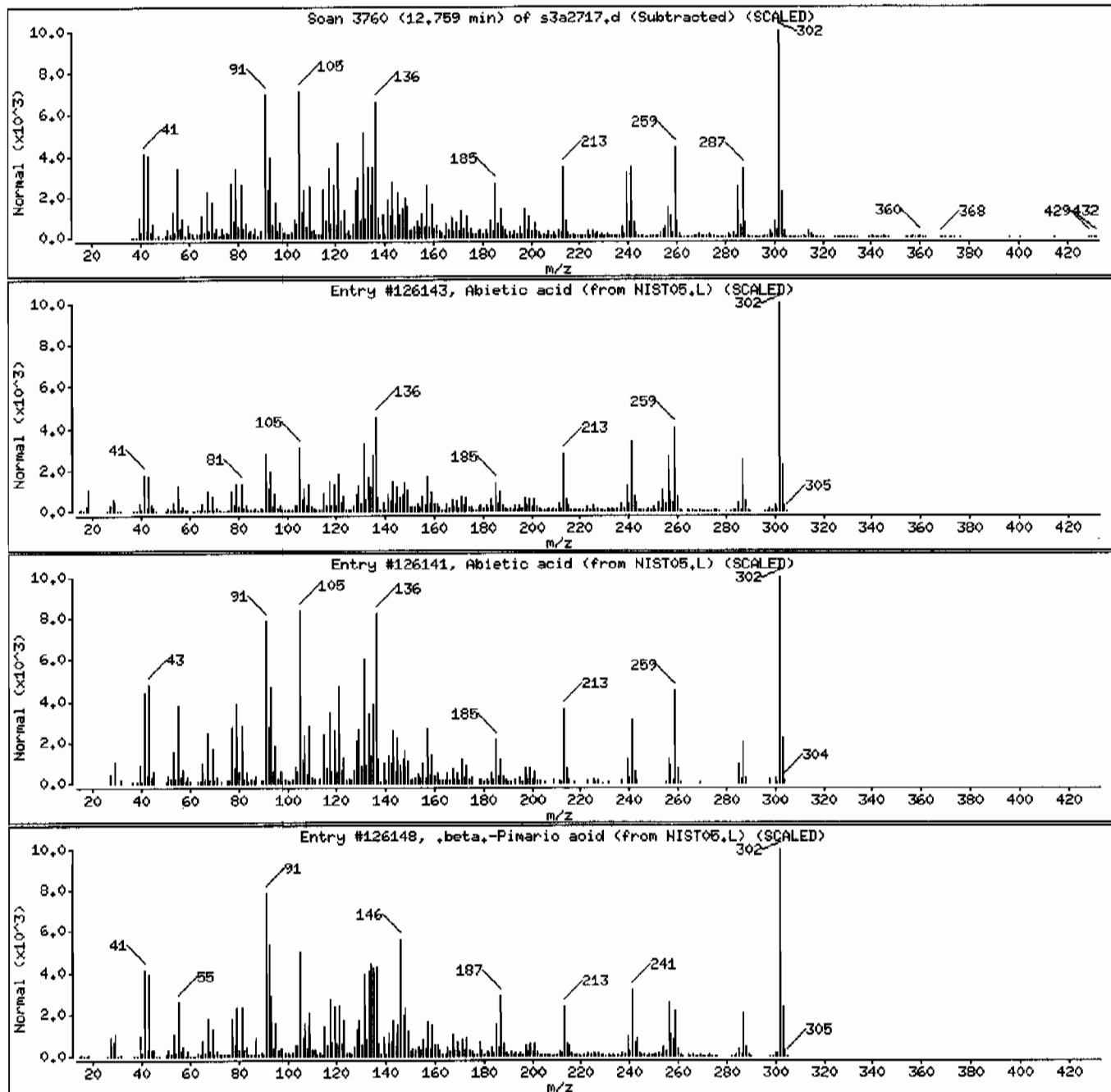
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|-------------------------------|------------|----------|--------|---------|----------|--------|
| Abietic acid                  | 514-10-3   | NIST05.L | 126143 | 91      | C20H30O2 | 302    |
| Abietic acid                  | 514-10-3   | NIST05.L | 126141 | 53      | C20H30O2 | 302    |
| ,beta,-Pimaric acid           | 79-54-9    | NIST05.L | 126148 | 49      | C20H30O2 | 302    |



Date : 27-JAN-2010 15:52

Client ID: RE15-10-8411

Instrument: MSD3.i

Sample Info: 1245114003194487411SVHF11ILANL

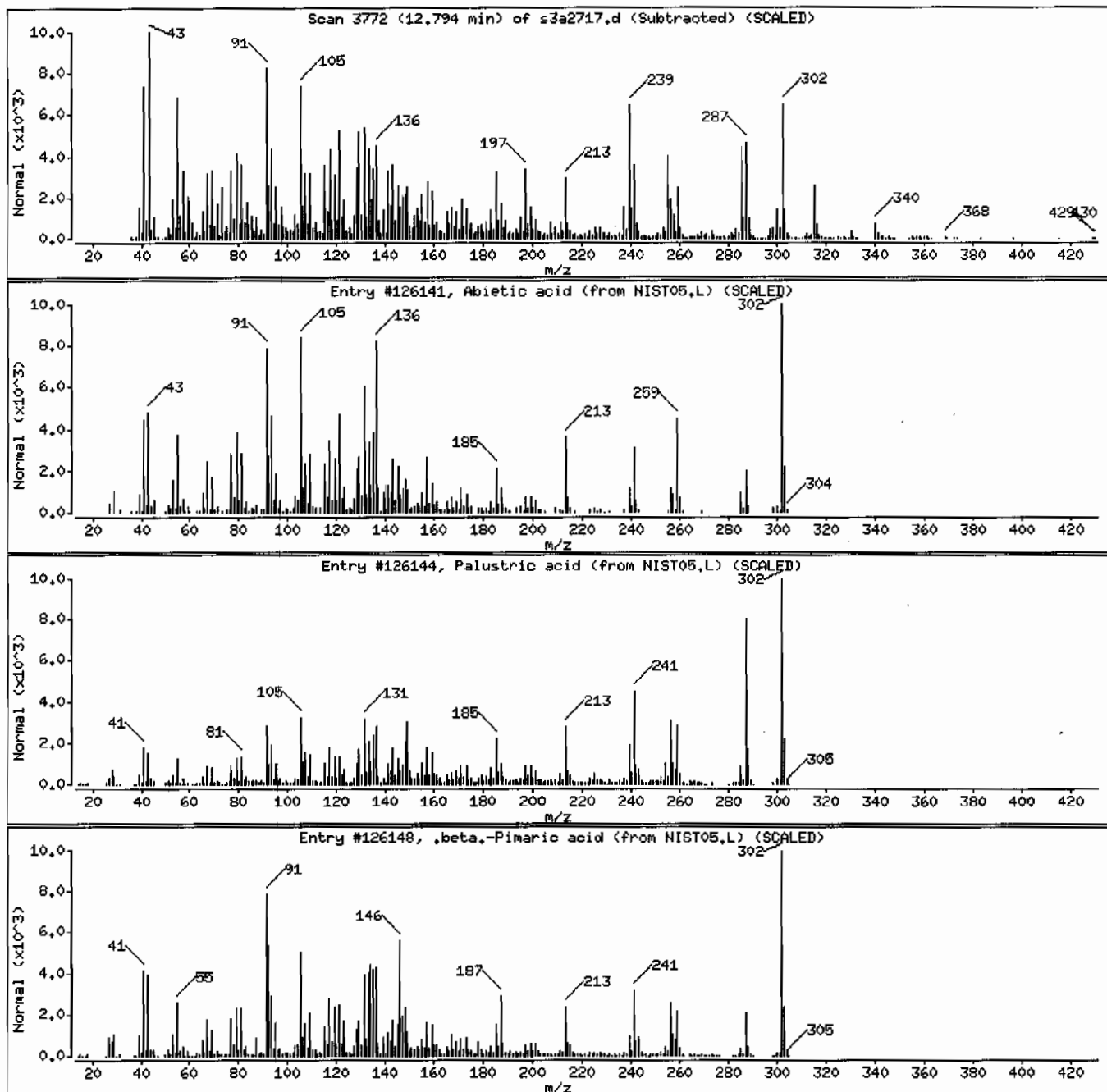
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|-------------------------------|------------|----------|--------|---------|--|--------|
| Unknown                       |            |          |        |         |  |        |
| Abietic acid                  | 514-10-3   | NIST05.L | 126141 | 50      | C <sub>20</sub> H <sub>30</sub> O <sub>2</sub> | 302    |
| Palustic acid                 | 1945-53-5  | NIST05.L | 126144 | 41      | C <sub>20</sub> H <sub>30</sub> O <sub>2</sub> | 302    |
| ,beta,-Pimaric acid           | 79-54-9    | NIST05.L | 126148 | 22      | C <sub>20</sub> H <sub>30</sub> O <sub>2</sub> | 302    |



Date : 27-JAN-2010 15:52

Client ID: RE15-10-8411

Instrument: MSD3.i

Sample Info: 12451140031944874111SVHF111LANL

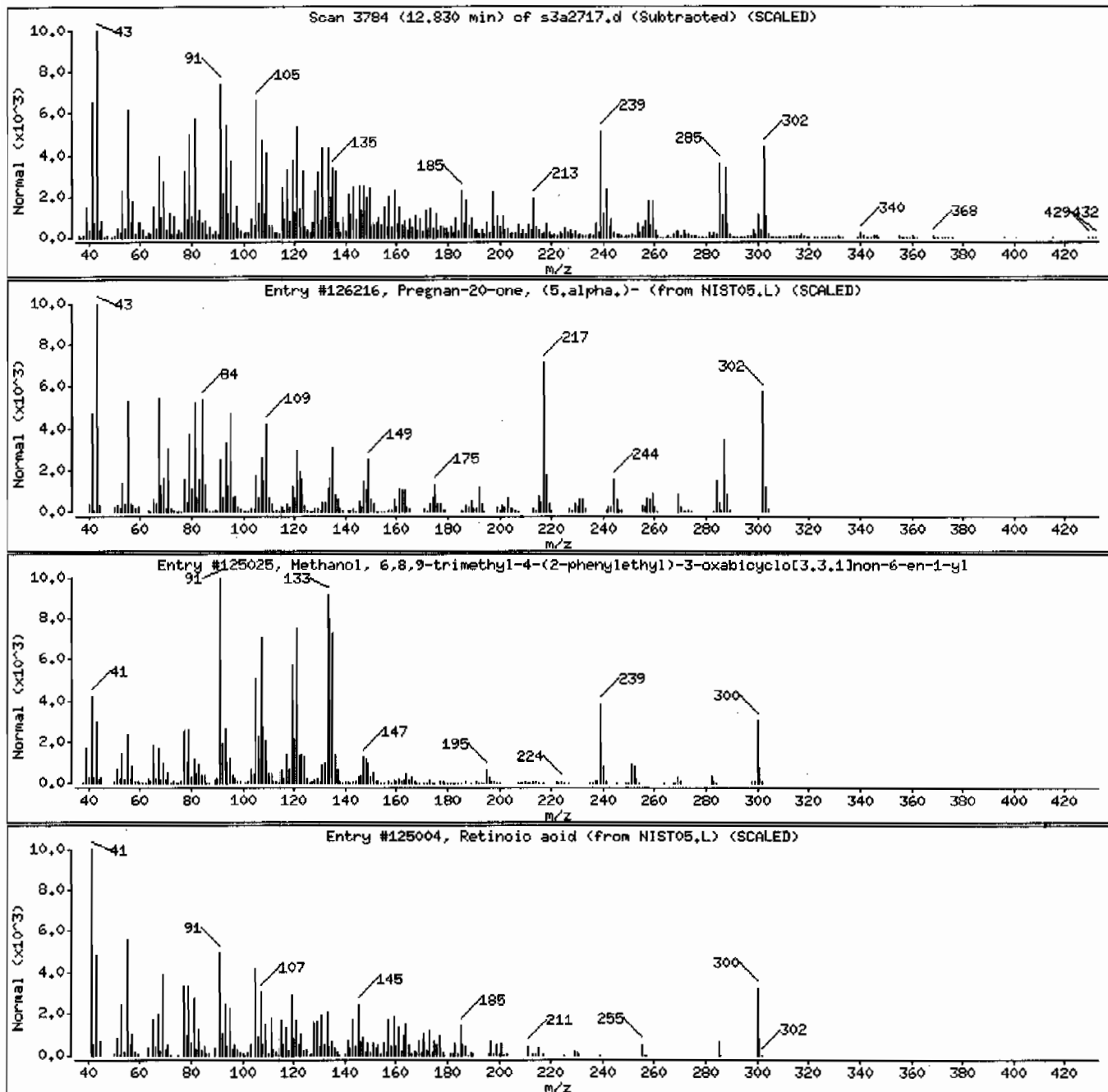
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match               | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|---|--------------|----------|--------|---------|----------|--------|
| Pregnan-20-one, (5.alpha.)-                 | 848-62-4     | NIST05.L | 126216 | 80      | C21H34O  | 302    |
| Methanol, 6,8,9-trimethyl-4-(2-phenylethyl) | 1000277-01-1 | NIST05.L | 125025 | 18      | C20H28O2 | 300    |
| Retinoic acid                               | 302-79-4     | NIST05.L | 125004 | 14      | C20H28O2 | 300    |



Date: 27-JAN-2010 15:52

Client ID: RE15-10-8411

Instrument: MSD3.i

Sample Info: 1245114003194487411SVHF11ILANL

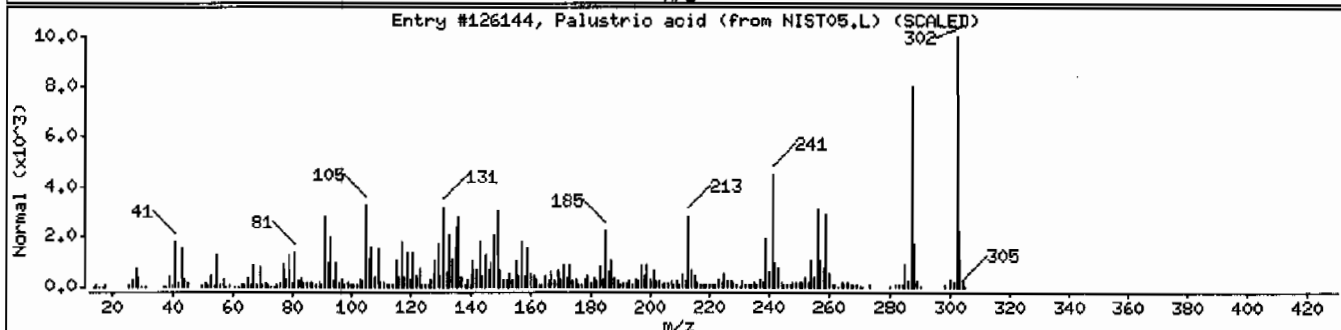
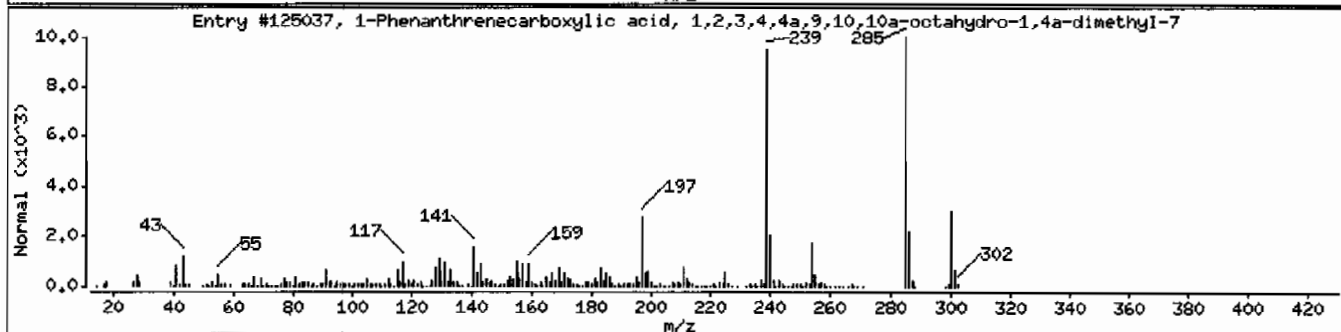
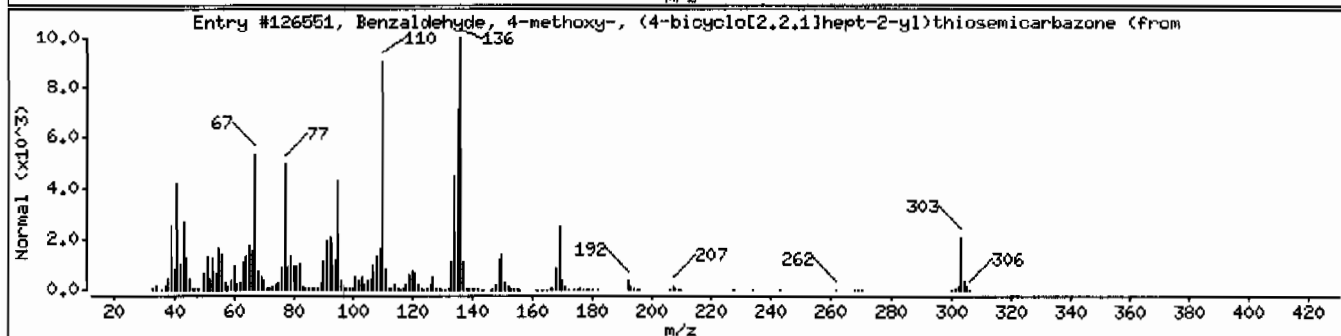
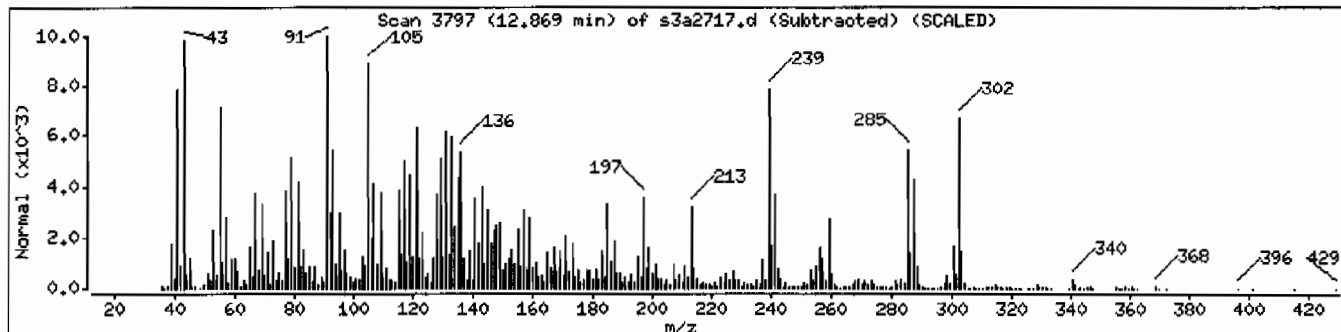
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match  | CAS Number   | Library  | Entry  | Quality | Formula   | Weight |
|--|--------------|----------|--------|---------|---|--------|
| Benzaldehyde, 4-methoxy-, (4-bicyclo[2.2.2]oct-5-ylidene)-                   | 1000268-22-7 | NIST05.L | 126551 | 91      | C <sub>16</sub> H <sub>21</sub> N <sub>3</sub> O <sub>3</sub> | 303    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7 | 1740-19-8    | NIST05.L | 125037 | 70      | C <sub>20</sub> H <sub>28</sub> O <sub>2</sub>                | 300    |
| Palustic acid  | 1945-53-5    | NIST05.L | 126144 | 50      | C <sub>20</sub> H <sub>30</sub> O <sub>2</sub>                | 302    |





Date : 27-JAN-2010 15:52

Client ID: RE15-10-8411

Instrument: MSD3.i

Sample Info: 12451140031944874111SVHF111LANL

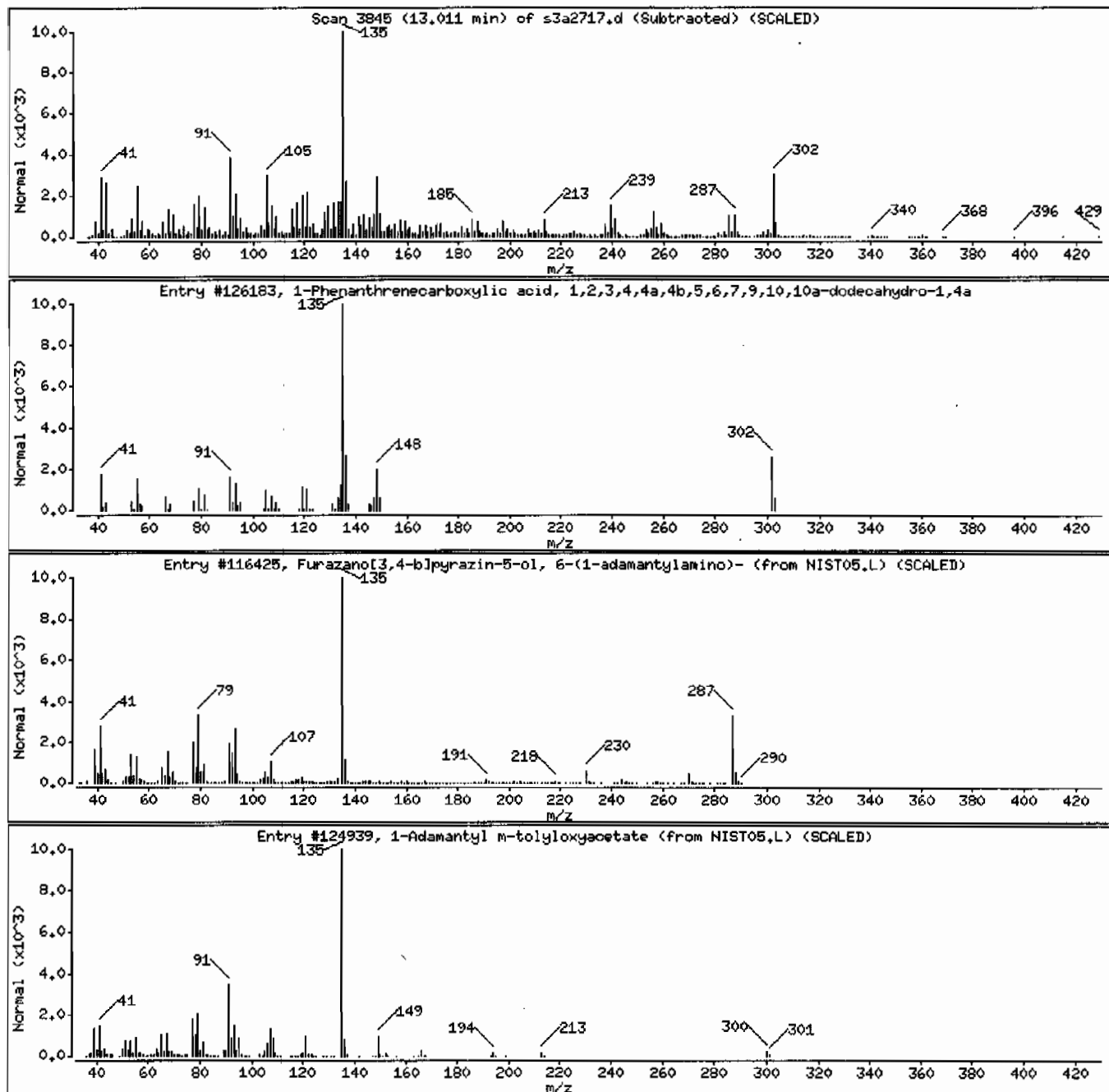
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula    | Weight |
|--|--------------|----------|--------|---------|------------|--------|
| Unknown                                  |              |          |        |         |            |        |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 471-77-2     | NIST05.L | 126183 | 70      | C20H30O2   | 302    |
| Furazano[3,4-b]pyrazin-5-ol, 6-(1-adaman | 1000263-25-7 | NIST05.L | 116425 | 60      | C14H17N5O2 | 287    |
| 1-Adamantyl m-tolxyloxyacetate           | 306278-20-6  | NIST05.L | 124939 | 50      | C19H24O3   | 300    |



Date : 27-JAN-2010 15:52

Client ID: RE15-10-8411

Instrument: MSD3.i

Sample Info: 12451140031944874111SVMF111LANL

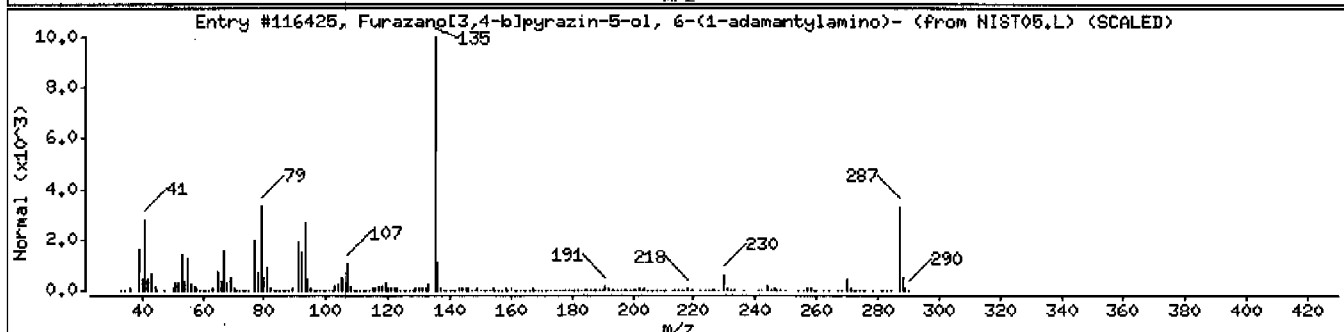
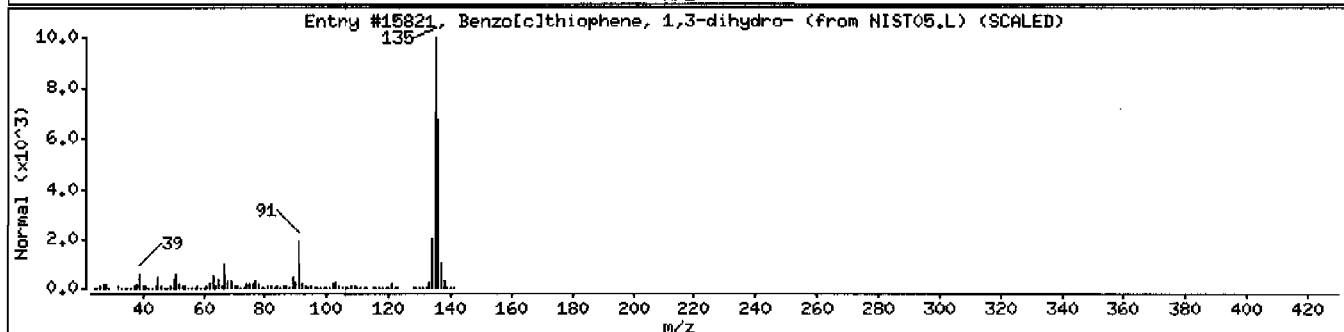
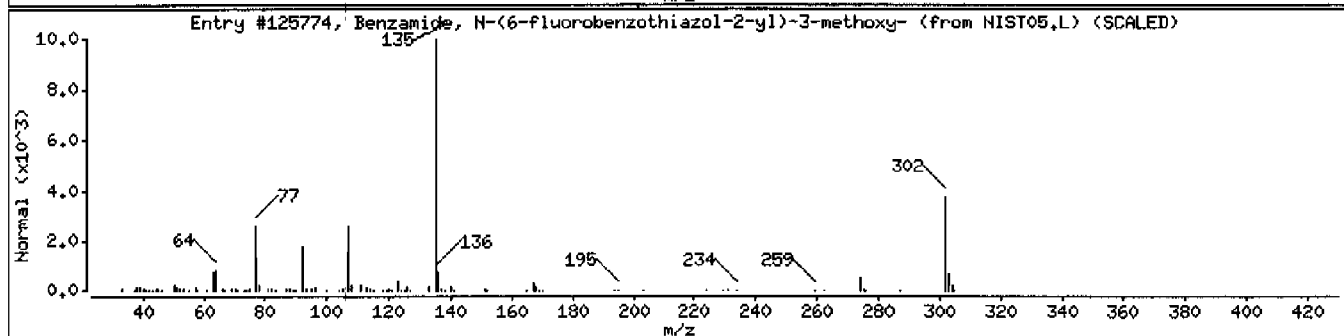
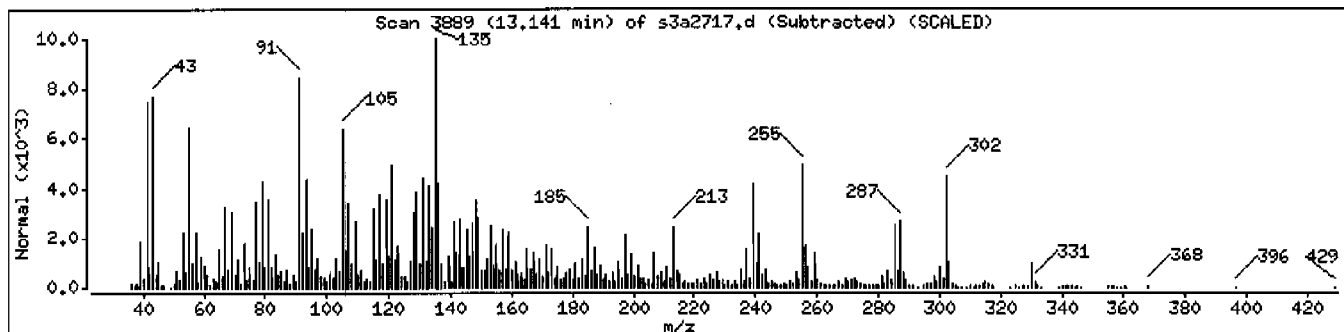
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula      | Weight |
|--|--------------|----------|--------|---------|--------------|--------|
| Unknown                                  |              |          |        |         |              |        |
| Benzamide, N-(6-fluorobenzothiazol-2-yl) | 1000304-71-2 | NIST05.L | 125774 | 20      | C15H11FN2O2S | 302    |
| Benzo[c]thiophene, 1,3-dihydro-          | 2471-92-3    | NIST05.L | 15821  | 18      | C8H6S        | 136    |
| Furazano[3,4-b]pyrazin-5-ol, 6-(1-adaman | 1000263-25-7 | NIST05.L | 116425 | 15      | C14H17N5O2   | 287    |



Date : 27-JAN-2010 15:52

Client ID: RE15-10-8411

Instrument: MSD3.i

Sample Info: 1245114003194487411SVHF111LANL

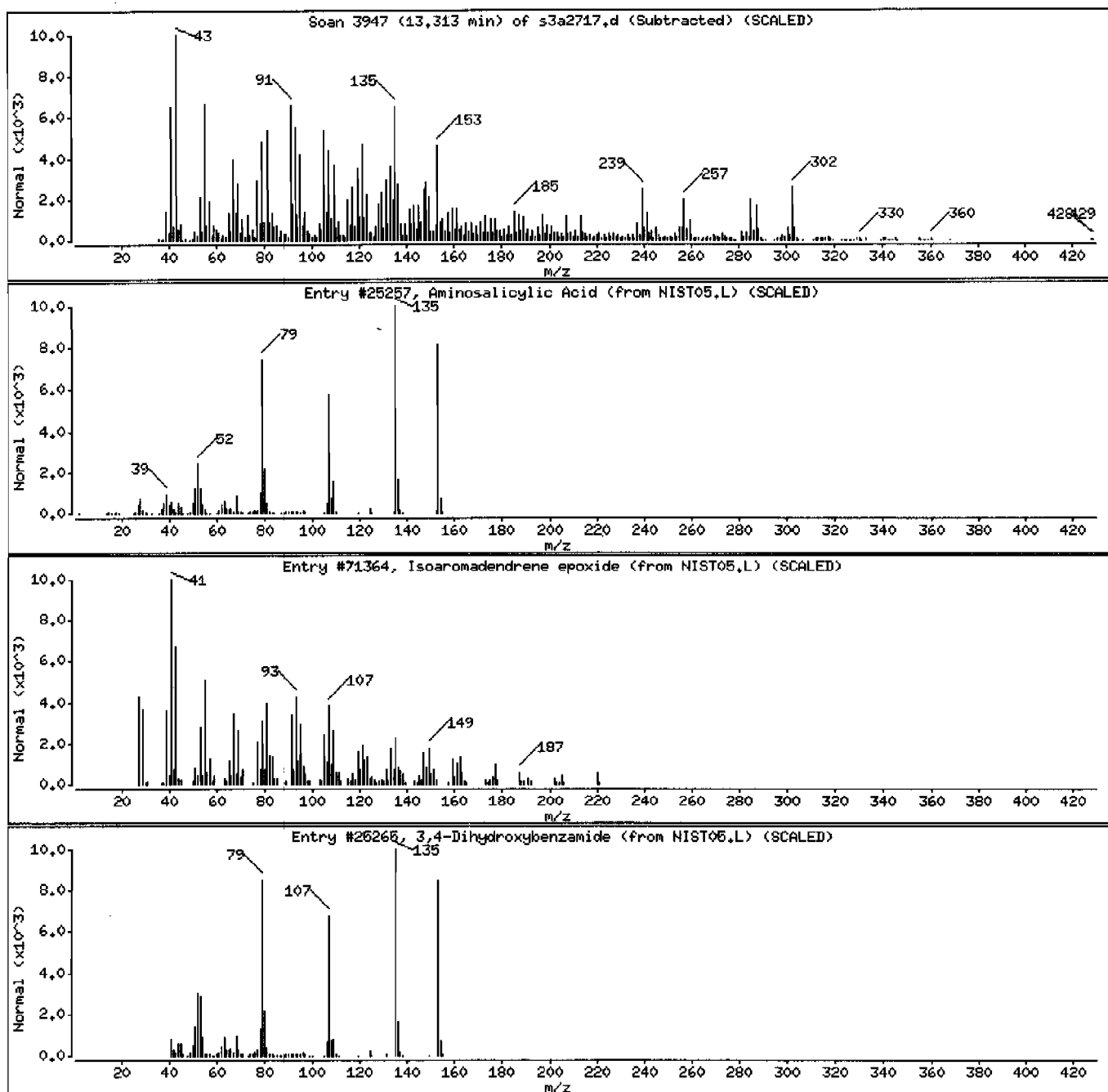
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number   | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|--------------|----------|-------|---------|---------|--------|
| Unknown                       |              |          |       |         |         |        |
| Aminosalicylic Acid           | 65-49-6      | NIST05.L | 25257 | 38      | C7H7NO3 | 153    |
| Isoaromadendrene epoxide      | 1000159-36-6 | NIST05.L | 71364 | 35      | C15H24O | 220    |
| 3,4-Dihydroxybenzamide        | 1000127-69-8 | NIST05.L | 25265 | 35      | C7H7NO3 | 153    |



Date: 27-JAN-2010 15:52

Client ID: RE15-10-8411

Instrument: MSD3.i

Sample Info: 1245114003194487411|SVHF11|LANL

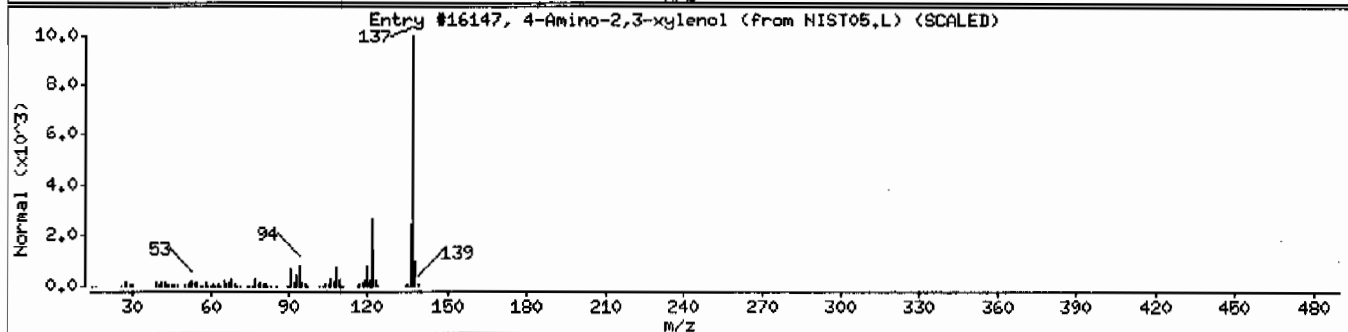
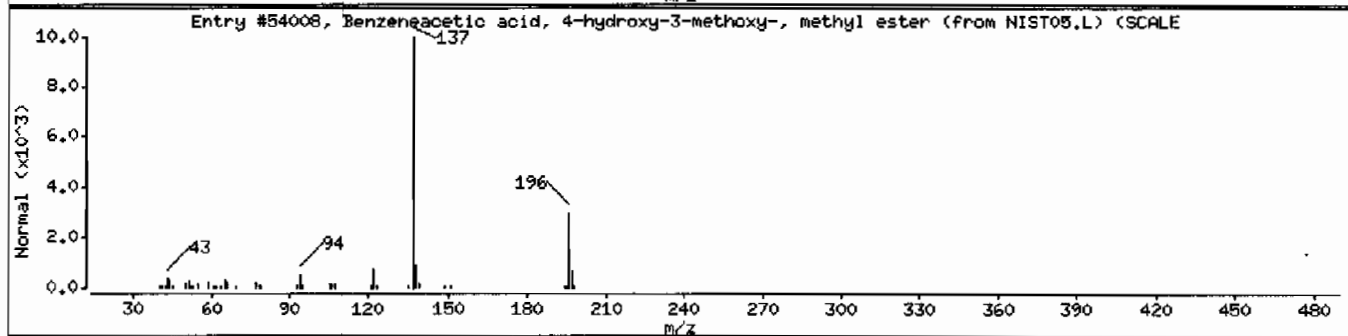
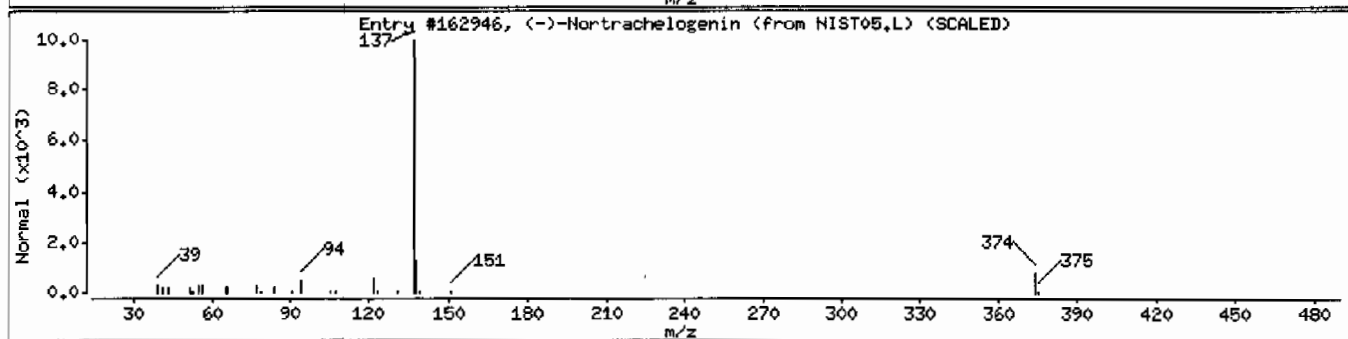
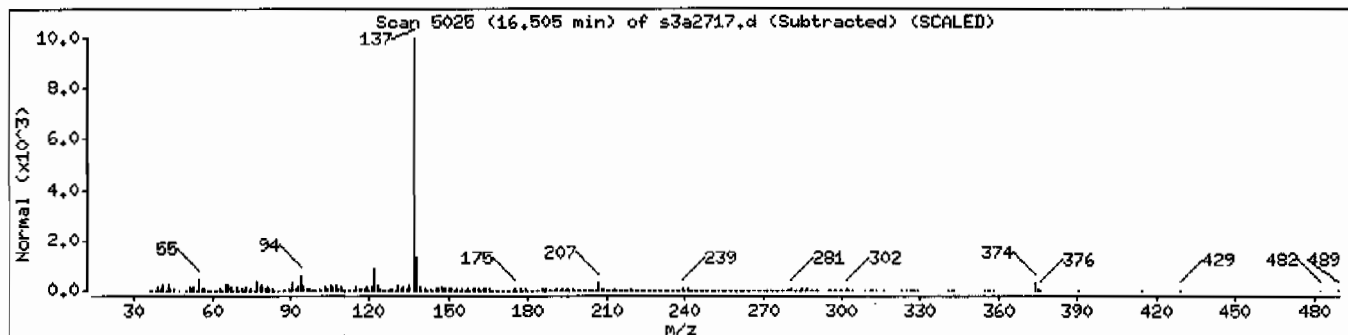
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| (-)-Nortrachelogenin                     | 34444-37-6 | NIST05.L | 162946 | 90      | C20H22O7 | 374    |
| Benzeneacetic acid, 4-hydroxy-3-methoxy- | 15964-80-4 | NIST05.L | 54008  | 72      | C10H12O4 | 196    |
| 4-Amino-2,3-xyleneol                     | 3096-69-3  | NIST05.L | 16147  | 72      | C8H11NO  | 137    |



Date : 27-JAN-2010 15:52

Client ID: RE15-10-8411

Instrument: MSD3.i

Sample Info: 12451140031944874111SVHF111LANL

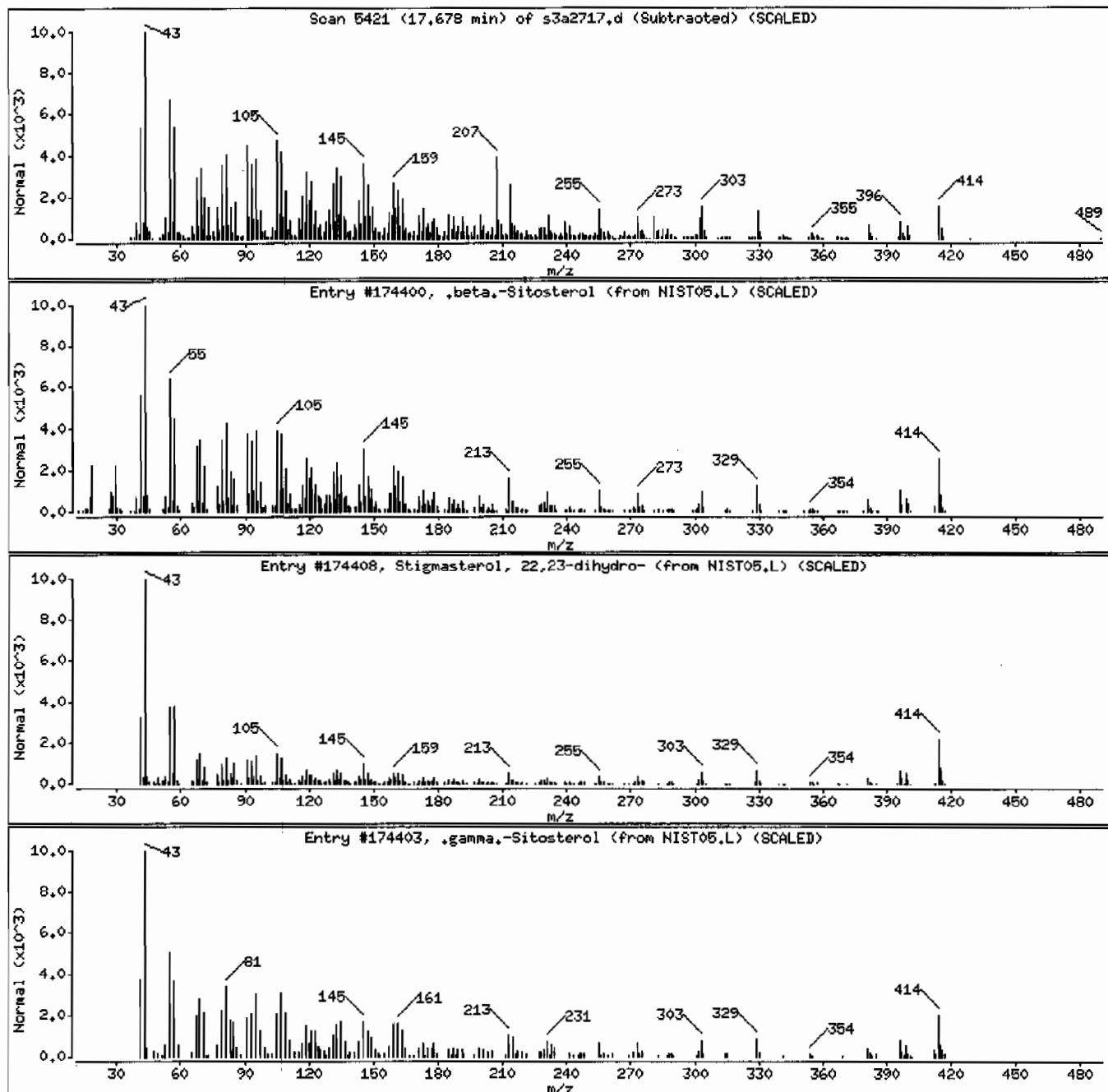
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number   | Library  | Entry  | Quality | Formula | Weight |
|-------------------------------|--------------|----------|--------|---------|---------|--------|
| .beta.-Sitosterol             | 83-46-5      | NIST05.L | 174400 | 98      | C29H50O | 414    |
| Stigmasterol, 22,23-dihydro-  | 1000214-20-7 | NIST05.L | 174408 | 95      | C29H50O | 414    |
| .gamma.-Sitosterol            | 83-47-6      | NIST05.L | 174403 | 91      | C29H50O | 414    |



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114004

Client ID: RE15-10-8412  
Batch ID: 944874  
Run Date: 01/27/2010 16:18  
Prep Date: 01/25/2010 21:06  
Data File: s3a2718.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 7.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 360    | ug/kg | 72.1    | 360     |
| 108-95-2   | Phenol                        | U         | 360    | ug/kg | 72.1    | 360     |
| 95-57-8    | 2-Chlorophenol                | U         | 360    | ug/kg | 72.1    | 360     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 360    | ug/kg | 72.1    | 360     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 360    | ug/kg | 72.1    | 360     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 360    | ug/kg | 72.1    | 360     |
| 83-32-9    | Acenaphthene                  | U         | 36.0   | ug/kg | 11.9    | 36.0    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 360    | ug/kg | 36.0    | 360     |
| 100-02-7   | 4-Nitrophenol                 | U         | 360    | ug/kg | 119     | 360     |
| 87-86-5    | Pentachlorophenol             | U         | 360    | ug/kg | 90.1    | 360     |
| 129-00-0   | Pyrene                        |           | 114    | ug/kg | 10.8    | 36.0    |
| 110-86-1   | Pyridine                      | U         | 360    | ug/kg | 72.1    | 360     |
| 62-53-3    | Aniline                       | U         | 360    | ug/kg | 108     | 360     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 360    | ug/kg | 72.1    | 360     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 360    | ug/kg | 72.1    | 360     |
| 100-51-6   | Benzyl alcohol                | U         | 360    | ug/kg | 108     | 360     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 360    | ug/kg | 72.1    | 360     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 360    | ug/kg | 72.1    | 360     |
| 95-48-7    | o-Cresol                      | U         | 360    | ug/kg | 72.1    | 360     |
| 65794-96-9 | m,p-Cresols                   | U         | 360    | ug/kg | 108     | 360     |
| 67-72-1    | Hexachloroethane              | U         | 360    | ug/kg | 72.1    | 360     |
| 98-95-3    | Nitrobenzene                  | U         | 360    | ug/kg | 72.1    | 360     |
| 78-59-1    | Isophorone                    | U         | 360    | ug/kg | 72.1    | 360     |
| 88-75-5    | 2-Nitrophenol                 | U         | 360    | ug/kg | 72.1    | 360     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 360    | ug/kg | 126     | 360     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 360    | ug/kg | 72.1    | 360     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 360    | ug/kg | 72.1    | 360     |
| 65-85-0    | Benzoic acid                  | U         | 721    | ug/kg | 180     | 721     |
| 91-20-3    | Naphthalene                   | U         | 36.0   | ug/kg | 10.8    | 36.0    |
| 106-47-8   | 4-Chloroaniline               | U         | 360    | ug/kg | 72.1    | 360     |
| 87-68-3    | Hexachlorobutadiene           | U         | 360    | ug/kg | 72.1    | 360     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 36.0   | ug/kg | 7.21    | 36.0    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 360    | ug/kg | 72.1    | 360     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 360    | ug/kg | 72.1    | 360     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 360    | ug/kg | 72.1    | 360     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 36.0   | ug/kg | 11.9    | 36.0    |
| 88-74-4    | 2-Nitroaniline                | U         | 360    | ug/kg | 72.1    | 360     |
|            | <i>o</i> -Nitroaniline        |           |        |       |         |         |
| 99-09-2    | 3-Nitroaniline                | U         | 360    | ug/kg | 72.1    | 360     |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

Page 2 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114004

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 7.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8412  
Batch ID: 944874  
Run Date: 01/27/2010 16:18  
Prep Date: 01/25/2010 21:06  
Data File: s3a2718.d

| CAS No.   | Parname                       | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|-------------------------------|-----------|--------|-------|---------|---------|
|           | <i>m</i> -Nitroaniline        |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate             | U         | 360    | ug/kg | 72.1    | 360     |
| 606-20-2  | 2,6-Dinitrotoluene            | U         | 360    | ug/kg | 36.0    | 360     |
| 208-96-8  | Acenaphthylene                | U         | 36.0   | ug/kg | 10.8    | 36.0    |
| 51-28-5   | 2,4-Dinitrophenol             | U         | 721    | ug/kg | 137     | 721     |
| 132-64-9  | Dibenzofuran                  | U         | 360    | ug/kg | 72.1    | 360     |
| 84-66-2   | Diethylphthalate              | U         | 360    | ug/kg | 72.1    | 360     |
| 86-73-7   | Fluorene                      | U         | 36.0   | ug/kg | 10.8    | 36.0    |
| 7005-72-3 | 4-Chlorophenylphenylether     | U         | 360    | ug/kg | 72.1    | 360     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol    | U         | 360    | ug/kg | 72.1    | 360     |
| 100-01-6  | 4-Nitroaniline                | U         | 360    | ug/kg | 108     | 360     |
|           | <i>p</i> -Nitroaniline        |           |        |       |         |         |
| 122-39-4  | Diphenylamine                 | U         | 360    | ug/kg | 72.1    | 360     |
| 122-66-7  | Azobenzene                    | U         | 360    | ug/kg | 72.1    | 360     |
|           | <i>1,2</i> -Diphenylhydrazine |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether      | U         | 360    | ug/kg | 72.1    | 360     |
| 118-74-1  | Hexachlorobenzene             | U         | 360    | ug/kg | 72.1    | 360     |
| 85-01-8   | Phenanthrene                  |           | 92.3   | ug/kg | 10.8    | 36.0    |
| 120-12-7  | Anthracene                    | U         | 36.0   | ug/kg | 7.21    | 36.0    |
| 84-74-2   | Di-n-butylphthalate           |           | 3640   | ug/kg | 72.1    | 360     |
| 206-44-0  | Fluoranthene                  |           | 65.5   | ug/kg | 10.8    | 36.0    |
| 85-68-7   | Butylbenzylphthalate          | U         | 360    | ug/kg | 72.1    | 360     |
| 56-55-3   | Benzo(a)anthracene            | J         | 25.2   | ug/kg | 10.8    | 36.0    |
| 91-94-1   | 3,3'-Dichlorobenzidine        | U         | 360    | ug/kg | 108     | 360     |
| 218-01-9  | Chrysene                      |           | 40.2   | ug/kg | 10.8    | 36.0    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate    | U         | 360    | ug/kg | 72.1    | 360     |
| 117-84-0  | Di-n-octylphthalate           | U         | 360    | ug/kg | 72.1    | 360     |
| 205-99-2  | Benzo(b)fluoranthene          |           | 36.2   | ug/kg | 10.8    | 36.0    |
| 207-08-9  | Benzo(k)fluoranthene          | J         | 13.2   | ug/kg | 10.8    | 36.0    |
| 50-32-8   | Benzo(a)pyrene                | J         | 31.3   | ug/kg | 10.8    | 36.0    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene        | U         | 36.0   | ug/kg | 10.8    | 36.0    |
| 53-70-3   | Dibenzo(a,h)anthracene        | U         | 36.0   | ug/kg | 10.8    | 36.0    |
| 191-24-2  | Benzo(ghi)perylene            | U         | 36.0   | ug/kg | 10.8    | 36.0    |
| 120-82-1  | 1,2,4-Trichlorobenzene        | U         | 360    | ug/kg | 72.1    | 360     |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.1  | 1440      | ug/kg |     | J    |
|         | Unknown                               | 2.28 | 178       | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114004

Client ID: RE15-10-8412  
Batch ID: 944874  
Run Date: 01/27/2010 16:18  
Prep Date: 01/25/2010 21:06  
Data File: s3a2718.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 7.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.  | Parmname                              | Qualifier | Result    | Units | MDL/LOD | PQL/LOQ |
|--|---------------------------------------|-----------|-----------|-------|---------|---------|
| <b>Tentatively Identified Compound Summary</b> |                                       |           |           |       |         |         |
| CAS No.  | Tentatively Identified Compound (TIC) | RT        | Estimated | Units | Fit     | Qual    |
|  | Unknown Aldol Condensate              | 3.4       | 186       | ug/kg |         | JA      |
|  | Unknown                               | 12.01     | 1060      | ug/kg |         | J       |
|  | Unknown                               | 12.05     | 1810      | ug/kg |         | J       |
|  | Unknown                               | 15.18     | 3560      | ug/kg |         | J       |
|  | Unknown                               | 15.51     | 1300      | ug/kg |         | J       |
|  | Unknown                               | 16.03     | 5480      | ug/kg |         | J       |
|  | Unknown                               | 16.17     | 498       | ug/kg |         | J       |
|  | Unknown                               | 16.55     | 174       | ug/kg |         | J       |
|  | Unknown                               | 16.79     | 249       | ug/kg |         | J       |
|  | Unknown                               | 16.81     | 247       | ug/kg |         | J       |
|  | Unknown                               | 17.52     | 244       | ug/kg |         | J       |
|  | Unknown                               | 17.66     | 263       | ug/kg |         | J       |
|  | Unknown                               | 18.03     | 370       | ug/kg |         | J       |



GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2718.d  
Lab Smp Id: 245114004 Client Smp ID: RE15-10-8412  
Inj Date : 27-JAN-2010 16:18  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |245114004|944874|1|SVMF|1|LANL  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m  
Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 18  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1324.sub  
Target Version: 3.50  
Processing Host: hpc1p1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.03000  | weight of sample          |
| M    | 7.60210   | % moisture                |

Cpnd Variable Local Compound Variable

| Compounds                   | QUANT SIG |        |        |         | RESPONSE | CONCENTRATIONS       |                  |
|-----------------------------|-----------|--------|--------|---------|----------|----------------------|------------------|
|                             | MASS      | RT     | EXP RT | REL RT  |          | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/Kg) |
| * 10 1,4-Dichlorobenzene-d4 | 152       | 4.818  | 4.817  | (1.000) | 219220   | 40.0000              |                  |
| * 29 Naphthalene-d8         | 136       | 6.100  | 6.100  | (1.000) | 872901   | 40.0000              |                  |
| * 46 Acenaphthene-d10       | 164       | 7.975  | 7.973  | (1.000) | 498440   | 40.0000              |                  |
| * 67 Phenanthrene-d10       | 188       | 9.593  | 9.588  | (1.000) | 832193   | 40.0000              |                  |
| * 91 Chrysene-d12           | 240       | 12.615 | 12.610 | (1.000) | 603295   | 40.0000              |                  |
| * 98 Perylene-d12           | 264       | 14.959 | 14.945 | (1.000) | 317973   | 40.0000              |                  |
| \$ 3 2-Fluorophenol         | 112       | 3.645  | 3.633  | (0.756) | 357402   | 62.6539              | 2260             |
| \$ 5 Phenol-d5              | 99        | 4.428  | 4.418  | (0.919) | 437145   | 60.9755              | 2200             |
| \$ 20 Nitrobenzene-d5       | 82        | 5.358  | 5.357  | (0.878) | 212037   | 32.8841              | 1180             |
| \$ 39 2-Fluorobiphenyl      | 172       | 7.230  | 7.227  | (0.906) | 452352   | 35.1106              | 1260             |
| \$ 60 2,4,6-Tribromophenol  | 329       | 8.831  | 8.825  | (1.107) | 118995   | 83.2779              | 3000             |
| \$ 81 p-Terphenyl-d14       | 244       | 11.303 | 11.297 | (0.896) | 491349   | 47.3840              | 1710             |

| Compounds               | QUANT SIG |        |        |         |          | CONCENTRATIONS       |                  |
|-------------------------|-----------|--------|--------|---------|----------|----------------------|------------------|
|                         | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/Kg) |
| 79 Pyrene               | 202       | 11.161 | 11.156 | (0.885) | 54863    | 3.17443              | 114              |
| 68 Phenanthrene         | 178       | 9.616  | 9.615  | (1.002) | 46836    | 2.56044              | 92.3             |
| 72 Di-n-butylphthalate  | 149       | 10.185 | 10.173 | (1.062) | 2232847  | 101.097              | 3640             |
| 76 Fluoranthene         | 202       | 10.910 | 10.906 | (1.137) | 30245    | 1.81713              | 65.5             |
| 89 Benzo(a)anthracene   | 228       | 12.600 | 12.592 | (0.999) | 9659     | 0.69924              | 25.2(a)          |
| 92 Chrysene             | 228       | 12.648 | 12.646 | (1.003) | 14476    | 1.11409              | 40.2             |
| 95 Benzo(b)fluoranthene | 252       | 14.279 | 14.266 | (0.955) | 7495     | 1.00441              | 36.2             |
| 96 Benzo(k)fluoranthene | 252       | 14.321 | 14.316 | (0.957) | 2846     | 0.36739              | 13.2(a)          |
| 97 Benzo(a)pyrene       | 252       | 14.856 | 14.845 | (0.993) | 5642     | 0.86768              | 31.3(a)          |

#### QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

## ION RATIO REPORT

## SV REPORT

Data file: s3a2718.d

Report Date: 01/27/2010 16:51

Lab. ID: 245114004

SampleType: SAMPLE

Injection Date: 27-JAN-2010 16:18

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245114004|944874|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1324

Sample Matrix: SOIL

| MASS  | RESPONSE               | RT             | EXPECT RT | TARGET RANGE | RATIO | QUAL |
|-------|------------------------|----------------|-----------|--------------|-------|------|
| ===== |                        |                |           |              |       |      |
| 4     | Aniline                | CAS#: 62-53-3  |           |              |       |      |
| 66    | 26929                  | 4.43           | 4.50      | 80-120       | 100   | (T)  |
| 93    | 1462                   | 4.48           | 4.50      | 205-265      | 5     | (Q)  |
| ----- |                        |                |           |              |       |      |
| 17    | N-Nitrosodipropylamine | CAS#: 621-64-7 |           |              |       |      |
| 70    | 29943                  | 5.36           | 5.19      | 80-120       | 100   | (T)  |
| 42    | 19978                  | 5.36           | 5.19      | 43-103       | 67    | (T)  |
| ----- |                        |                |           |              |       |      |
| 41    | m-Nitroaniline         | CAS#: 99-09-2  |           |              |       |      |
| 138   | 126                    | 7.98           | 7.92      | 80-120       | 100   | ( )  |
| 92    | 2894                   | 7.98           | 7.92      | 79-139       | 2283  | (Q)  |
| 108   | 11201                  | 7.98           | 7.92      | 0- 40        | 8836  | (Q)  |
| ----- |                        |                |           |              |       |      |
| 44    | 2,6-Dinitrotoluene     | CAS#: 606-20-2 |           |              |       |      |
| 165   | 65528                  | 7.98           | 7.73      | 80-120       | 100   | (T)  |
| 63    | 1106                   | 7.98           | 7.73      | 35- 95       | 2     | (QT) |
| ----- |                        |                |           |              |       |      |
| 50    | 2,4-Dinitrotoluene     | CAS#: 121-14-2 |           |              |       |      |
| 165   | 65528                  | 7.98           | 8.16      | 80-120       | 100   | (T)  |
| 89    | 991                    | 7.98           | 8.16      | 42-102       | 2     | (QT) |
| 63    | 1106                   | 7.98           | 8.16      | 20- 80       | 2     | (QT) |
| ----- |                        |                |           |              |       |      |
| 68    | Phenanthrene           | CAS#: 85-01-8  |           |              |       |      |
| 178   | 46836                  | 9.62           | 9.61      | 80-120       | 100   | ( )  |
| 179   | 7841                   | 9.62           | 9.61      | 0- 45        | 17    | ( )  |
| 176   | 8918                   | 9.62           | 9.61      | 0- 49        | 19    | ( )  |
| ----- |                        |                |           |              |       |      |

| MASS                      | RESPONSE | RT             | EXPECT RT | TARGET RANGE | RATIO | QUAL |
|---------------------------|----------|----------------|-----------|--------------|-------|------|
| <hr/>                     |          |                |           |              |       |      |
| 69 Anthracene             |          | CAS#: 120-12-7 |           |              |       |      |
| 178                       | 46836    | 9.62           | 9.67      | 80-120       | 100   | ( )  |
| 179                       | 7841     | 9.62           | 9.67      | 0- 45        | 17    | ( )  |
| 176                       | 8918     | 9.62           | 9.67      | 0- 48        | 19    | ( )  |
| <hr/>                     |          |                |           |              |       |      |
| 72 Di-n-butylphthalate    |          | CAS#: 84-74-2  |           |              |       |      |
| 149                       | 2232847  | 10.18          | 10.17     | 80-120       | 100   | ( )  |
| 150                       | 209845   | 10.18          | 10.17     | 0- 39        | 9     | ( )  |
| 104                       | 122906   | 10.18          | 10.17     | 0- 36        | 6     | ( )  |
| <hr/>                     |          |                |           |              |       |      |
| 76 Fluoranthene           |          | CAS#: 206-44-0 |           |              |       |      |
| 202                       | 30245    | 10.91          | 10.91     | 80-120       | 100   | ( )  |
| 203                       | 5123     | 10.91          | 10.91     | 0- 47        | 17    | ( )  |
| 101                       | 3995     | 10.91          | 10.90     | 0- 43        | 13    | ( )  |
| <hr/>                     |          |                |           |              |       |      |
| 79 Pyrene                 |          | CAS#: 129-00-0 |           |              |       |      |
| 202                       | 54863    | 11.16          | 11.16     | 80-120       | 100   | ( )  |
| 200                       | 11498    | 11.16          | 11.16     | 0- 51        | 21    | ( )  |
| 101                       | 8977     | 11.16          | 11.16     | 0- 46        | 16    | ( )  |
| <hr/>                     |          |                |           |              |       |      |
| 89 Benzo(a)anthracene     |          | CAS#: 56-55-3  |           |              |       |      |
| 228                       | 9659     | 12.60          | 12.59     | 80-120       | 100   | ( )  |
| 226                       | 2385     | 12.60          | 12.59     | 0- 56        | 25    | ( )  |
| 229                       | 2125     | 12.60          | 12.59     | 0- 50        | 22    | ( )  |
| <hr/>                     |          |                |           |              |       |      |
| 90 3,3'-Dichlorobenzidine |          | CAS#: 91-94-1  |           |              |       |      |
| 252                       | 131      | 12.49          | 12.53     | 80-120       | 100   | ( )  |
| 254                       | 477      | 12.62          | 12.53     | 35- 95       | 363   | (QT) |
| 126                       | 1319     | 12.62          | 12.53     | 0- 45        | 1004  | (QT) |
| <hr/>                     |          |                |           |              |       |      |
| 92 Chrysene               |          | CAS#: 218-01-9 |           |              |       |      |
| 228                       | 14476    | 12.65          | 12.65     | 80-120       | 100   | ( )  |
| 229                       | 2853     | 12.65          | 12.65     | 0- 50        | 20    | ( )  |
| 226                       | 4114     | 12.65          | 12.65     | 0- 59        | 28    | ( )  |
| <hr/>                     |          |                |           |              |       |      |
| 95 Benzo(b)fluoranthene   |          | CAS#: 205-99-2 |           |              |       |      |
| 252                       | 7495     | 14.28          | 14.27     | 80-120       | 100   | ( )  |
| 253                       | 2164     | 14.27          | 14.27     | 0- 52        | 29    | ( )  |
| 125                       | 526      | 14.28          | 14.27     | 0- 43        | 7     | ( )  |
| <hr/>                     |          |                |           |              |       |      |
| 96 Benzo(k)fluoranthene   |          | CAS#: 207-08-9 |           |              |       |      |
| 252                       | 2846     | 14.32          | 14.32     | 80-120       | 100   | ( )  |
| 253                       | 867      | 14.32          | 14.32     | 0- 52        | 30    | ( )  |
| 125                       | 526      | 14.28          | 14.31     | 0- 43        | 19    | ( )  |
| <hr/>                     |          |                |           |              |       |      |
| 97 Benzo(a)pyrene         |          | CAS#: 50-32-8  |           |              |       |      |
| 252                       | 5642     | 14.86          | 14.84     | 80-120       | 100   | ( )  |
| 253                       | 1487     | 14.86          | 14.84     | 0- 52        | 26    | ( )  |
| 125                       | 1062     | 14.86          | 14.84     | 0- 47        | 19    | ( )  |
| <hr/>                     |          |                |           |              |       |      |

| MASS                      | RESPONSE | RT    | EXPECT RT | TARGET RANGE   | RATIO | QUAL |
|---------------------------|----------|-------|-----------|----------------|-------|------|
| =====                     |          |       |           |                |       |      |
| 99 Indeno(1,2,3-cd)pyrene |          |       |           | CAS#: 193-39-5 |       |      |
| 276                       | 1904     | 16.95 | 16.93     | 80-120         | 100   | ( )  |
| 138                       | 245      | 16.95 | 16.93     | 0- 55          | 13    | ( )  |

|                        |      |       |       |                |     |     |
|------------------------|------|-------|-------|----------------|-----|-----|
| -----                  |      |       |       |                |     |     |
| 101 Benzo(ghi)perylene |      |       |       | CAS#: 191-24-2 |     |     |
| 276                    | 2035 | 17.47 | 17.45 | 80-120         | 100 | ( ) |
| 138                    | 748  | 17.47 | 17.45 | 5- 65          | 37  | ( ) |

-----

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2718.d  
Lab Smp Id: 245114004 Client Smp ID: RE15-10-8412  
Inj Date : 27-JAN-2010 16:18  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |245114004|944874|1|SVMF|1|LANL  
Misc Info : |MSD8270 S|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m  
Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 18  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1324.sub  
Target Version: 3.50  
Processing Host: hpc1p1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.03000  | weight of sample          |
| M    | 7.60210   | % moisture                |

Cpnd Variable

Local Compound Variable

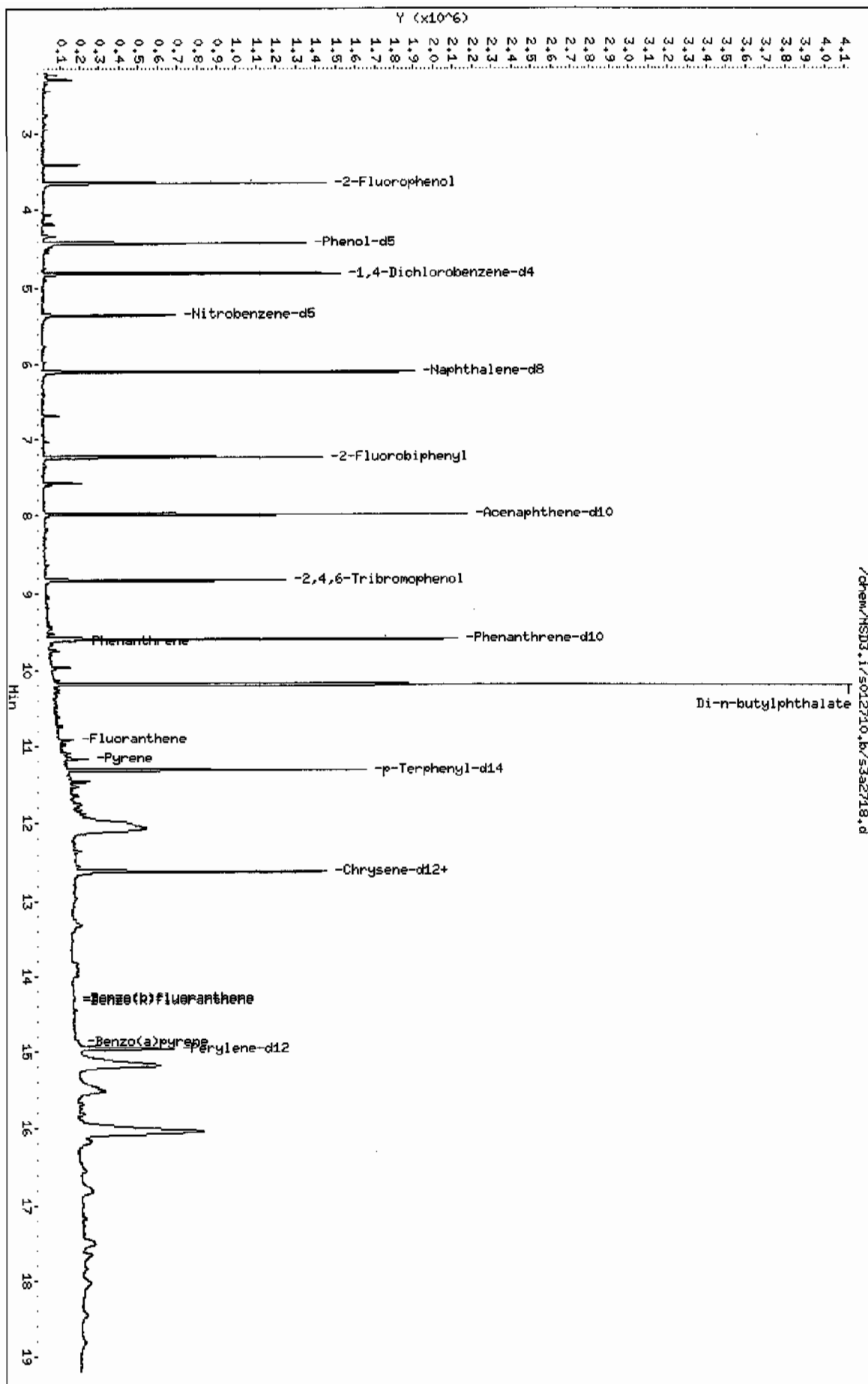
| ISTD                        | RT     | AREA    | AMOUNT |
|-----------------------------|--------|---------|--------|
| =====                       | =====  | =====   | =====  |
| * 10 1,4-Dichlorobenzene-d4 | 4.818  | 1391374 | 40.000 |
| * 91 Chrysene-d12           | 12.615 | 1627067 | 40.000 |
| * 98 Perylene-d12           | 14.959 | 973177  | 40.000 |

| CONCENTRATIONS |       |               |              | QUANT |         |           |        |
|----------------|-------|---------------|--------------|-------|---------|-----------|--------|
| RT             | AREA  | ON-COL(ng/ul) | FINAL(ug/Kg) | QUAL  | LIBRARY | LIB ENTRY | CPND # |
| =====          | ===== | =====         | =====        | ===== | =====   | =====     | =====  |

| RT                       | CONCENTRATIONS |                |               | QUAL   | QUANT   |           | CPND # |
|--------------------------|----------------|----------------|---------------|--------|---------|-----------|--------|
|                          | AREA           | ON-COL (ng/ul) | FINAL (ug/Kg) |        | LIBRARY | LIB ENTRY |        |
| Unknown                  |                |                |               | CAS #: |         |           |        |
| 2.100                    | 1390711        | 39.9809389     | 1440          | 0      |         | 0         | 10     |
| Unknown                  |                |                |               | CAS #: |         |           |        |
| 2.285                    | 171846         | 4.94031939     | 178           | 0      |         | 0         | 10     |
| Unknown Aldol Condensate |                |                |               | CAS #: |         |           |        |
| 3.402                    | 179745         | 5.16740578     | 186           | 0      |         | 0         | 10     |
| Unknown                  |                |                |               | CAS #: |         |           |        |
| 12.012                   | 1201974        | 29.5494601     | 1060          | 0      |         | 0         | 91     |
| Unknown                  |                |                |               | CAS #: |         |           |        |
| 12.054                   | 2041019        | 50.1766315     | 1810          | 0      |         | 0         | 91     |
| Unknown                  |                |                |               | CAS #: |         |           |        |
| 15.178                   | 2404518        | 98.8315847     | 3560          | 0      |         | 0         | 98     |
| Unknown                  |                |                |               | CAS #: |         |           |        |
| 15.509                   | 875953         | 36.0038087     | 1300          | 0      |         | 0         | 98     |
| Unknown                  |                |                |               | CAS #: |         |           |        |
| 16.030                   | 3700742        | 152.109565     | 5480          | 0      |         | 0         | 98     |
| Unknown                  |                |                |               | CAS #: |         |           |        |
| 16.169                   | 336402         | 13.8269565     | 498           | 0      |         | 0         | 98     |
| Unknown                  |                |                |               | CAS #: |         |           |        |
| 16.548                   | 117304         | 4.82149559     | 174           | 0      |         | 0         | 98     |
| Unknown                  |                |                |               | CAS #: |         |           |        |
| 16.793                   | 168292         | 6.91721629     | 249           | 0      |         | 0         | 98     |
| Unknown                  |                |                |               | CAS #: |         |           |        |
| 16.814                   | 166887         | 6.85946592     | 247           | 0      |         | 0         | 98     |
| Unknown                  |                |                |               | CAS #: |         |           |        |
| 17.515                   | 164533         | 6.76269229     | 244           | 0      |         | 0         | 98     |
| Unknown                  |                |                |               | CAS #: |         |           |        |
| 17.657                   | 177483         | 7.29498709     | 263           | 0      |         | 0         | 98     |
| Unknown                  |                |                |               | CAS #: |         |           |        |
| 18.033                   | 249796         | 10.2672204     | 370           | 0      |         | 0         | 98     |

Data File: /chem/HSD3.i/5012710.k/53a2718.d  
 Date: 27-JAN-2010 16:18  
 Client ID: REL5-10-8412  
 Sample Info: 1245114004|94487411|SMF111LNL  
 Volume Injected (UL): 0.5  
 Column Phase: J&W DB-SHS

Instrument: HSD3.i  
 Operator: JLD  
 Column diameter: 0.20





Date : 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: MSD3.i

Sample Info: 12451140041944874111SVHF111LANL

Volume Injected (uL): 0.5

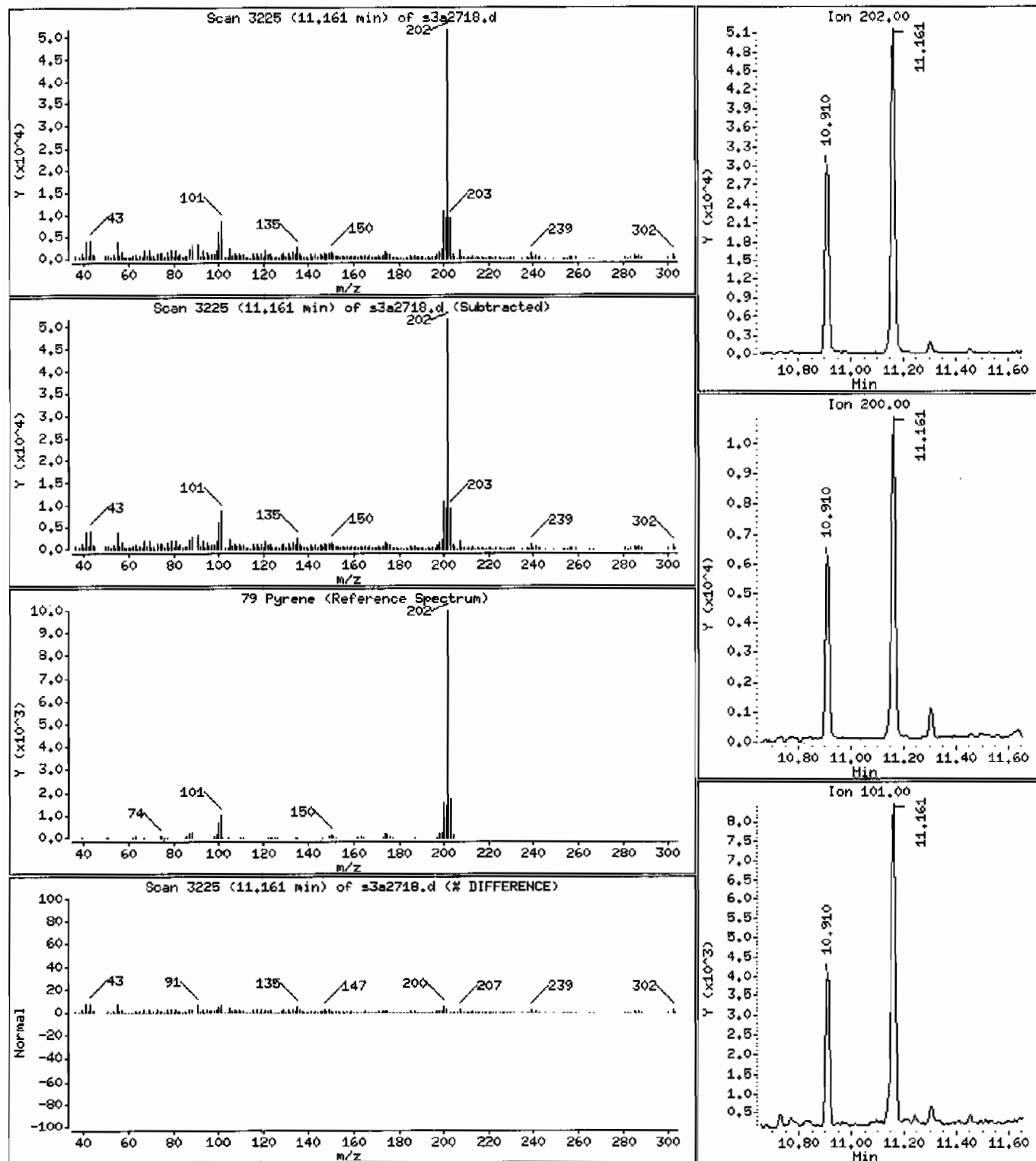
Operator: JLD1

Column phase: J&amp;W DB-5HS

Column diameter: 0.20

79 Pyrene

Concentration: 114 ug/Kg



Date : 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: MSD3.i

Sample Info: 1245114004194487411SVHF111LANL

Volume Injected (UL): 0.5

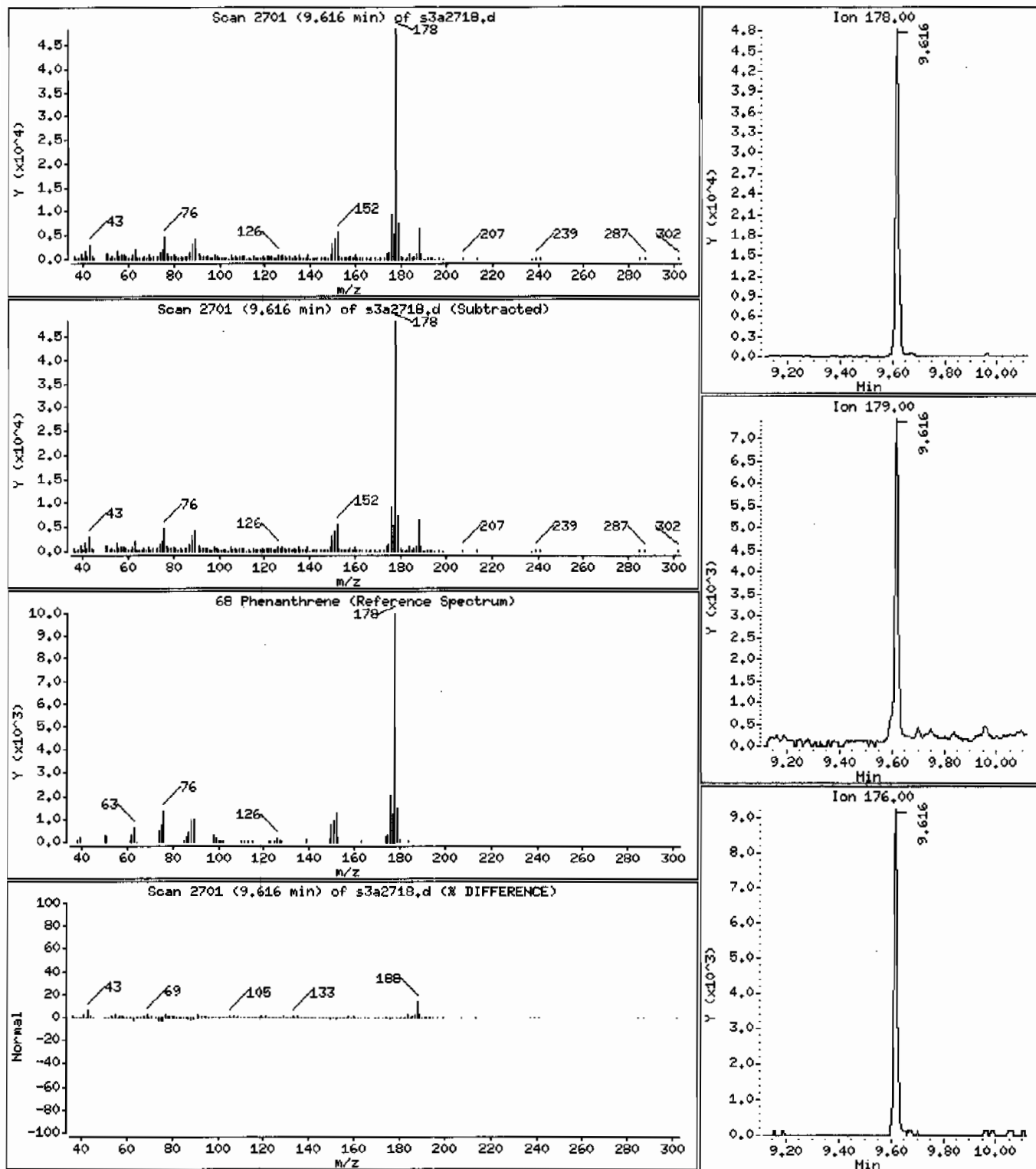
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 92.3 ug/Kg



Date : 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: MSD3.1

Sample Info: 1245114004194487411SVHF111LANL

Volume Injected (uL): 0.5

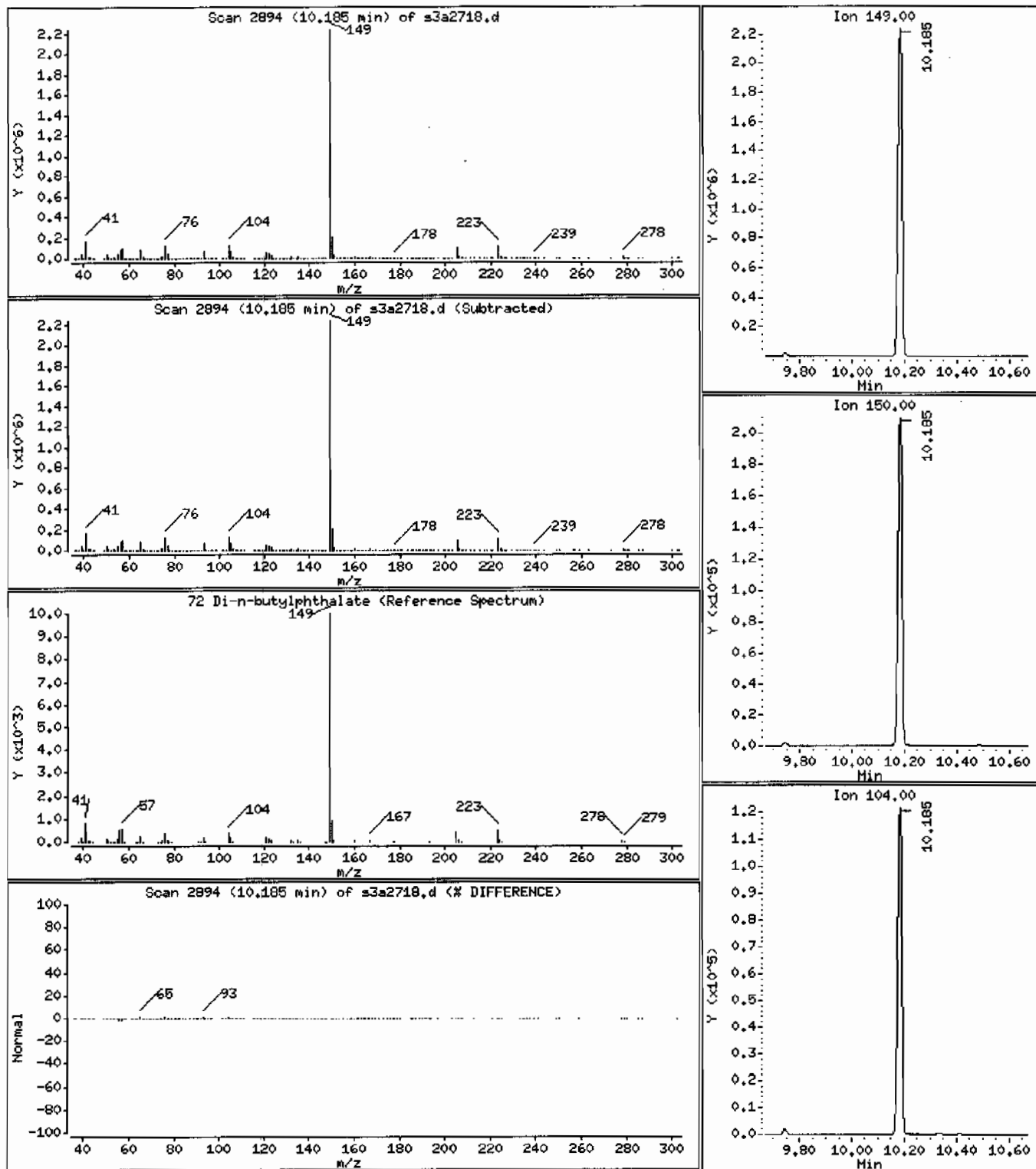
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

72 Di-n-butylphthalate

Concentration: 3640 ug/Kg



Date : 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: HSD3.i

Sample Info: 1245114004194487411ISVHF11ILANL

Volume Injected (uL): 0.5

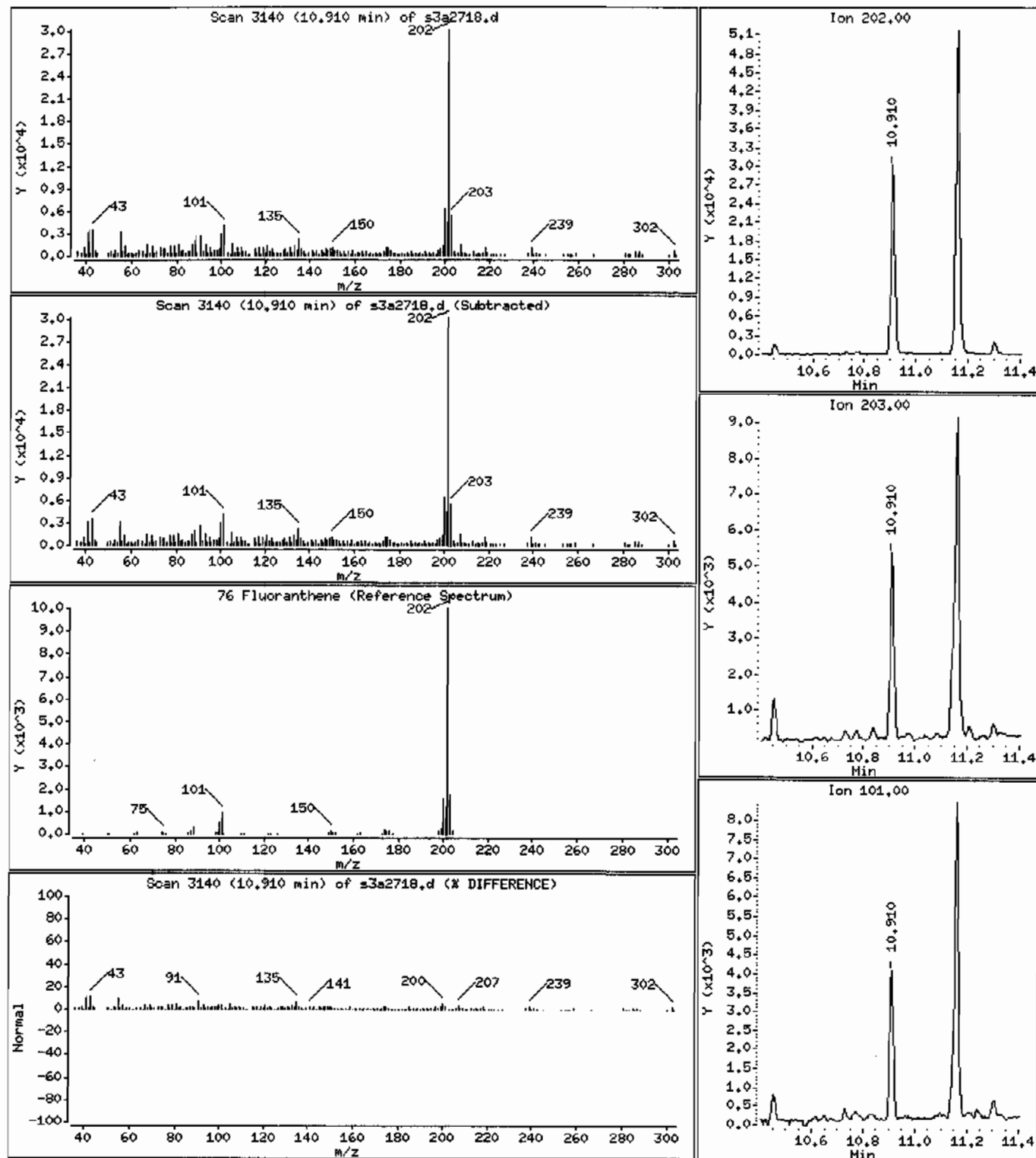
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 65.5 ug/Kg



Date : 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: MSD3.i

Sample Info: 1245114004|9448741|1|SVMF11|LANL

Volume Injected (uL): 0.5

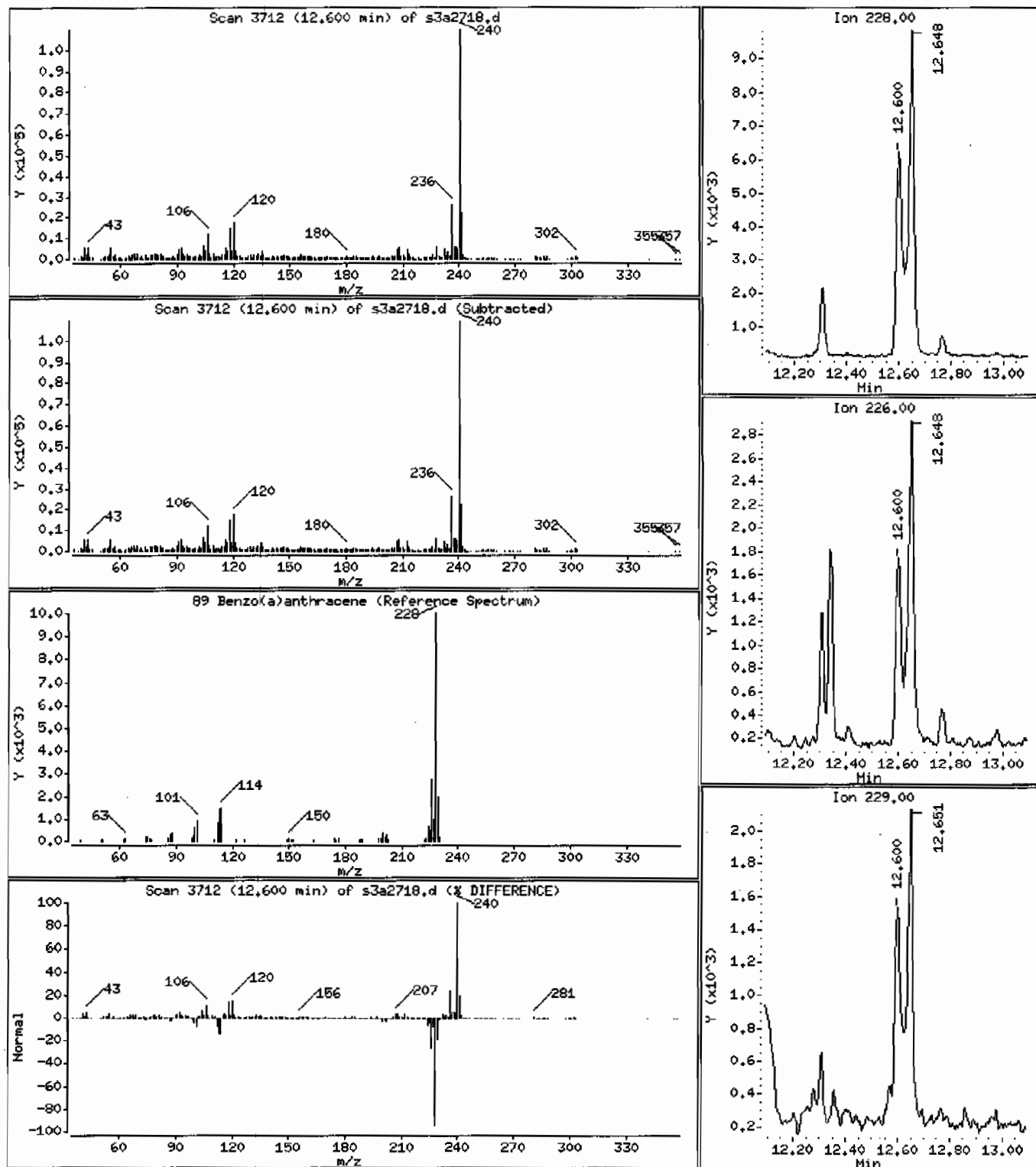
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 25.2 ug/Kg



Date : 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: MSD3.i

Sample Info: 12451140041944874111SVHF111LANL

Volume Injected (uL): 0.5

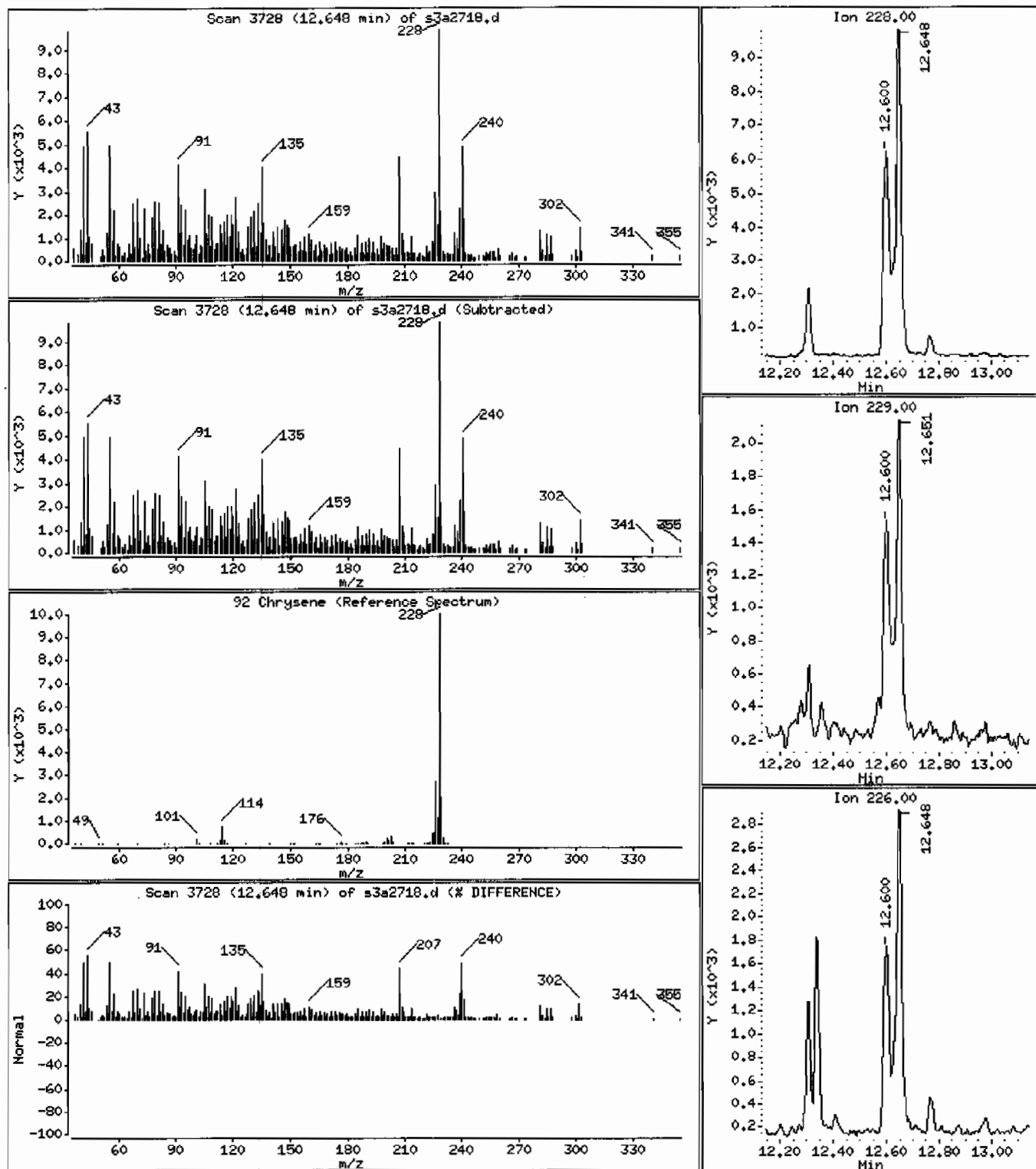
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 40.2 ug/Kg



Date : 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: MSD3.1

Sample Info: 1245114004|94487411|SVHF11|LANL

Volume Injected (uL): 0.5

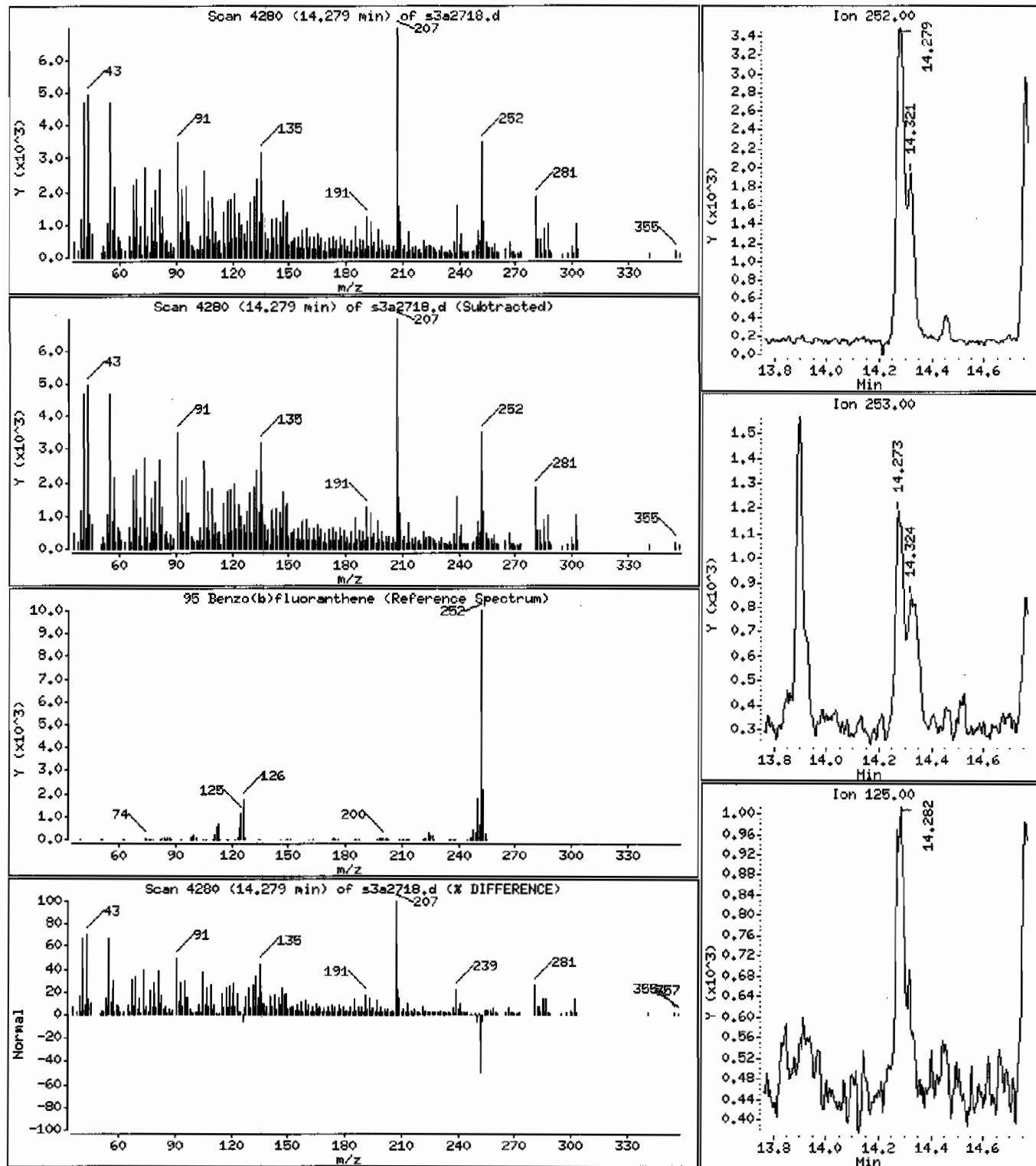
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 36.2 ug/Kg



Date : 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: MSD3.i

Sample Info: 1245114004194487411SVHF111LANL

Volume Injected (uL): 0.5

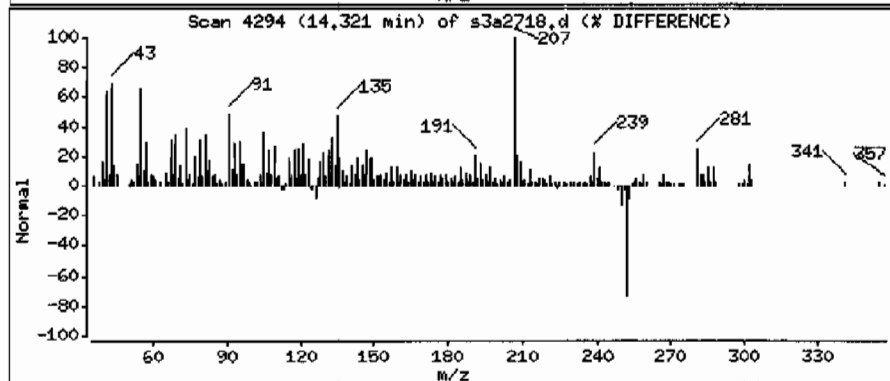
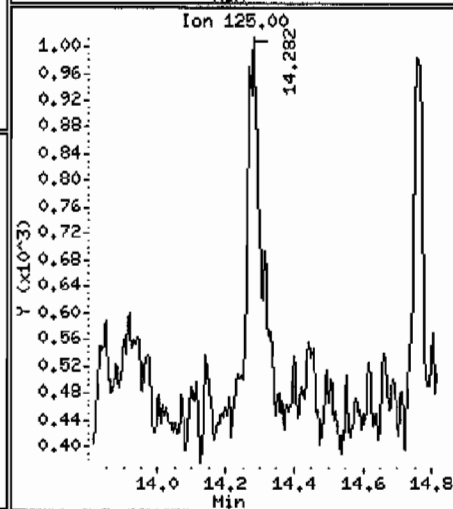
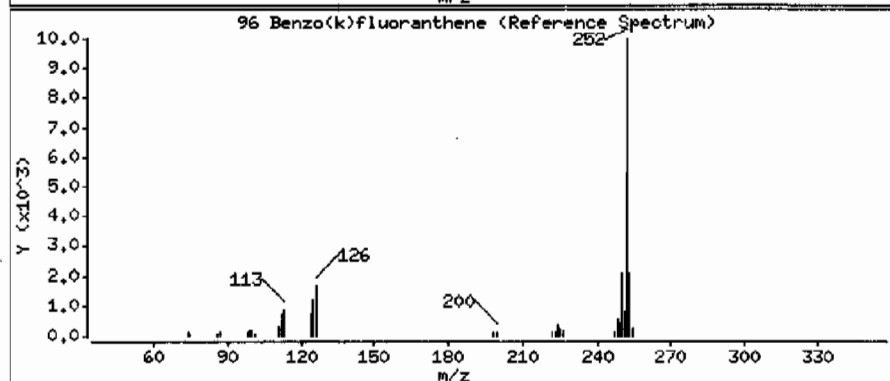
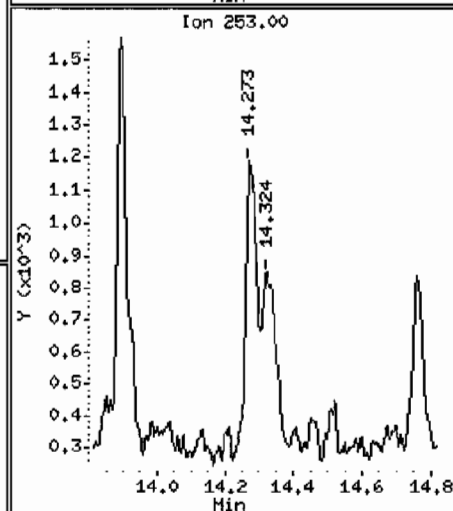
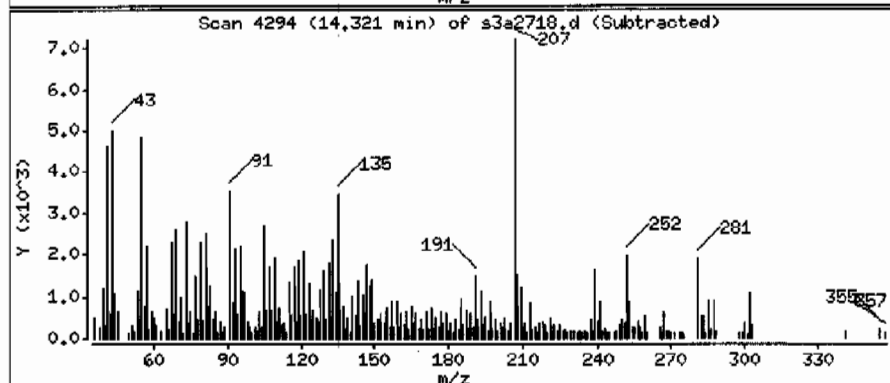
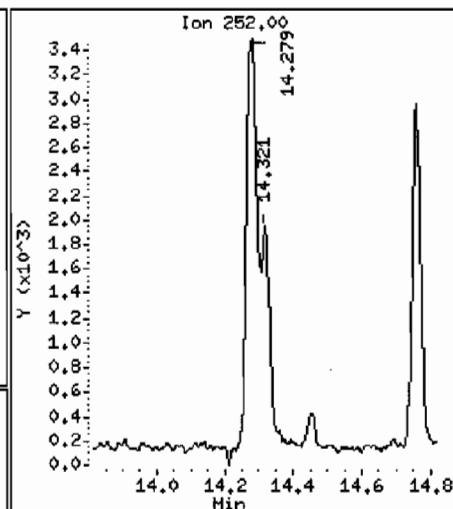
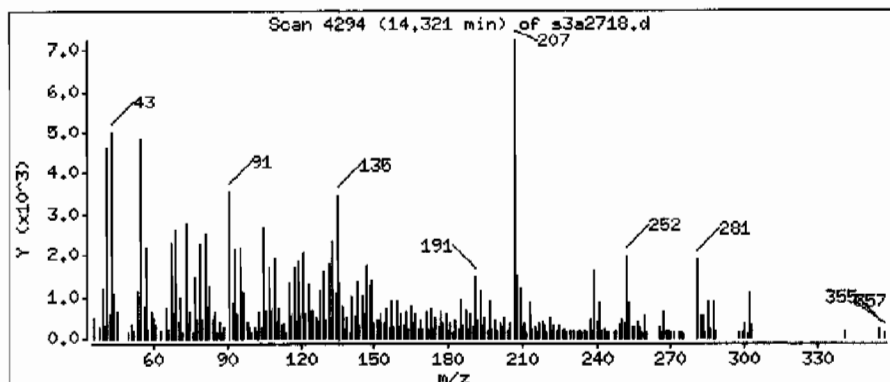
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

96 Benzo(k)fluoranthene

Concentration: 13.2 ug/Kg





Date : 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: HSD3.i

Sample Info: 1245114004194487411SVHF111LANL

Volume Injected (uL): 0.5

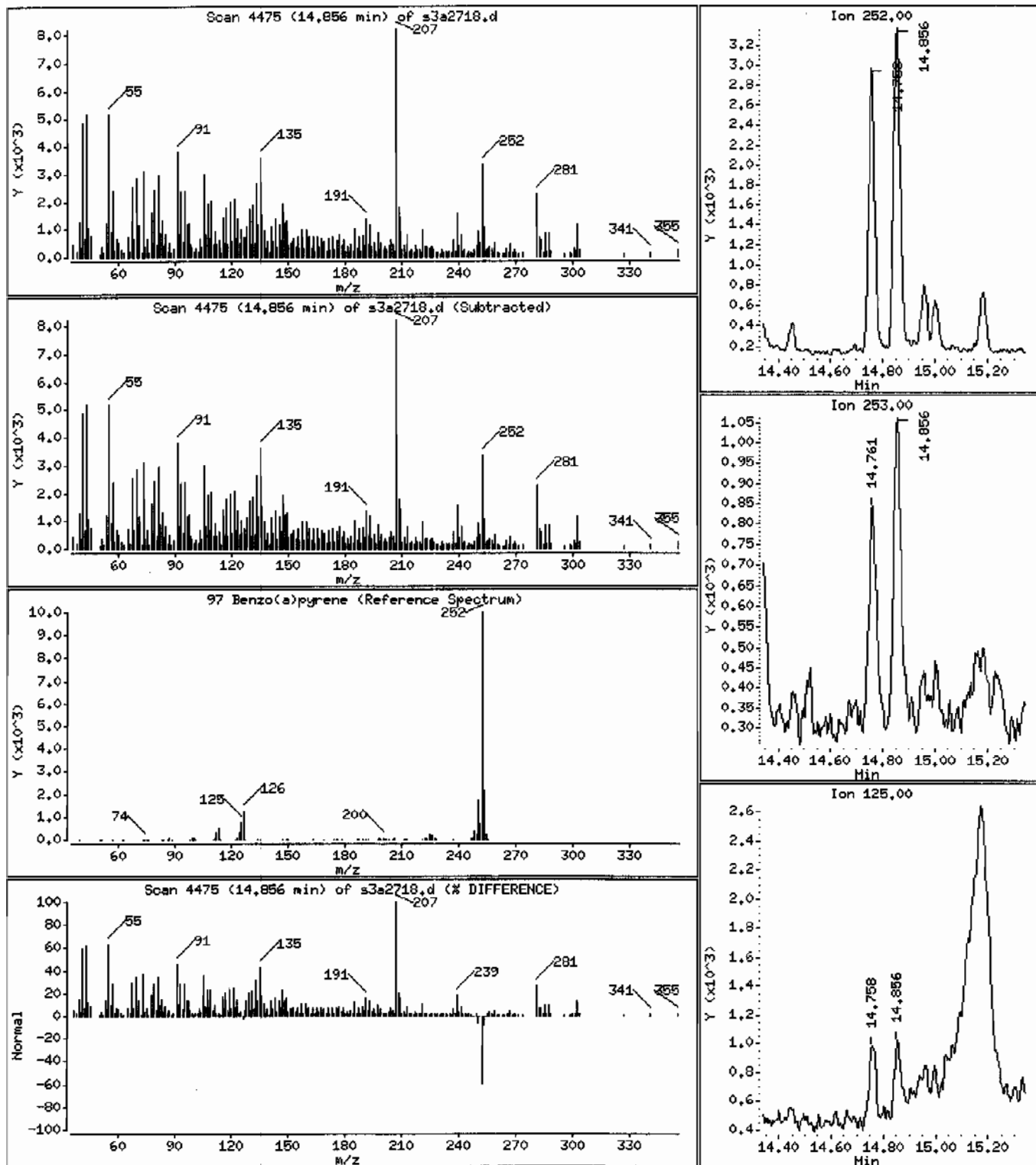
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 31.3 ug/Kg



Date: 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: MSD3.1

Sample Info: 12451140041944874111SVMF111LANL

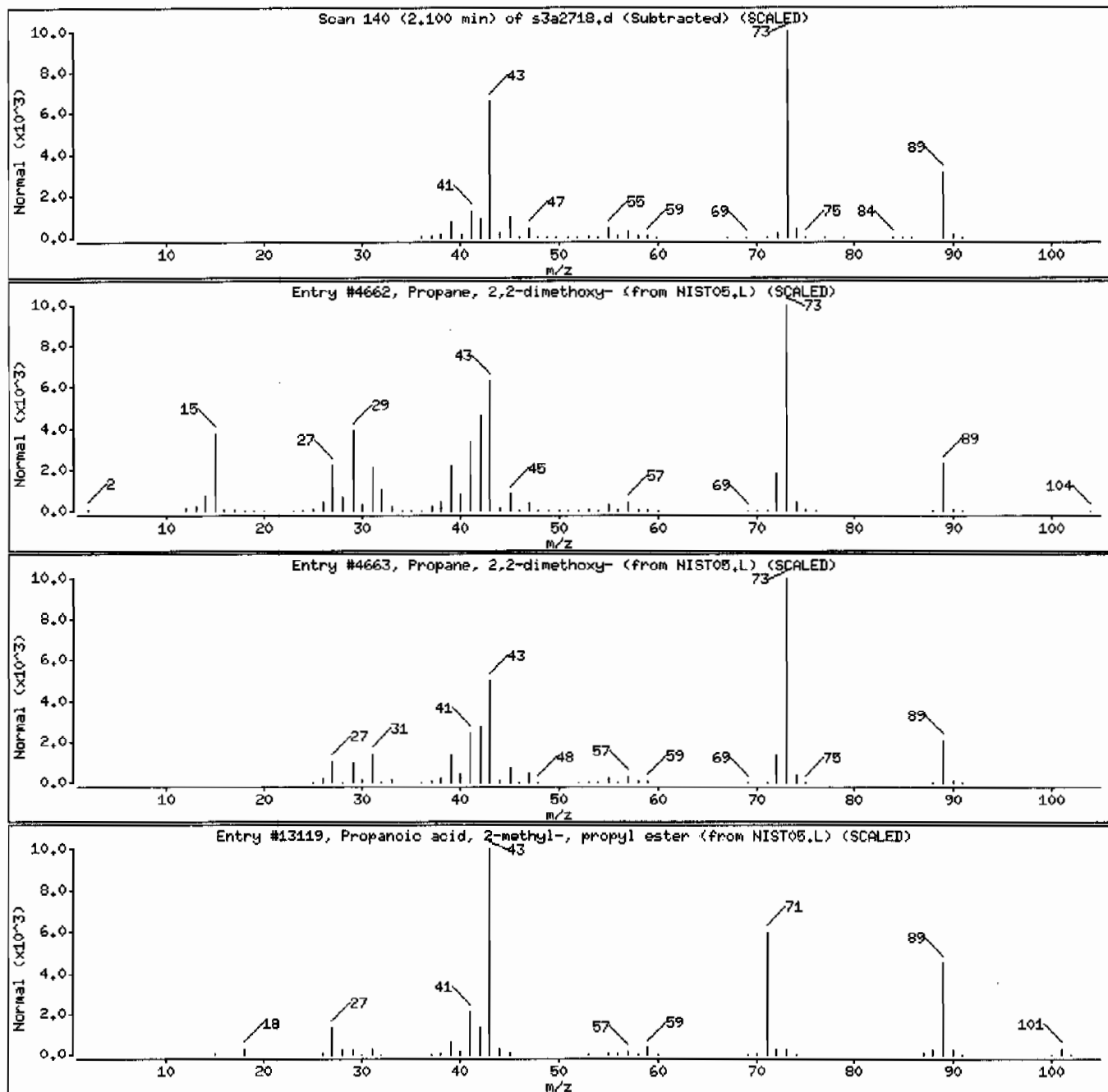
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match           | CAS Number | Library  | Entry | Quality | Formula | Weight |
|---|------------|----------|-------|---------|---------|--------|
| Unknown                                 |            |          |       |         |         |        |
| Propane, 2,2-dimethoxy-                 | 77-76-9    | NIST05.L | 4662  | 42      | C5H12O2 | 104    |
| Propane, 2,2-dimethoxy-                 | 77-76-9    | NIST05.L | 4663  | 38      | C5H12O2 | 104    |
| Propanoic acid, 2-methyl-, propyl ester | 644-49-5   | NIST05.L | 13119 | 17      | C7H14O2 | 130    |



Date : 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: MSD3.1

Sample Info: 1245114004194487411SVMF111LANL

Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

## Library Search Compound Match

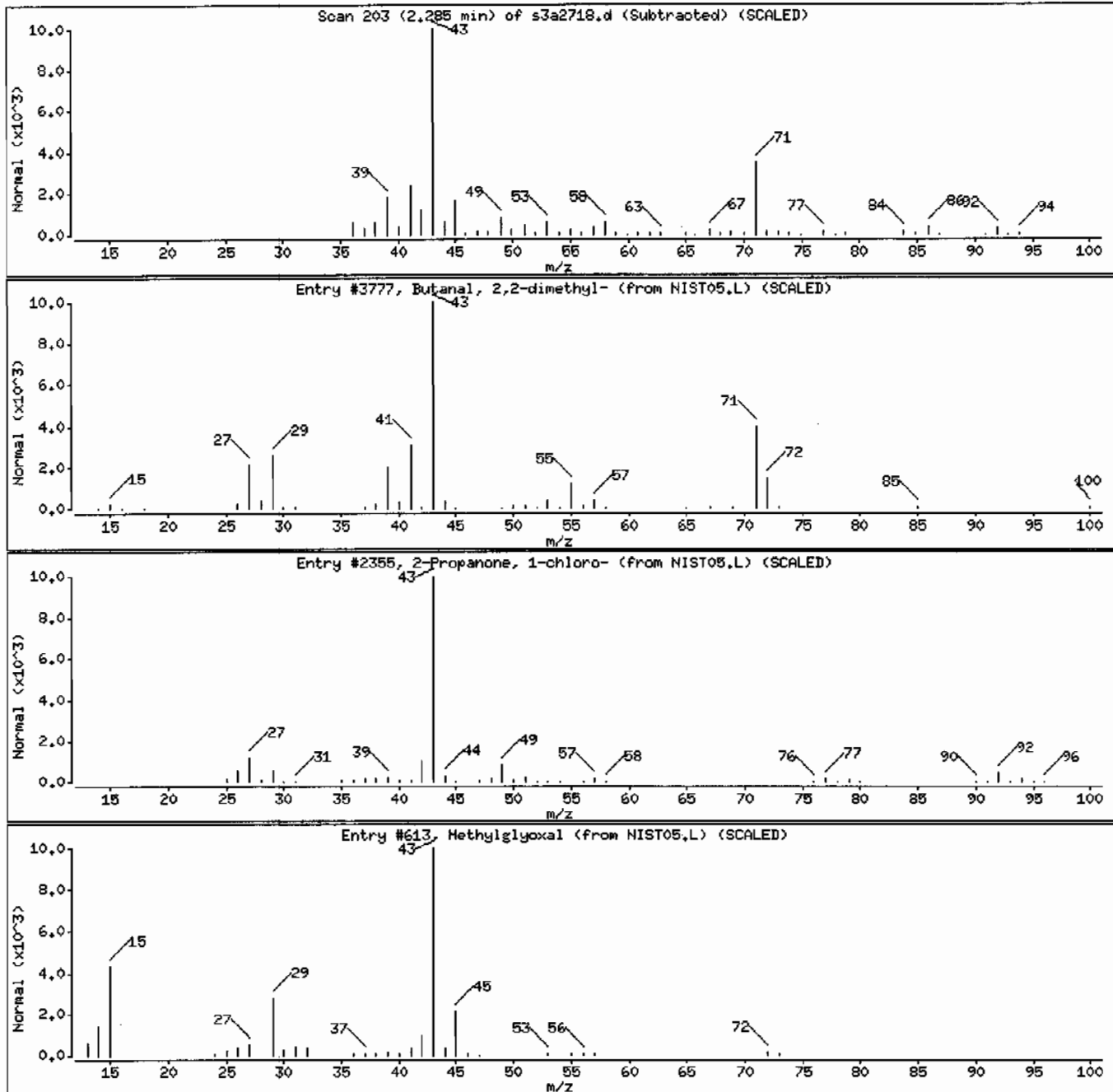
Unknown

Butanal, 2,2-dimethyl-

2-Propanone, 1-chloro-

Methylglyoxal

| CAS Number | Library  | Entry | Quality | Formula | Weight |
|------------|----------|-------|---------|---------|--------|
| 2094-75-9  | NIST05.L | 3777  | 38      | C6H12O  | 100    |
| 78-95-5    | NIST05.L | 2355  | 38      | C3H5ClO | 92     |
| 78-98-8    | NIST05.L | 613   | 38      | C3H4O2  | 72     |



Date : 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: MSD3.i

Sample Info: 12451140041944874111SVMF111LANL

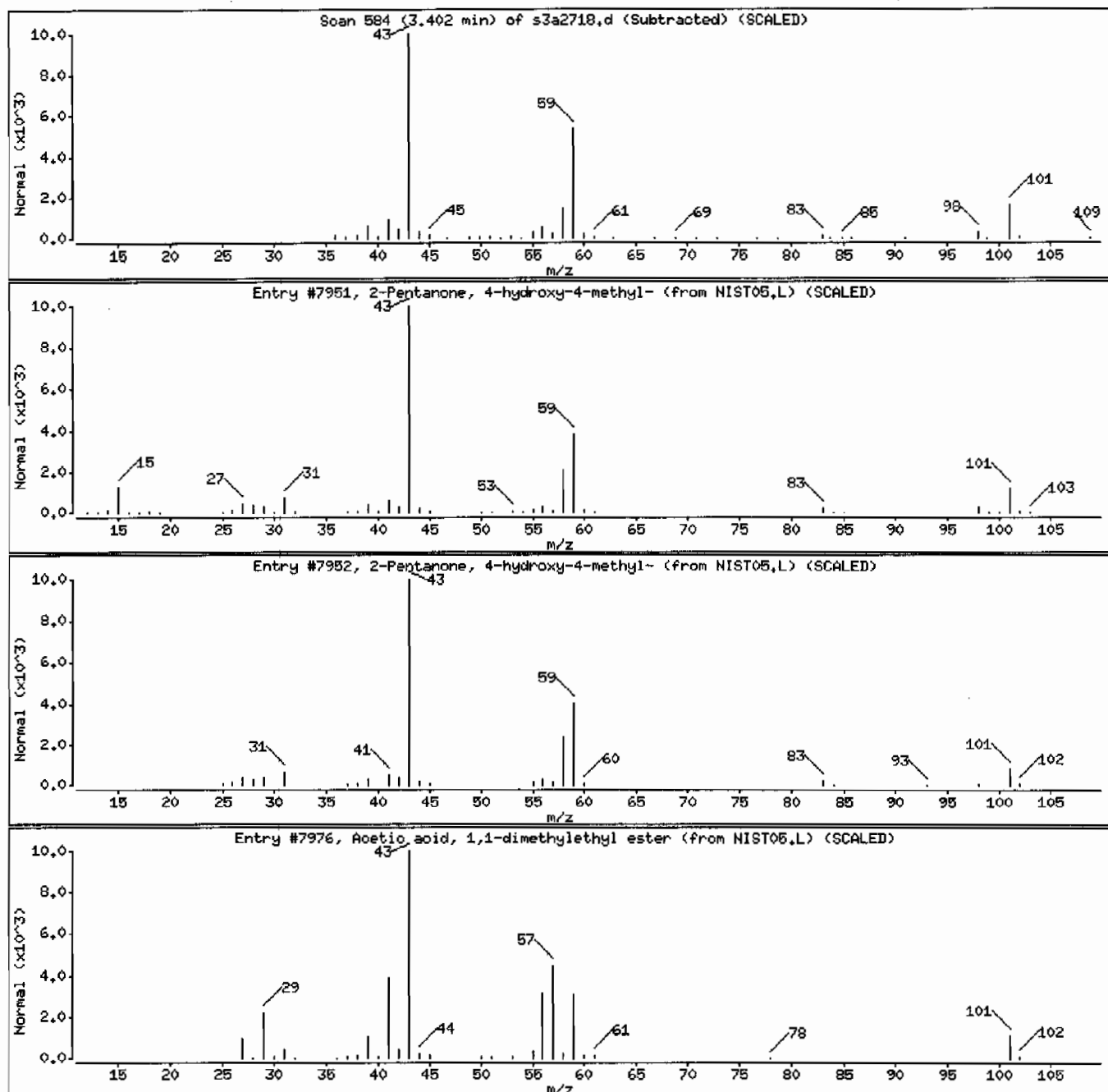
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match        | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--------------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown Aldol Condensate             |            |          |       |         |         |        |
| 2-Pentanone, 4-hydroxy-4-methyl-     | 123-42-2   | NIST05.L | 7951  | 53      | C6H12O2 | 116    |
| 2-Pentanone, 4-hydroxy-4-methyl-     | 123-42-2   | NIST05.L | 7952  | 50      | C6H12O2 | 116    |
| Acetic acid, 1,1-dimethylethyl ester | 540-88-6   | NIST05.L | 7976  | 28      | C6H12O2 | 116    |



Date: 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: MSD3.1

Sample Info: 12451140041944874111SVHF111LANL

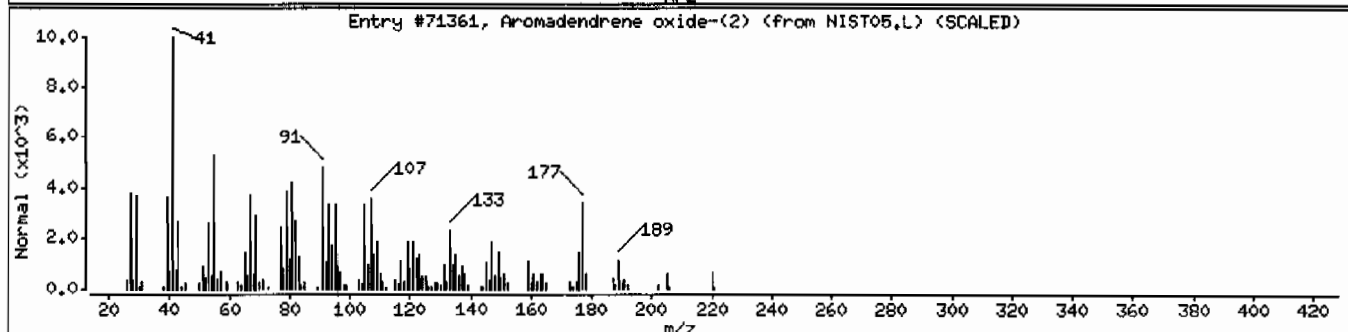
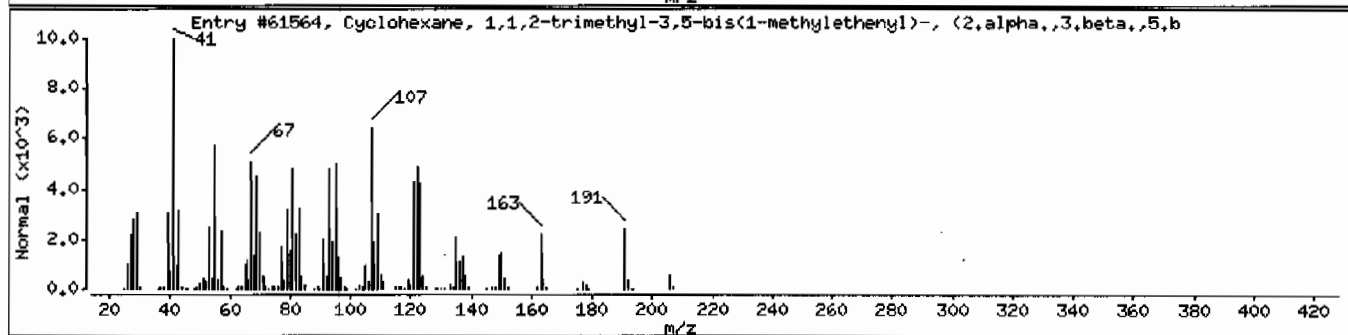
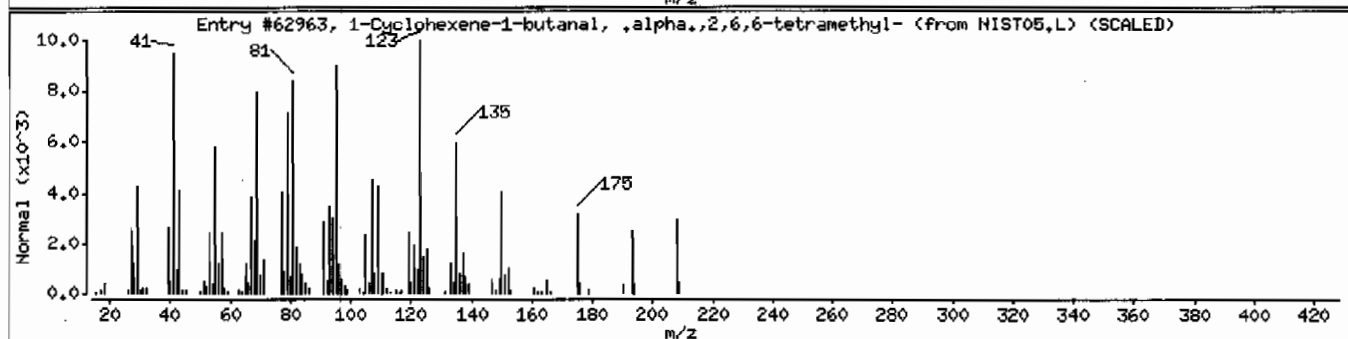
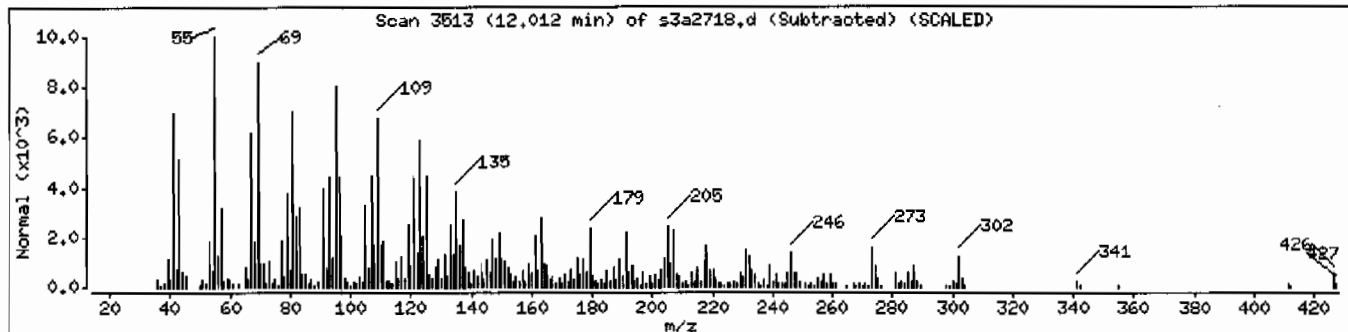
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5HS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula | Weight |
|--|--------------|----------|-------|---------|---------|--------|
| Unknown                                  |              |          |       |         |         |        |
| 1-Cyclohexene-1-butanol, .alpha.,2,6,6-t | 21632-06-4   | NIST05.L | 62963 | 62      | C14H24O | 208    |
| Cyclohexane, 1,1,2-trimethyl-3,5-bis(1-m | 62337-97-7   | NIST05.L | 61564 | 46      | C15H26  | 206    |
| Aromadendrene oxide-(2)                  | 1000151-98-6 | NIST05.L | 71361 | 45      | C15H24O | 220    |



Date: 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: MSD3.i

Sample Info: 1245114004|944874|1|SVHF|1|LANL

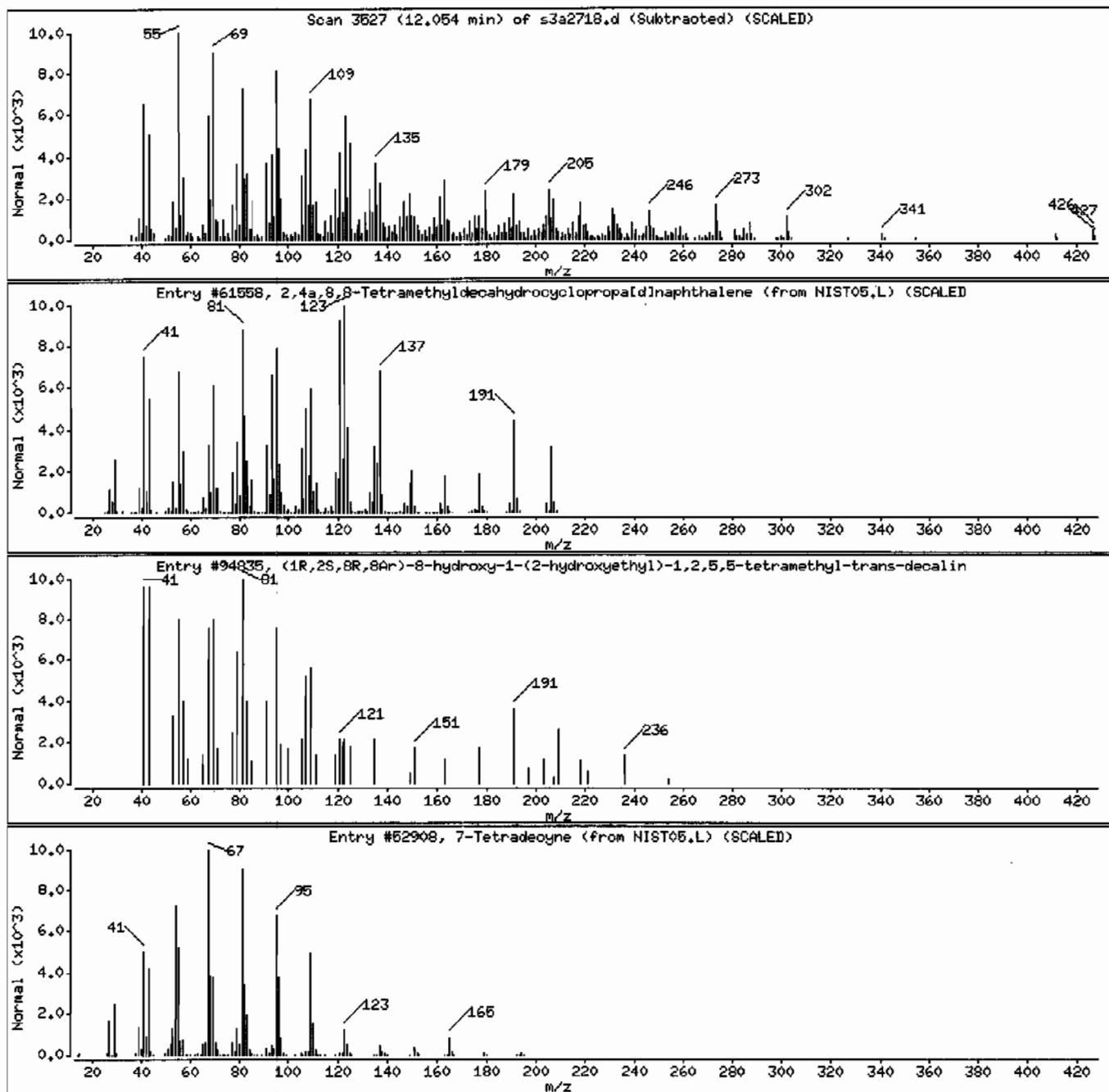
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match              | CAS Number   | Library  | Entry | Quality | Formula  | Weight |
|--|--------------|----------|-------|---------|----------|--------|
| Unknown                                    |              |          |       |         |          |        |
| 2,4a,8,8-Tetramethyldecahydrocyclopropal   | 74022-04-1   | NIST05.L | 61558 | 62      | C15H26   | 206    |
| (1R,2S,8R,8Ar)-8-hydroxy-1-(2-hydroxyethyl | 1000298-98-3 | NIST05.L | 94835 | 60      | C16H30O2 | 254    |
| 7-Tetradecyne                              | 35216-11-6   | NIST05.L | 52908 | 46      | C14H26   | 194    |



Date : 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: MSD3.i

Sample Info: 1245114004194487411(SVMF11)LANL

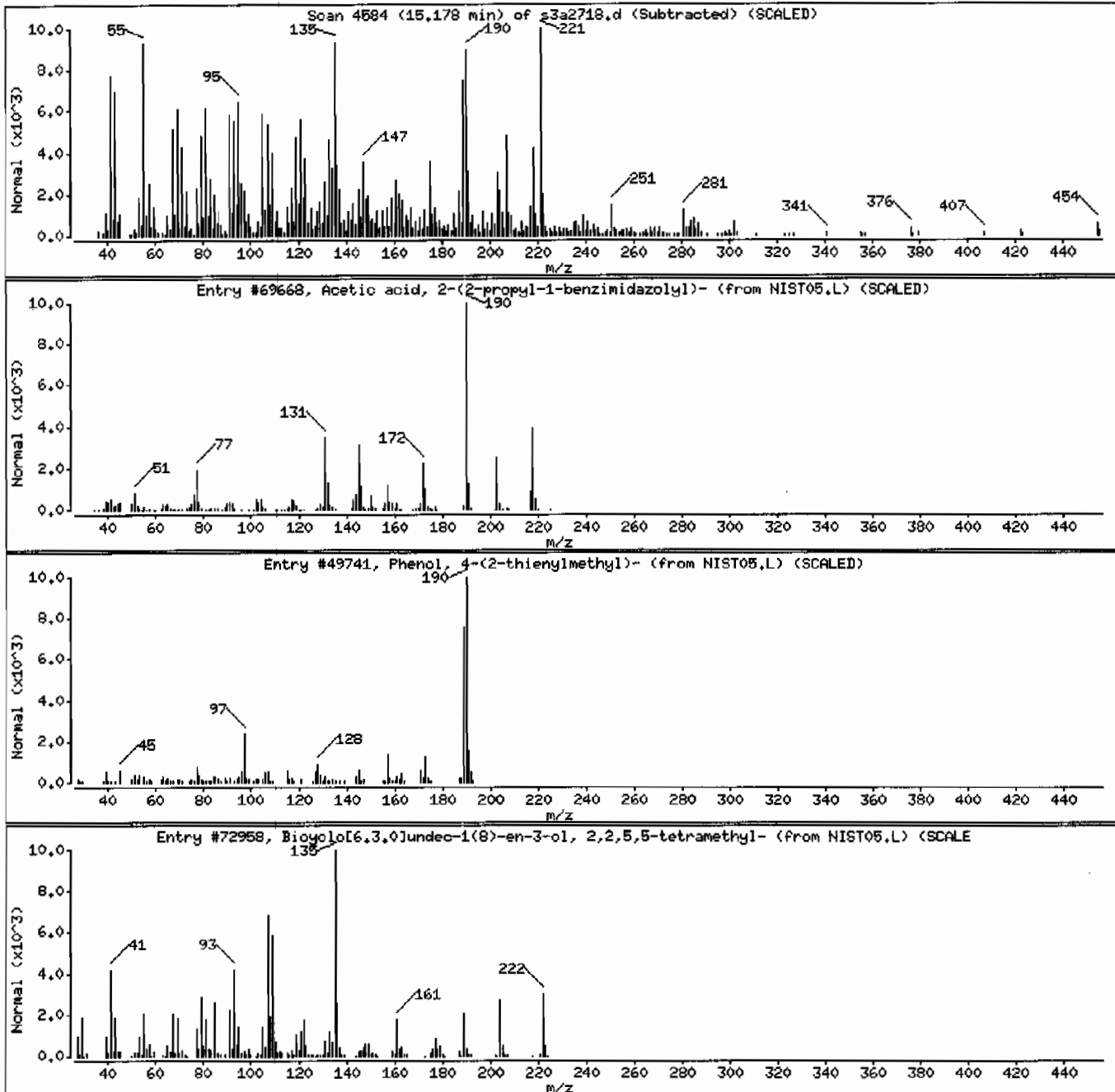
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match               | CAS Number   | Library  | Entry | Quality | Formula    | Weight |
|---|--------------|----------|-------|---------|------------|--------|
| Unknown                                     |              |          |       |         |            |        |
| Acetic acid, 2-(2-propyl-1-benzimidazolyl)- | 331736-92-6  | NIST05.L | 69668 | 46      | C12H14N2O2 | 218    |
| Phenol, 4-(2-thienylmethyl)-                | 91680-55-6   | NIST05.L | 49741 | 35      | C11H10OS   | 190    |
| Bicyclo[6.3.0]undec-1(8)-en-3-ol, 2,2,5,    | 1000164-02-6 | NIST05.L | 72958 | 35      | C15H26O    | 222    |



Date : 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: MSD3.i

Sample Info: 1245114004194487411|SVMF11|LANL

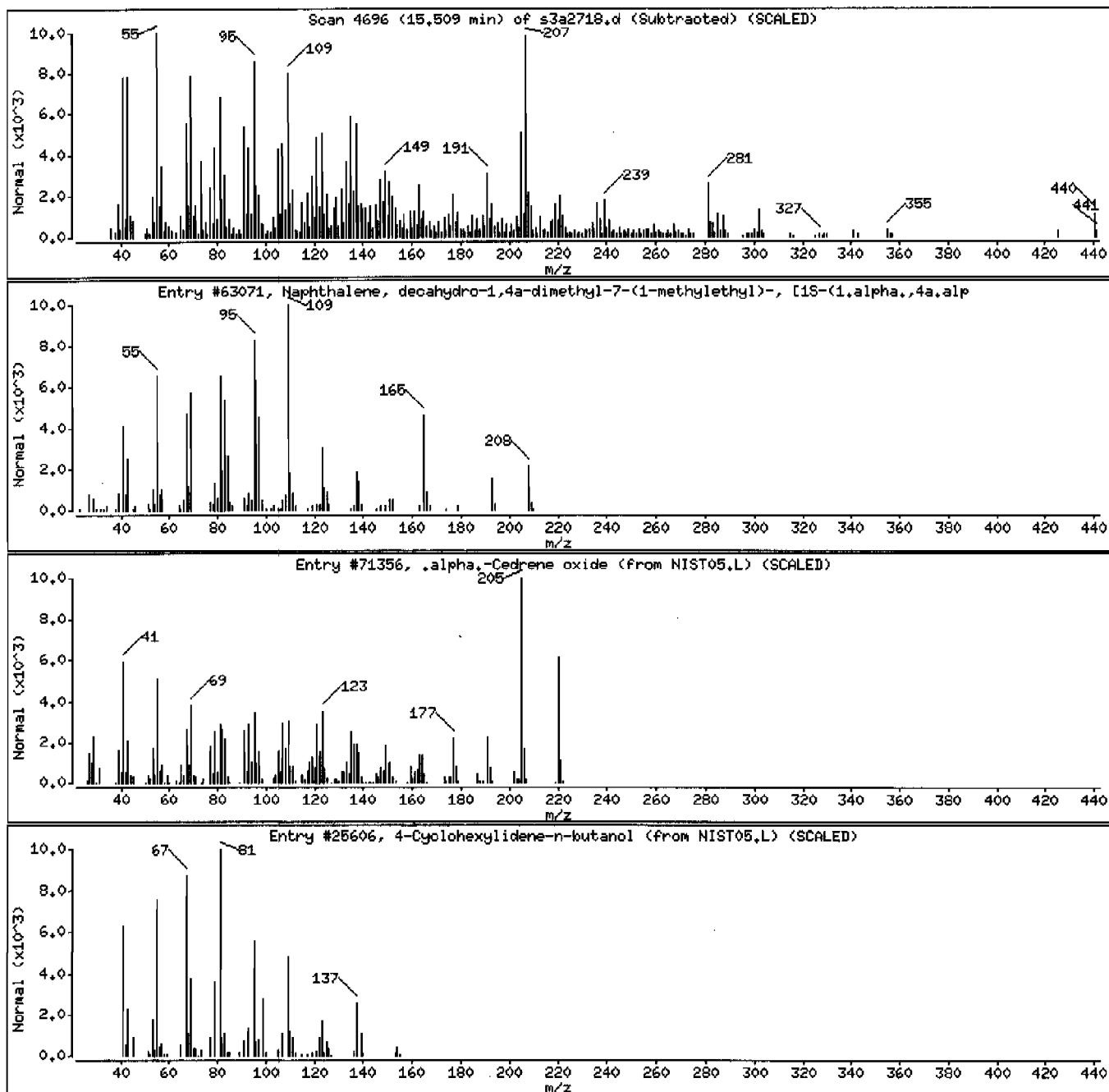
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula | Weight |
|--|--------------|----------|-------|---------|---------|--------|
| Unknown                                  |              |          |       |         |         |        |
| Naphthalene, decahydro-1,4a-dimethyl-7-( | 30824-81-8   | NIST05.L | 63071 | 41      | C15H28  | 208    |
| .alpha.-Cedrene oxide                    | 1000159-39-1 | NIST05.L | 71356 | 38      | C15H24O | 220    |
| 4-Cyclohexylidene-n-butanol              | 4441-68-1    | NIST05.L | 25606 | 38      | C10H18O | 154    |





Date : 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: MSD3.i

Sample Info: 12451140041944874111SVHF111LANL

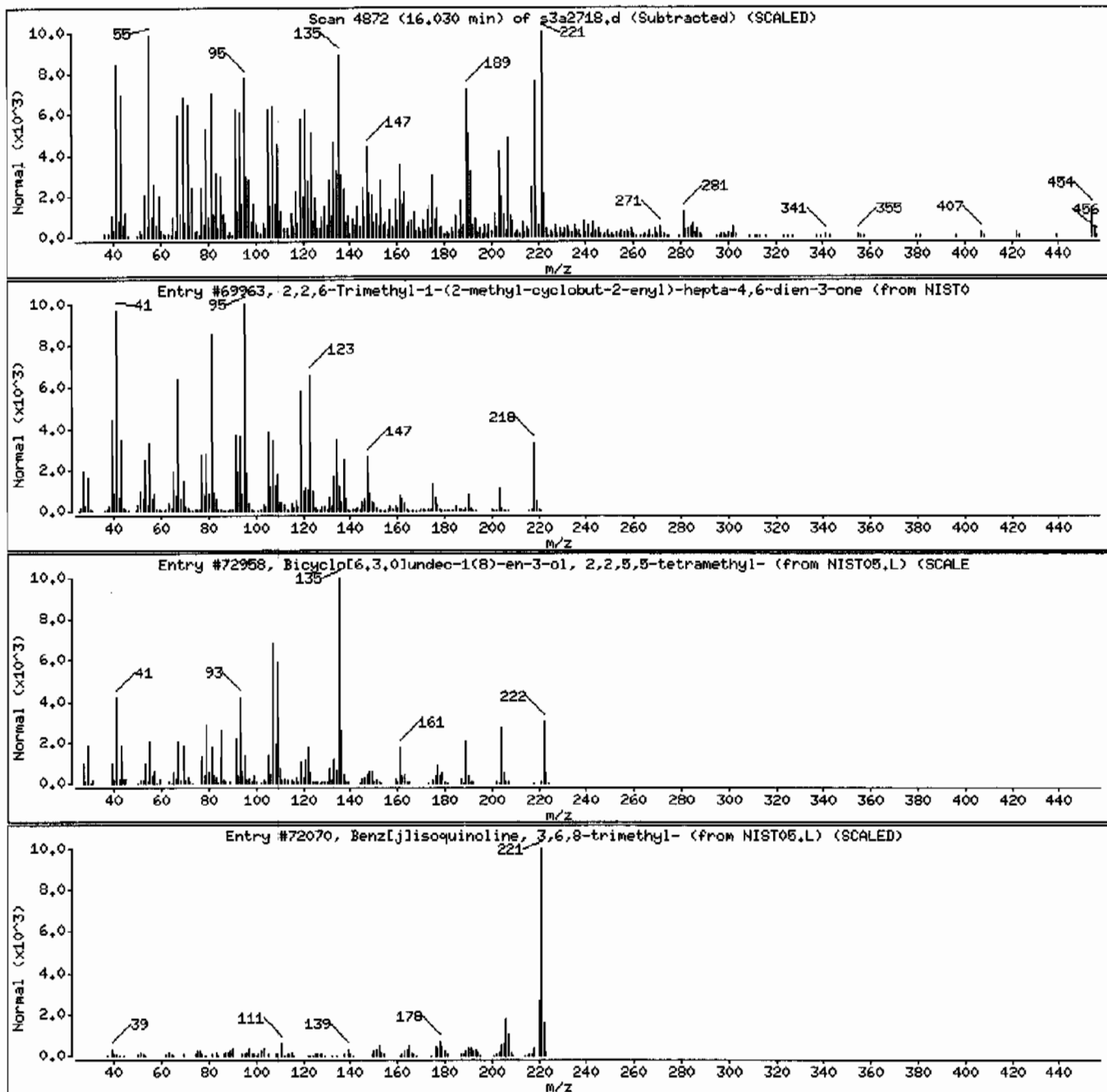
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match              | CAS Number   | Library  | Entry | Quality | Formula | Weight |
|--|--------------|----------|-------|---------|---------|--------|
| Unknown                                    |              |          |       |         |         |        |
| 2,2,6-Trimethyl-1-(2-methyl-cyclobut-2-yl) | 1000188-72-8 | NIST05.L | 69963 | 76      | C15H22O | 218    |
| Bicyclo[6.3.0]undec-1(8)-en-3-ol, 2,2,5,   | 1000164-02-6 | NIST05.L | 72958 | 25      | C15H26O | 222    |
| Benz[1]isoquinoline, 3,6,8-trimethyl-      | 61171-16-2   | NIST05.L | 72070 | 25      | C16H18N | 221    |



Date : 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: MSD3.i

Sample Info: 1245114004|94487411|SVMF11|LANL

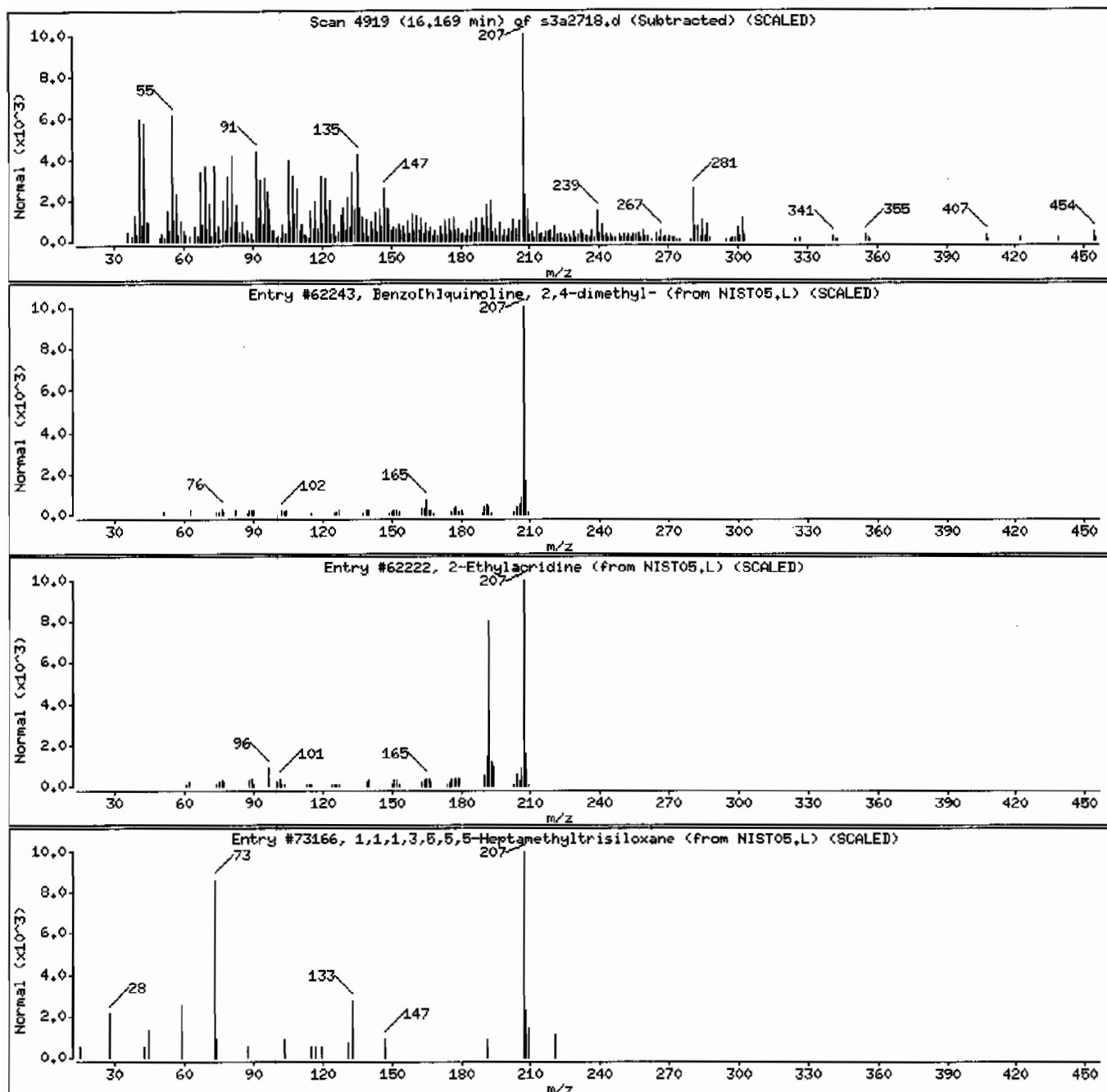
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match        | CAS Number | Library  | Entry | Quality | Formula  | Weight |
|--------------------------------------|------------|----------|-------|---------|----------|--------|
| Unknown                              |            |          |       |         |          |        |
| Benzo[h]quinoline, 2,4-dimethyl-     | 605-67-4   | NIST05.L | 62243 | 42      | C15H13N  | 207    |
| 2-Ethylacridine                      | 55751-83-2 | NIST05.L | 62222 | 38      | C15H13N  | 207    |
| 1,1,1,3,5,5,5-Heptamethyltrisiloxane | 1873-88-7  | NIST05.L | 73166 | 38      | C7H20Si3 | 222    |



Date : 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: MSD3.i

Sample Info: 1245114004194487411SVMF11ILANL

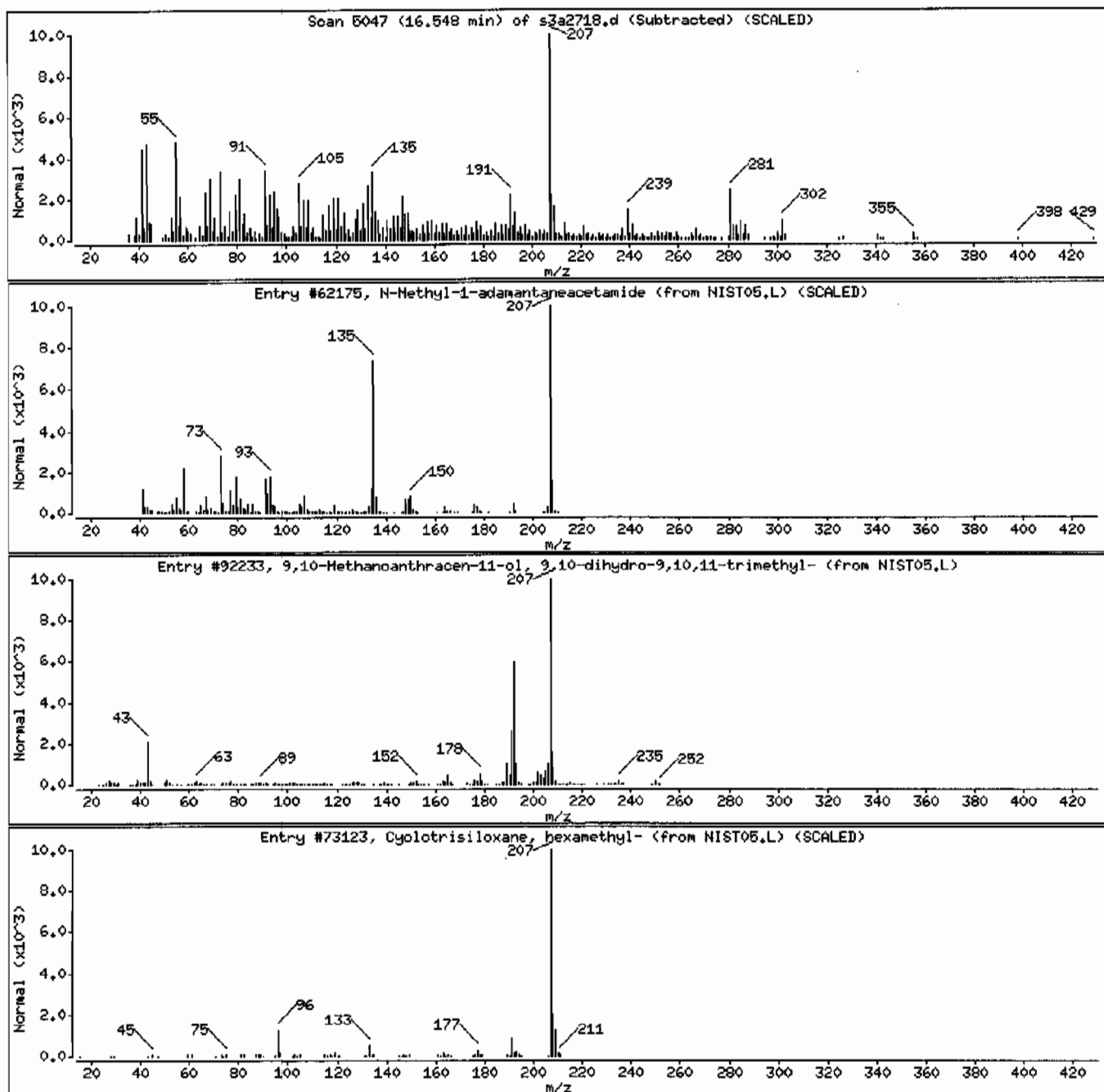
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5HS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number  | Library  | Entry | Quality | Formula   | Weight |
|--|-------------|----------|-------|---------|---|--------|
| Unknown                                  |             |          |       |         |   |        |
| N-Methyl-1-Adamantaneacetamide           | 31897-93-5  | NIST05.L | 62175 | 55      | C <sub>13</sub> H <sub>21</sub> NO              | 207    |
| 9,10-Methanoanthracen-11-ol, 9,10-dihydr | 126615-74-5 | NIST05.L | 92233 | 42      | C <sub>18</sub> H <sub>18</sub> O               | 250    |
| Cyclotrisiloxane, hexamethyl-            | 541-05-9    | NIST05.L | 73123 | 38      | C <sub>6</sub> H <sub>18</sub> OSi <sub>3</sub> | 222    |



Date : 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: HSD3.i

Sample Info: 12451140041944874111SVHF111LANL

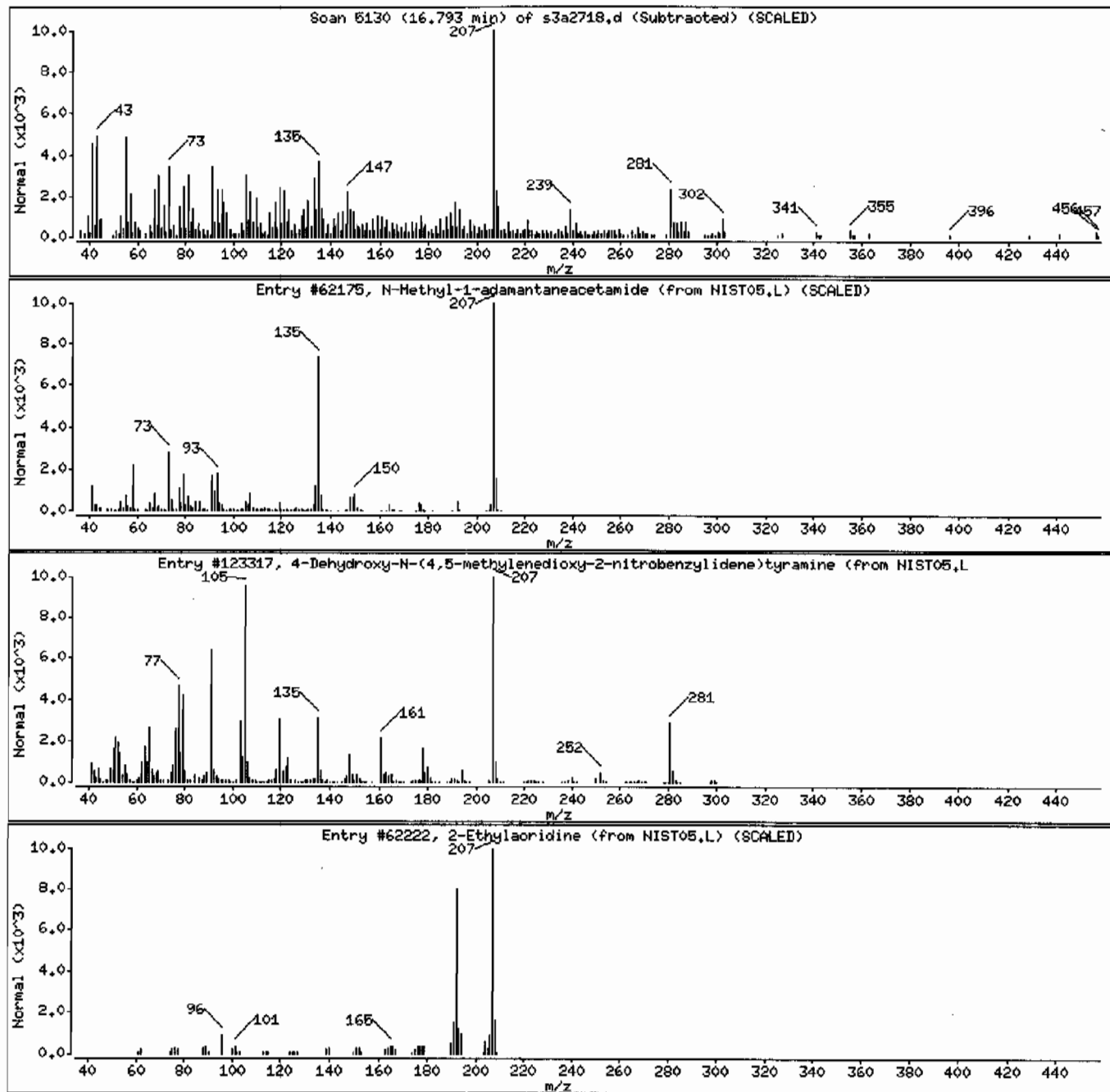
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula    | Weight |
|--|--------------|----------|--------|---------|------------|--------|
| Unknown                                  |              |          |        |         |            |        |
| N-Methyl-1-adamantaneacetamide           | 31897-93-5   | NIST05.L | 62175  | 55      | C13H21NO   | 207    |
| 4-Dehydroxy-N-(4,5-methylenedioxy-2-nitr | 1000111-66-9 | NIST05.L | 123317 | 46      | C16H14N2O4 | 298    |
| 2-Ethylacridine                          | 66751-83-2   | NIST05.L | 62222  | 38      | C15H13N    | 207    |



Date : 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: MSD3.i

Sample Info: 1245114004194487411SVHF111LANL

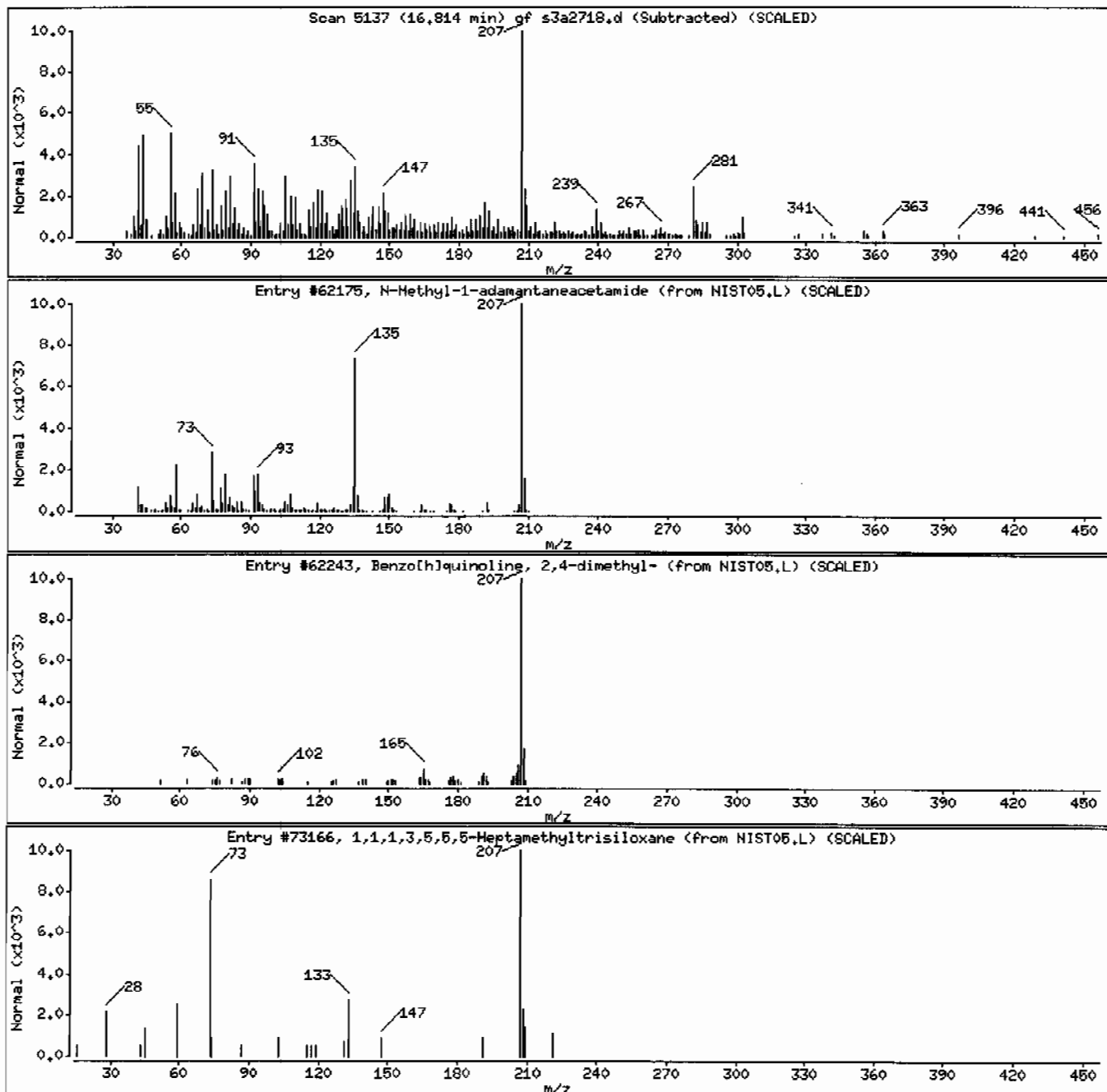
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match        | CAS Number | Library  | Entry | Quality | Formula   | Weight |
|--------------------------------------|------------|----------|-------|---------|-----------|--------|
| Unknown                              |            |          |       |         |           |        |
| N-Methyl-1-adamantaneacetamide       | 31897-93-5 | NIST05.L | 62175 | 55      | C13H21NO  | 207    |
| Benzo[h]quinoline, 2,4-dimethyl-     | 605-67-4   | NIST05.L | 62243 | 38      | C15H13N   | 207    |
| 1,1,1,3,5,5,5-Heptamethyltrisiloxane | 1873-88-7  | NIST05.L | 73166 | 38      | C7H202Si3 | 222    |



Date : 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: MSD3.1

Sample Info: 1245114004194487411SVHF11ILANL

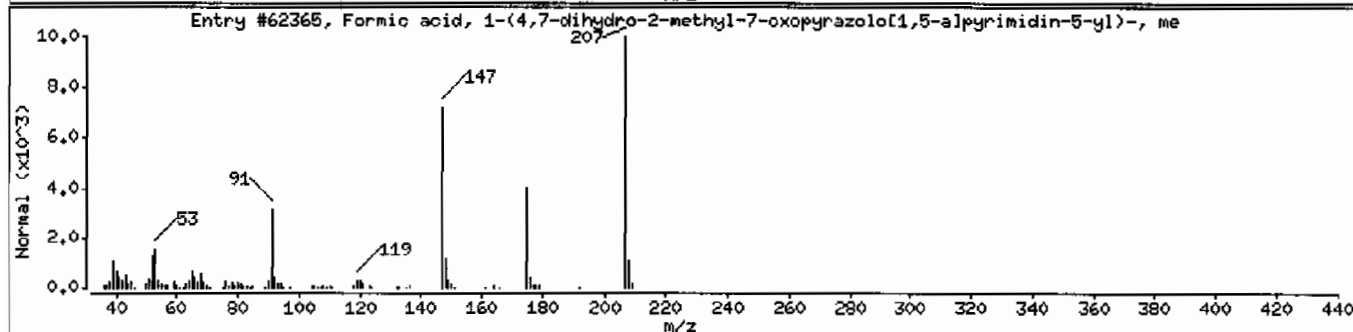
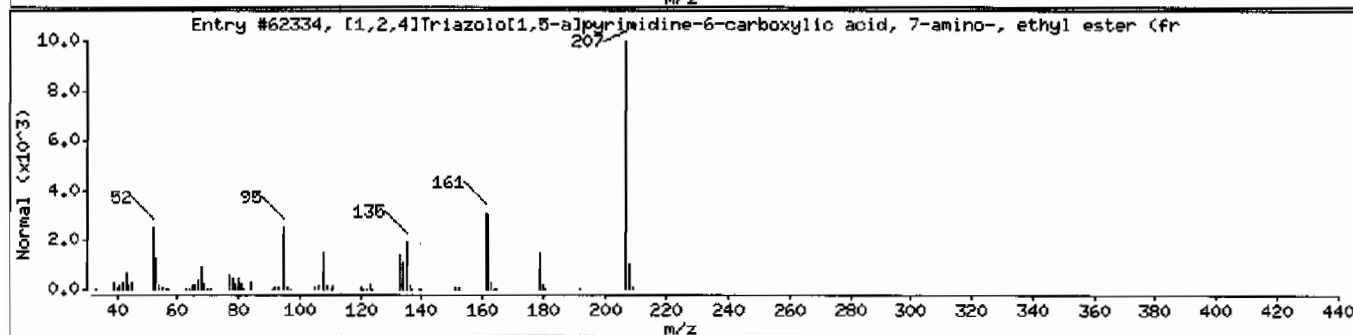
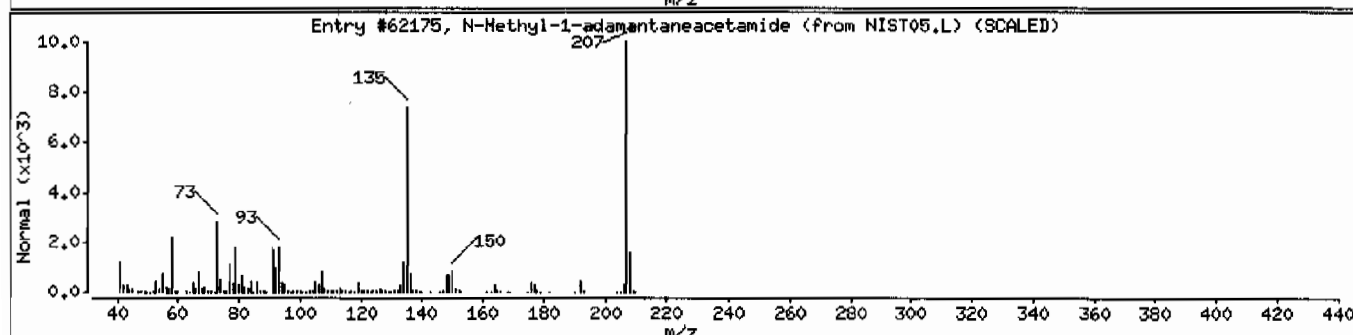
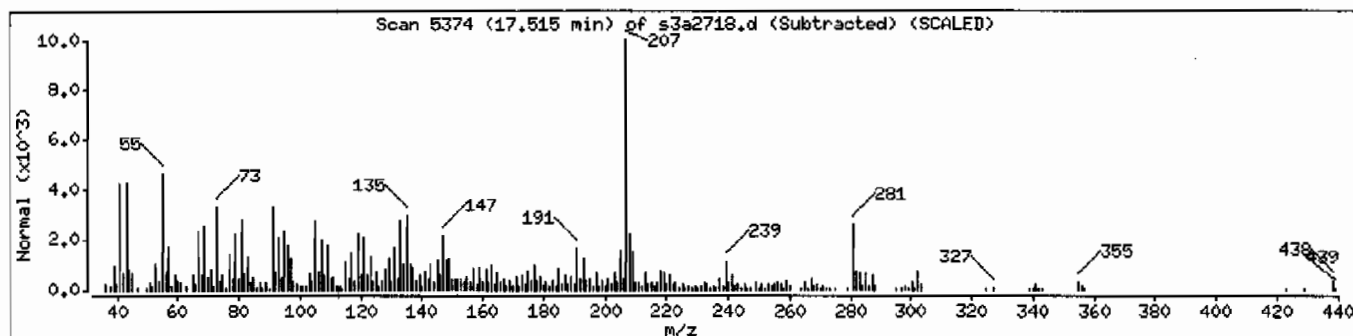
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula  | Weight |
|--|--------------|----------|-------|---------|----------|--------|
| Unknown                                  |              |          |       |         |          |        |
| N-Methyl-1-adamantaneacetamide           | 31897-93-5   | NIST05.L | 62175 | 38      | C13H21NO | 207    |
| [1,2,4]Triazolo[1,5-a]pyrimidine-6-carbo | 1000316-75-8 | NIST05.L | 62334 | 38      | C8H9N5O2 | 207    |
| Formic acid, 1-(4,7-dihydro-2-methyl-7-o | 1000267-28-6 | NIST05.L | 62365 | 35      | C9H9N3O3 | 207    |



Date : 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: MSD3.i

Sample Info: 1245114004194487411SVHF11ILANL

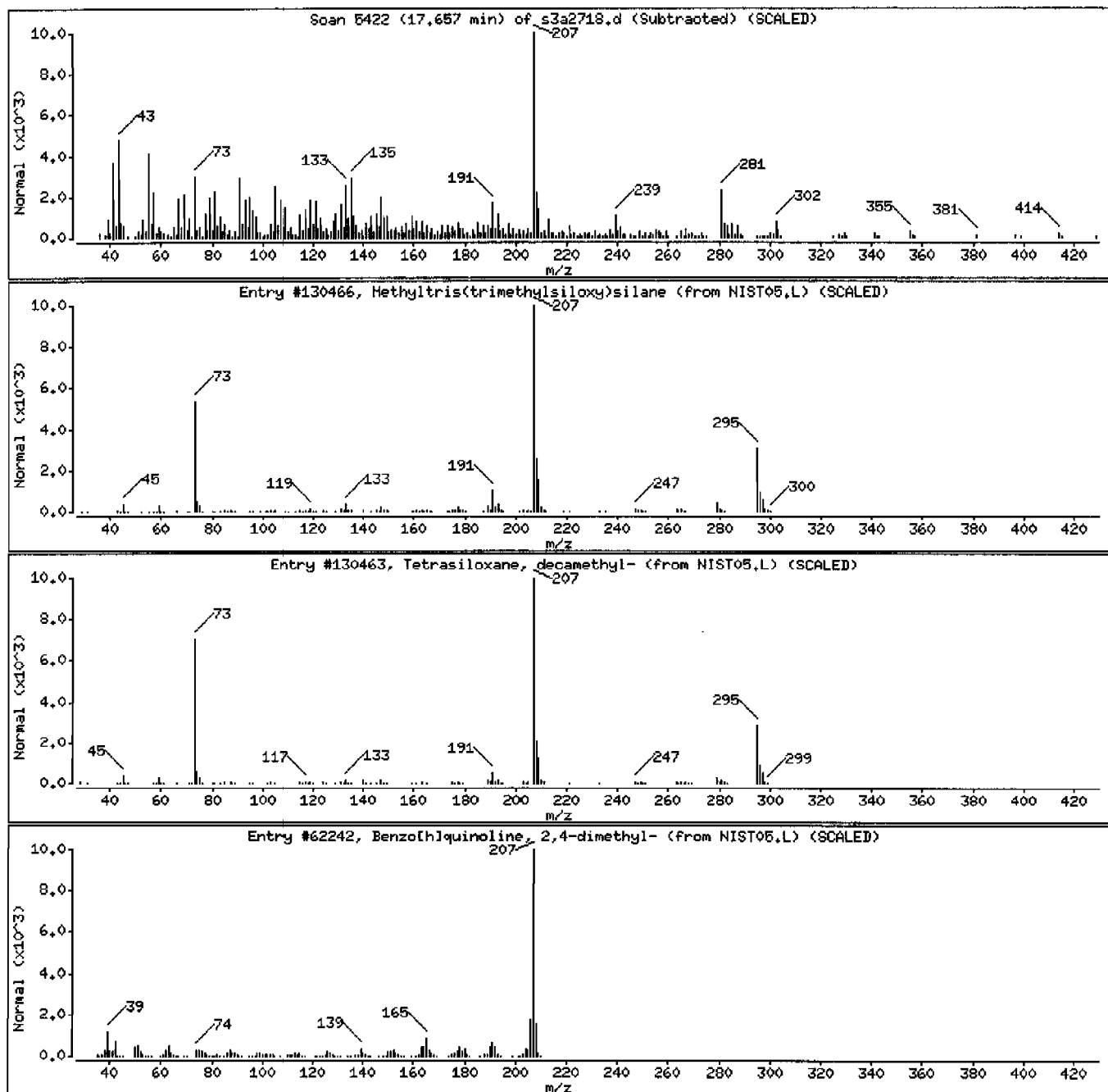
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match     | CAS Number | Library  | Entry  | Quality | Formula     | Weight |
|-----------------------------------|------------|----------|--------|---------|-------------|--------|
| Unknown                           |            |          |        |         |             |        |
| Methyltris(trimethylsiloxy)silane | 17928-28-8 | NIST05.L | 130466 | 43      | C10H30O3Si4 | 310    |
| Tetrasiloxane, decamethyl-        | 141-62-8   | NIST05.L | 130463 | 43      | C10H30O3Si4 | 310    |
| Benzo[h]quinoline, 2,4-dimethyl-  | 605-67-4   | NIST05.L | 62242  | 41      | C15H13N     | 207    |



Date : 27-JAN-2010 16:18

Client ID: RE15-10-8412

Instrument: MSD3.i

Sample Info: I245114004194487411|SVHF11|LANL

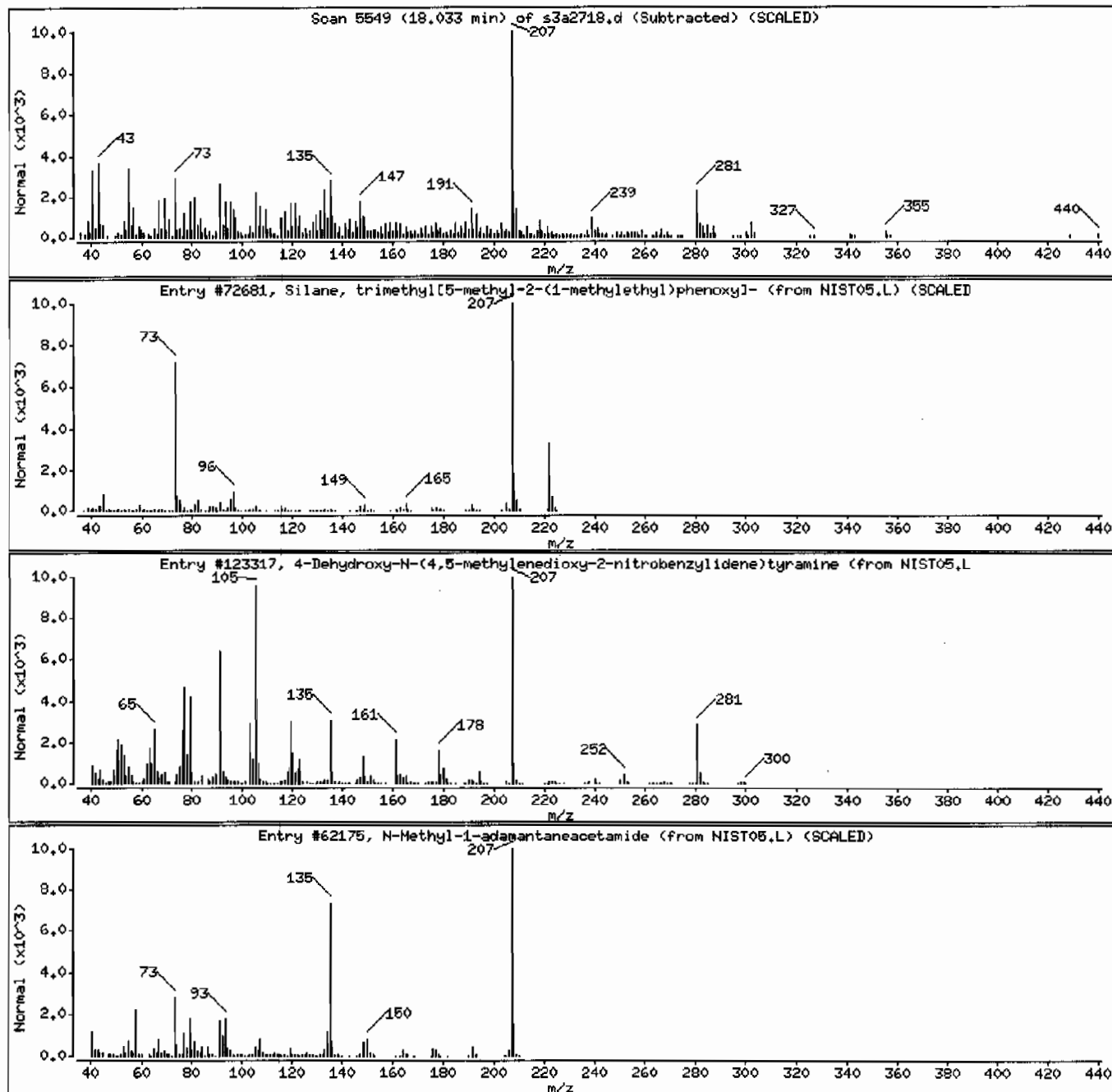
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula    | Weight |
|--|--------------|----------|--------|---------|------------|--------|
| Unknown                                  |              |          |        |         |            |        |
| Silane, trimethyl[5-methyl-2-(1-methylet | 55012-80-1   | NIST05.L | 72681  | 60      | C13H22OSi  | 222    |
| 4-Dehydroxy-N-(4,5-methylenedioxy-2-nitr | 1000111-66-9 | NIST05.L | 123317 | 58      | C16H14N2O4 | 298    |
| N-Methyl-1-adamantaneacetamide           | 31897-93-5   | NIST05.L | 62175  | 49      | C13H21NO   | 207    |





Semi-Volatile  
Certificate of Analysis  
Sample Summary

Page 1 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114006

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.04 g  
Column: J&W DB-5MS

Matrix: R  
% Moisture: 10.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8413  
Batch ID: 944874  
Run Date: 01/29/2010 00:54  
Prep Date: 01/25/2010 21:06  
Data File: s3a2835.d

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 372    | ug/kg | 74.5    | 372     |
| 108-95-2   | Phenol                        | U         | 372    | ug/kg | 74.5    | 372     |
| 95-57-8    | 2-Chlorophenol                | U         | 372    | ug/kg | 74.5    | 372     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 372    | ug/kg | 74.5    | 372     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 372    | ug/kg | 74.5    | 372     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 372    | ug/kg | 74.5    | 372     |
| 83-32-9    | Acenaphthene                  | U         | 37.2   | ug/kg | 12.3    | 37.2    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 372    | ug/kg | 37.2    | 372     |
| 100-02-7   | 4-Nitrophenol                 | U         | 372    | ug/kg | 123     | 372     |
| 87-86-5    | Pentachlorophenol             | U         | 372    | ug/kg | 93.1    | 372     |
| 129-00-0   | Pyrene                        | J         | 22.2   | ug/kg | 11.2    | 37.2    |
| 110-86-1   | Pyridine                      | U         | 372    | ug/kg | 74.5    | 372     |
| 62-53-3    | Aniline                       | U         | 372    | ug/kg | 112     | 372     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 372    | ug/kg | 74.5    | 372     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 372    | ug/kg | 74.5    | 372     |
| 100-51-6   | Benzyl alcohol                | U         | 372    | ug/kg | 112     | 372     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 372    | ug/kg | 74.5    | 372     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 372    | ug/kg | 74.5    | 372     |
| 95-48-7    | o-Cresol                      | U         | 372    | ug/kg | 74.5    | 372     |
| 65794-96-9 | m,p-Cresols                   | U         | 372    | ug/kg | 112     | 372     |
| 67-72-1    | Hexachloroethane              | U         | 372    | ug/kg | 74.5    | 372     |
| 98-95-3    | Nitrobenzene                  | U         | 372    | ug/kg | 74.5    | 372     |
| 78-59-1    | Isophorone                    | U         | 372    | ug/kg | 74.5    | 372     |
| 88-75-5    | 2-Nitrophenol                 | U         | 372    | ug/kg | 74.5    | 372     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 372    | ug/kg | 130     | 372     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 372    | ug/kg | 74.5    | 372     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 372    | ug/kg | 74.5    | 372     |
| 65-85-0    | Benzoic acid                  | U         | 745    | ug/kg | 186     | 745     |
| 91-20-3    | Naphthalene                   | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 106-47-8   | 4-Chloroaniline               | U         | 372    | ug/kg | 74.5    | 372     |
| 87-68-3    | Hexachlorobutadiene           | U         | 372    | ug/kg | 74.5    | 372     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 37.2   | ug/kg | 7.45    | 37.2    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 372    | ug/kg | 74.5    | 372     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 372    | ug/kg | 74.5    | 372     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 372    | ug/kg | 74.5    | 372     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 37.2   | ug/kg | 12.3    | 37.2    |
| 88-74-4    | 2-Nitroaniline                | U         | 372    | ug/kg | 74.5    | 372     |
| 99-09-2    | o-Nitroaniline                | U         | 372    | ug/kg | 74.5    | 372     |
|            | 3-Nitroaniline                |           |        |       |         |         |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114006

Client ID: RE15-10-8413  
Batch ID: 944874  
Run Date: 01/29/2010 00:54  
Prep Date: 01/25/2010 21:06  
Data File: s3a2835.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.04 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|------------------------------|-----------|--------|-------|---------|---------|
|           | <i>m</i> -Nitroaniline       |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate            | U         | 372    | ug/kg | 74.5    | 372     |
| 606-20-2  | 2,6-Dinitrotoluene           | U         | 372    | ug/kg | 37.2    | 372     |
| 208-96-8  | Acenaphthylene               | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 51-28-5   | 2,4-Dinitrophenol            | U         | 745    | ug/kg | 142     | 745     |
| 132-64-9  | Dibenzofuran                 | U         | 372    | ug/kg | 74.5    | 372     |
| 84-66-2   | Diethylphthalate             | U         | 372    | ug/kg | 74.5    | 372     |
| 86-73-7   | Fluorene                     | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 7005-72-3 | 4-Chlorophenylphenylether    | U         | 372    | ug/kg | 74.5    | 372     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol   | U         | 372    | ug/kg | 74.5    | 372     |
| 100-01-6  | 4-Nitroaniline               | U         | 372    | ug/kg | 112     | 372     |
|           | <i>p</i> -Nitroaniline       |           |        |       |         |         |
| 122-39-4  | Diphenylamine                | U         | 372    | ug/kg | 74.5    | 372     |
| 122-66-7  | Azobenzene                   | U         | 372    | ug/kg | 74.5    | 372     |
|           | <i>1,2-Diphenylhydrazine</i> |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether     | U         | 372    | ug/kg | 74.5    | 372     |
| 118-74-1  | Hexachlorobenzene            | U         | 372    | ug/kg | 74.5    | 372     |
| 85-01-8   | Phenanthrene                 | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 120-12-7  | Anthracene                   | U         | 37.2   | ug/kg | 7.45    | 37.2    |
| 84-74-2   | Di-n-butylphthalate          | J         | 353    | ug/kg | 74.5    | 372     |
| 206-44-0  | Fluoranthene                 | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 85-68-7   | Butylbenzylphthalate         | U         | 372    | ug/kg | 74.5    | 372     |
| 56-55-3   | Benzo(a)anthracene           | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 91-94-1   | 3,3'-Dichlorobenzidine       | U         | 372    | ug/kg | 112     | 372     |
| 218-01-9  | Chrysene                     | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate   | U         | 372    | ug/kg | 74.5    | 372     |
| 117-84-0  | Di-n-octylphthalate          | U         | 372    | ug/kg | 74.5    | 372     |
| 205-99-2  | Benzo(b)fluoranthene         | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 207-08-9  | Benzo(k)fluoranthene         | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 50-32-8   | Benzo(a)pyrene               | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene       | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 53-70-3   | Dibenzo(a,h)anthracene       | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 191-24-2  | Benzo(ghi)perylene           | U         | 37.2   | ug/kg | 11.2    | 37.2    |
| 120-82-1  | 1,2,4-Trichlorobenzene       | U         | 372    | ug/kg | 74.5    | 372     |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.07 | 5380      | ug/kg |     | J    |
|         | Unknown Aldol Condensate              | 3.32 | 198       | ug/kg |     | JA   |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114006    | Date Received: 01/20/2010 08:45  | % Moisture: 10.6     |
| Client ID: RE15-10-8413     | Client: LANL010                  | Project: LANL01004   |
| Batch ID: 944874            | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Run Date: 01/29/2010 00:54  | Inst: MSD3.I                     | Dilution: 1          |
| Prep Date: 01/25/2010 21:06 | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Data File: s3a2835.d        | Aliquot: 30.04 g                 | Final Volume: 1 mL   |
|                             | Column: J&W DB-5MS               | Level: LOW           |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |  |       | Estimated |       |     |      |
|---|--|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC)    | RT    |           | Units | Fit | Qual |
| 7785-70-8                               | 1R-.alpha.-Pinene                        | 4.1   | 1520      | ug/kg | 97  | NJ   |
| 498-15-7                                | Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy | 4.67  | 901       | ug/kg | 97  | NJ   |
| 138-86-3                                | Limonene                                 | 4.81  | 194       | ug/kg | 95  | NJ   |
|   | Unknown                                  | 10.87 | 234       | ug/kg |     | J    |
|   | Unknown                                  | 11.42 | 307       | ug/kg |     | J    |
|   | Unknown                                  | 11.65 | 683       | ug/kg |     | J    |
| 1235-74-1                               | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.76 | 560       | ug/kg | 99  | NJ   |
|   | Unknown                                  | 11.86 | 158       | ug/kg |     | J    |
|   | Unknown                                  | 11.91 | 163       | ug/kg |     | J    |
| 127-25-3                                | Methyl abietate                          | 11.99 | 753       | ug/kg | 98  | NJ   |
|   | Unknown                                  | 12.1  | 287       | ug/kg |     | J    |
|   | Unknown                                  | 12.13 | 245       | ug/kg |     | J    |
|   | Unknown                                  | 12.17 | 243       | ug/kg |     | J    |
|   | Unknown                                  | 12.22 | 430       | ug/kg |     | J    |
|   | Unknown                                  | 12.33 | 403       | ug/kg |     | J    |
|   | Unknown                                  | 12.38 | 170       | ug/kg |     | J    |
|   | Unknown                                  | 12.41 | 249       | ug/kg |     | J    |
|   | Unknown                                  | 12.59 | 150       | ug/kg |     | J    |
| 309735-29-3                             | 1,2-Benzisothiazole, 3-(hexahydro-1H-aze | 12.69 | 341       | ug/kg | 90  | NJ   |
|   | Unknown                                  | 12.84 | 221       | ug/kg |     | J    |

Report Date: 29-Jan-2010 11:35

## GEL Laboratories LLC

Data file : /chem/MSD3.i/s012810a.b/s3a2835.d  
 Lab Smp Id: 245114006 Client Smp ID: RE15-10-8413  
 Inj Date : 29-JAN-2010 00:54  
 Operator : JLD1 Inst ID: MSD3.i  
 Smp Info : |245114006|944874|1|SVMF|1|LANL  
 Misc Info : |MSD8270\_S|WBN100107-02|  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m  
 Meth Date : 29-Jan-2010 10:49 jen00986 Quant Type: ISTD  
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
 Als bottle: 10  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1324.sub  
 Target Version: 3.50  
 Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.04000  | weight of sample          |
| M    | 10.61900  | % moisture                |

Cpnd Variable Local Compound Variable

| Compounds                   | QUANT SIG | MASS | RT     | EXP RT | REL RT  | RESPONSE | CONCENTRATIONS |         |
|-----------------------------|-----------|------|--------|--------|---------|----------|----------------|---------|
|                             |           |      |        |        |         |          | ON-COLUMN      | FINAL   |
|                             |           |      |        |        |         |          | (ng/ul)        | (ug/Kg) |
| * 10 1,4-Dichlorobenzene-d4 |           | 152  | 4.721  | 4.722  | (1.000) | 524170   | 40.0000        |         |
| * 29 Naphthalene-d8         |           | 136  | 5.996  | 6.003  | (1.000) | 2007803  | 40.0000        |         |
| * 46 Acenaphthene-d10       |           | 164  | 7.868  | 7.875  | (1.000) | 1107403  | 40.0000        |         |
| * 67 Phenanthrene-d10       |           | 188  | 9.483  | 9.486  | (1.000) | 1664985  | 40.0000        |         |
| * 91 Chrysene-d12           |           | 240  | 12.476 | 12.478 | (1.000) | 763540   | 40.0000        |         |
| * 98 Perylene-d12           |           | 264  | 14.758 | 14.762 | (1.000) | 342601   | 40.0000        |         |
| \$ 3 2-Fluorophenol         |           | 112  | 3.559  | 3.549  | (0.754) | 854800   | 62.6706        | 2330    |
| \$ 5 Phenol-d5              |           | 99   | 4.328  | 4.331  | (0.917) | 991030   | 57.8129        | 2150    |
| \$ 20 Nitrobenzene-d5       |           | 82   | 5.256  | 5.262  | (0.877) | 468893   | 31.6149        | 1180    |
| \$ 39 2-Fluorobiphenyl      |           | 172  | 7.124  | 7.128  | (0.905) | 934746   | 32.6560        | 1220    |
| \$ 60 2,4,6-Tribromophenol  |           | 329  | 8.718  | 8.724  | (1.108) | 164912   | 51.9470        | 1930    |
| \$ 81 p-Terphenyl-d14       |           | 244  | 11.196 | 11.196 | (0.897) | 678717   | 51.7164        | 1930    |

| Compounds              | QUANT STG |        |        |         |          | CONCENTRATIONS       |                  |
|------------------------|-----------|--------|--------|---------|----------|----------------------|------------------|
|                        | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/Kg) |
| =====                  | =====     | ==     | =====  | =====   | =====    | =====                | =====            |
| 79 Pyrene              | 202       | 11.048 | 11.052 | (0.886) | 13037    | 0.59602              | 22.2(a)          |
| 72 Di-n-butylphthalate | 149       | 10.075 | 10.080 | (1.062) | 418860   | 9.47896              | 353(a)           |

#### QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).

## ION RATIO REPORT

## SV REPORT

Data file: s3a2835.d

Report Date: 01/29/2010 11:13

Lab. ID: 245114006

SampleType: SAMPLE

Injection Date: 29-JAN-2010 00:54

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245114006|944874|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1324

Sample Matrix: SOIL

| MASS                      | RESPONSE | RT             | EXPECT RT | TARGET RANGE | RATIO | QUAL |
|---------------------------|----------|----------------|-----------|--------------|-------|------|
| -----                     |          |                |           |              |       |      |
| 4 Aniline                 |          | CAS#: 62-53-3  |           |              |       |      |
| 66                        | 57303    | 4.33           | 4.41      | 80-120       | 100   | (T)  |
| 93                        | 34621    | 4.39           | 4.41      | 201-261      | 60    | (Q)  |
| -----                     |          |                |           |              |       |      |
| 6 Phenol                  |          | CAS#: 108-95-2 |           |              |       |      |
| 94                        | 91439    | 4.45           | 4.34      | 80-120       | 100   | (T)  |
| 66                        | 17510    | 4.45           | 4.34      | 17- 77       | 19    | (T)  |
| 65                        | 53587    | 4.45           | 4.34      | 5- 65        | 59    | (T)  |
| -----                     |          |                |           |              |       |      |
| 17 N-Nitrosodipropylamine |          | CAS#: 621-64-7 |           |              |       |      |
| 70                        | 74576    | 5.26           | 5.10      | 80-120       | 100   | (T)  |
| 42                        | 53101    | 5.26           | 5.10      | 45-105       | 71    | (T)  |
| -----                     |          |                |           |              |       |      |
| 40 2-Chloronaphthalene    |          | CAS#: 91-58-7  |           |              |       |      |
| 162                       | 83349    | 7.47           | 7.27      | 80-120       | 100   | (T)  |
| 164                       | 4940     | 7.47           | 7.27      | 3- 63        | 6     | (T)  |
| 127                       | 6047     | 7.47           | 7.27      | 10- 70       | 7     | (QT) |
| -----                     |          |                |           |              |       |      |
| 42 o-Nitroaniline         |          | CAS#: 88-74-4  |           |              |       |      |
| 65                        | 105508   | 7.47           | 7.37      | 80-120       | 100   | (T)  |
| 92                        | 119869   | 7.47           | 7.37      | 32- 92       | 114   | (QT) |
| 138                       | 9318     | 7.47           | 7.37      | 72-132       | 9     | (QT) |
| -----                     |          |                |           |              |       |      |
| 41 m-Nitroaniline         |          | CAS#: 99-09-2  |           |              |       |      |
| 138                       | 340      | 7.87           | 7.82      | 80-120       | 100   | ( )  |
| 92                        | 6260     | 7.87           | 7.82      | 80-140       | 1837  | (Q)  |
| 108                       | 26780    | 7.87           | 7.82      | 0- 40        | 7861  | (Q)  |
| -----                     |          |                |           |              |       |      |

| MASS                      | RESPONSE | RT    | EXPECT RT | TARGET RANGE   | RATIO | QUAL |
|---------------------------|----------|-------|-----------|----------------|-------|------|
| =====                     |          |       |           |                |       |      |
| 44 2,6-Dinitrotoluene     |          |       |           | CAS#: 606-20-2 |       |      |
| 165                       | 144464   | 7.87  | 7.63      | 80-120         | 100   | (T)  |
| 63                        | 1501     | 7.87  | 7.63      | 35- 95         | 1     | (QT) |
| -----                     |          |       |           |                |       |      |
| 50 2,4-Dinitrotoluene     |          |       |           | CAS#: 121-14-2 |       |      |
| 165                       | 144464   | 7.87  | 8.07      | 80-120         | 100   | (T)  |
| 89                        | 2750     | 7.87  | 8.07      | 43-103         | 2     | (QT) |
| 63                        | 1501     | 7.87  | 8.07      | 23- 83         | 1     | (QT) |
| -----                     |          |       |           |                |       |      |
| 56 p-Nitroaniline         |          |       |           | CAS#: 100-01-6 |       |      |
| 138                       | 258      | 8.50  | 8.48      | 80-120         | 100   | ( )  |
| 108                       | 1296     | 8.45  | 8.48      | 42-102         | 501   | (Q)  |
| 92                        | 176      | 8.47  | 8.48      | 17- 77         | 68    | ( )  |
| -----                     |          |       |           |                |       |      |
| 72 Di-n-butylphthalate    |          |       |           | CAS#: 84-74-2  |       |      |
| 149                       | 418860   | 10.08 | 10.08     | 80-120         | 100   | ( )  |
| 150                       | 38163    | 10.08 | 10.08     | 0- 39          | 9     | ( )  |
| 104                       | 23521    | 10.08 | 10.08     | 0- 35          | 6     | ( )  |
| -----                     |          |       |           |                |       |      |
| 76 Fluoranthene           |          |       |           | CAS#: 206-44-0 |       |      |
| 202                       | 13037    | 11.05 | 10.80     | 80-120         | 100   | (T)  |
| 203                       | 2914     | 11.05 | 10.80     | 0- 47          | 22    | (T)  |
| 101                       | 2121     | 11.05 | 10.80     | 0- 44          | 16    | (T)  |
| -----                     |          |       |           |                |       |      |
| 79 Pyrene                 |          |       |           | CAS#: 129-00-0 |       |      |
| 202                       | 13037    | 11.05 | 11.05     | 80-120         | 100   | ( )  |
| 200                       | 2553     | 11.05 | 11.05     | 0- 51          | 20    | ( )  |
| 101                       | 2091     | 11.05 | 11.05     | 0- 47          | 16    | ( )  |
| -----                     |          |       |           |                |       |      |
| 90 3,3'-Dichlorobenzidine |          |       |           | CAS#: 91-94-1  |       |      |
| 252                       | 250      | 12.62 | 12.41     | 80-120         | 100   | (T)  |
| 254                       | 174      | 12.63 | 12.41     | 33- 93         | 70    | (T)  |
| 126                       | 161      | 12.64 | 12.41     | 0- 46          | 64    | (QT) |
| -----                     |          |       |           |                |       |      |
| 92 Chrysene               |          |       |           | CAS#: 218-01-9 |       |      |
| 228                       | 5167     | 12.47 | 12.51     | 80-120         | 100   | ( )  |
| 229                       | 1201     | 12.48 | 12.51     | 0- 50          | 23    | ( )  |
| 226                       | 852      | 12.46 | 12.51     | 0- 59          | 16    | ( )  |

Q qualifier indicates ion failed ratio requirement

Report Date: 29-Jan-2010 11:35

## GEL Laboratories LLC

Data file : /chem/MSD3.i/s012810a.b/s3a2835.d  
Lab Smp Id: 245114006 Client Smp ID: RE15-10-8413  
Inj Date : 29-JAN-2010 00:54  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |245114006|944874|1|SVMF|1|LANL  
Misc Info : |MSD8270 S|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m  
Meth Date : 29-Jan-2010 10:49 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 10  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1324.sub  
Target Version: 3.50  
Processing Host: hpclp1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$ 

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.04000  | weight of sample          |
| M    | 10.61900  | % moisture                |

Cpnd Variable

Local Compound Variable

| ISTD                        | RT     | AREA    | AMOUNT |
|-----------------------------|--------|---------|--------|
| =====                       | =====  | =====   | =====  |
| * 10 1,4-Dichlorobenzene-d4 | 4.721  | 3382157 | 40.000 |
| * 67 Phenanthrene-d10       | 9.483  | 4316406 | 40.000 |
| * 91 Chrysene-d12           | 12.476 | 4338814 | 40.000 |

| CONCENTRATIONS |       |               |              | QUANT |         |           |        |
|----------------|-------|---------------|--------------|-------|---------|-----------|--------|
| RT             | AREA  | ON-COL(ng/ul) | FINAL(ug/Kg) | QUAL  | LIBRARY | LIB ENTRY | CPND # |
| =====          | ===== | =====         | =====        | ===== | =====   | =====     | =====  |

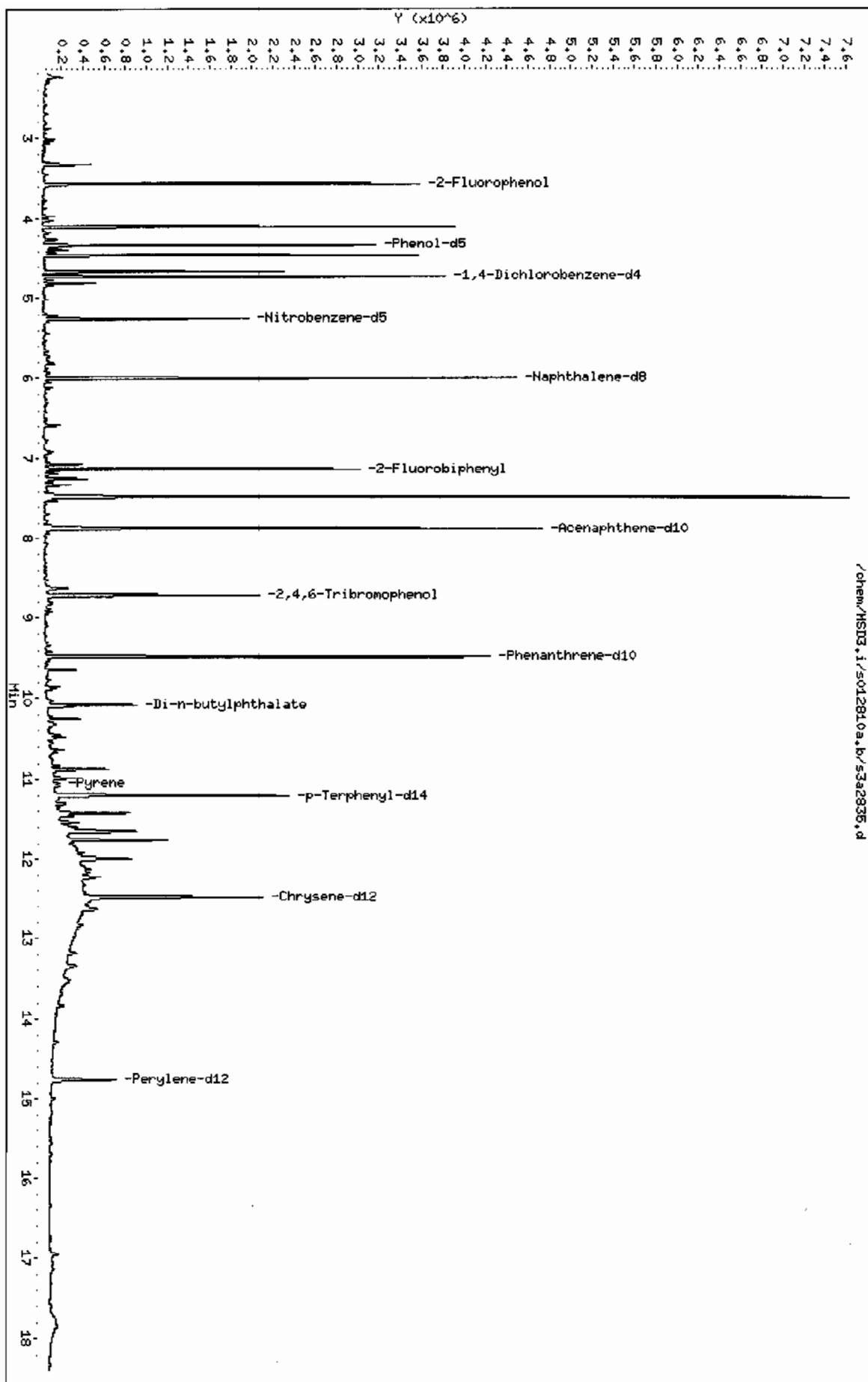


| RT                                       | CONCENTRATIONS |               |              | QUAL | QUANT            |           | CPND # |
|--|----------------|---------------|--------------|------|------------------|-----------|--------|
|  | AREA           | ON-COL(ng/ul) | FINAL(ug/Kg) |      | LIBRARY          | LIB ENTRY |        |
| Unknown                                  |                |               |              |      | CAS #:           |           |        |
| 2.074                                    | 12218727       | 144.508070    | 5380         | 0    |                  | 0         | 10     |
| Unknown Aldol Condensate                 |                |               |              |      | CAS #:           |           |        |
| 3.324                                    | 449560         | 5.31684599    | 198          | 0    |                  | 0         | 10     |
| 1R-.alpha.-Pinene                        |                |               |              |      | CAS #: 7785-70-8 |           |        |
| 4.096                                    | 3453611        | 40.8450620    | 1520         | 97   | NIST05.L         | 15188     | 10     |
| Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy |                |               |              |      | CAS #: 498-15-7  |           |        |
| 4.665                                    | 2045842        | 24.1957043    | 901          | 97   | NIST05.L         | 15369     | 10     |
| Limonene                                 |                |               |              |      | CAS #: 138-86-3  |           |        |
| 4.809                                    | 440564         | 5.21044699    | 194          | 95   | NIST05.L         | 15154     | 10     |
| Unknown                                  |                |               |              |      | CAS #:           |           |        |
| 10.871                                   | 678132         | 6.28422984    | 234          | 0    |                  | 0         | 67     |
| Unknown                                  |                |               |              |      | CAS #:           |           |        |
| 11.417                                   | 892775         | 8.23059303    | 306          | 0    |                  | 0         | 91     |
| Unknown                                  |                |               |              |      | CAS #:           |           |        |
| 11.648                                   | 1988971        | 18.3365398    | 683          | 0    |                  | 0         | 91     |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 |                |               |              |      | CAS #: 1235-74-1 |           |        |
| 11.757                                   | 1632182        | 15.0472608    | 560          | 99   | NIST05.L         | 133618    | 91     |
| Unknown                                  |                |               |              |      | CAS #:           |           |        |
| 11.861                                   | 459878         | 4.23966609    | 158          | 0    |                  | 0         | 91     |
| Unknown                                  |                |               |              |      | CAS #:           |           |        |
| 11.914                                   | 474320         | 4.37280952    | 163          | 0    |                  | 0         | 91     |
| Methyl abietate                          |                |               |              |      | CAS #: 127-25-3  |           |        |
| 11.991                                   | 2192971        | 20.2172402    | 753          | 98   | NIST05.L         | 134711    | 91     |
| Unknown                                  |                |               |              |      | CAS #:           |           |        |
| 12.103                                   | 835495         | 7.70251613    | 287          | 0    |                  | 0         | 91     |
| Unknown                                  |                |               |              |      | CAS #:           |           |        |
| 12.130                                   | 714131         | 6.58364980    | 245          | 0    |                  | 0         | 91     |
| Unknown                                  |                |               |              |      | CAS #:           |           |        |
| 12.168                                   | 708929         | 6.53569287    | 243          | 0    |                  | 0         | 91     |

| RT                                       | CONCENTRATIONS |               |              |                    | QUANT    |           |        |
|--|----------------|---------------|--------------|--------------------|----------|-----------|--------|
|  | AREA           | ON-COL(ng/ul) | FINAL(ug/Kg) | QUAL               | LIBRARY  | LFB ENTRY | CPND # |
| Unknown                                  |                |               |              | CAS #:             |          |           |        |
| 12.222                                   | 1251255        | 11.5354595    | 430          | 0                  |          | 0         | 91     |
| Unknown                                  |                |               |              | CAS #:             |          |           |        |
| 12.325                                   | 1172272        | 10.8072991    | 402          | 0                  |          | 0         | 91     |
| Unknown                                  |                |               |              | CAS #:             |          |           |        |
| 12.375                                   | 494426         | 4.55816710    | 170          | 0                  |          | 0         | 91     |
| Unknown                                  |                |               |              | CAS #:             |          |           |        |
| 12.414                                   | 725710         | 6.69039698    | 249          | 0                  |          | 0         | 91     |
| Unknown                                  |                |               |              | CAS #:             |          |           |        |
| 12.591                                   | 436807         | 4.02697223    | 150          | 0                  |          | 0         | 91     |
| 1,2-Benzisothiazole, 3-(hexahydro-1H-aze |                |               |              | CAS #: 309735-29-3 |          |           |        |
| 12.692                                   | 993318         | 9.15750655    | 341          | 90                 | NIST05.L | 101019    | 91     |
| Unknown                                  |                |               |              | CAS #:             |          |           |        |
| 12.837                                   | 642803         | 5.92606916    | 221          | 0                  |          | 0         | 91     |

Data File: /chem/HSD3.i/s012810a.b/s3a2835.d  
 Date: 29-JAN-2010 00:54  
 Client ID: RE15-10-8413  
 Sample Info: 1245114006194487411SVHF11LNL  
 Volume Injected (uL): 0.5  
 Column phase: J&W DB-5MS

Instrument: HSD3.i  
 Operator: JLD  
 Column diameter: 0.20



Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: HSD3.i

Sample Info: 1245114006194487411SVHF11/LANL

Volume Injected (uL): 0.5

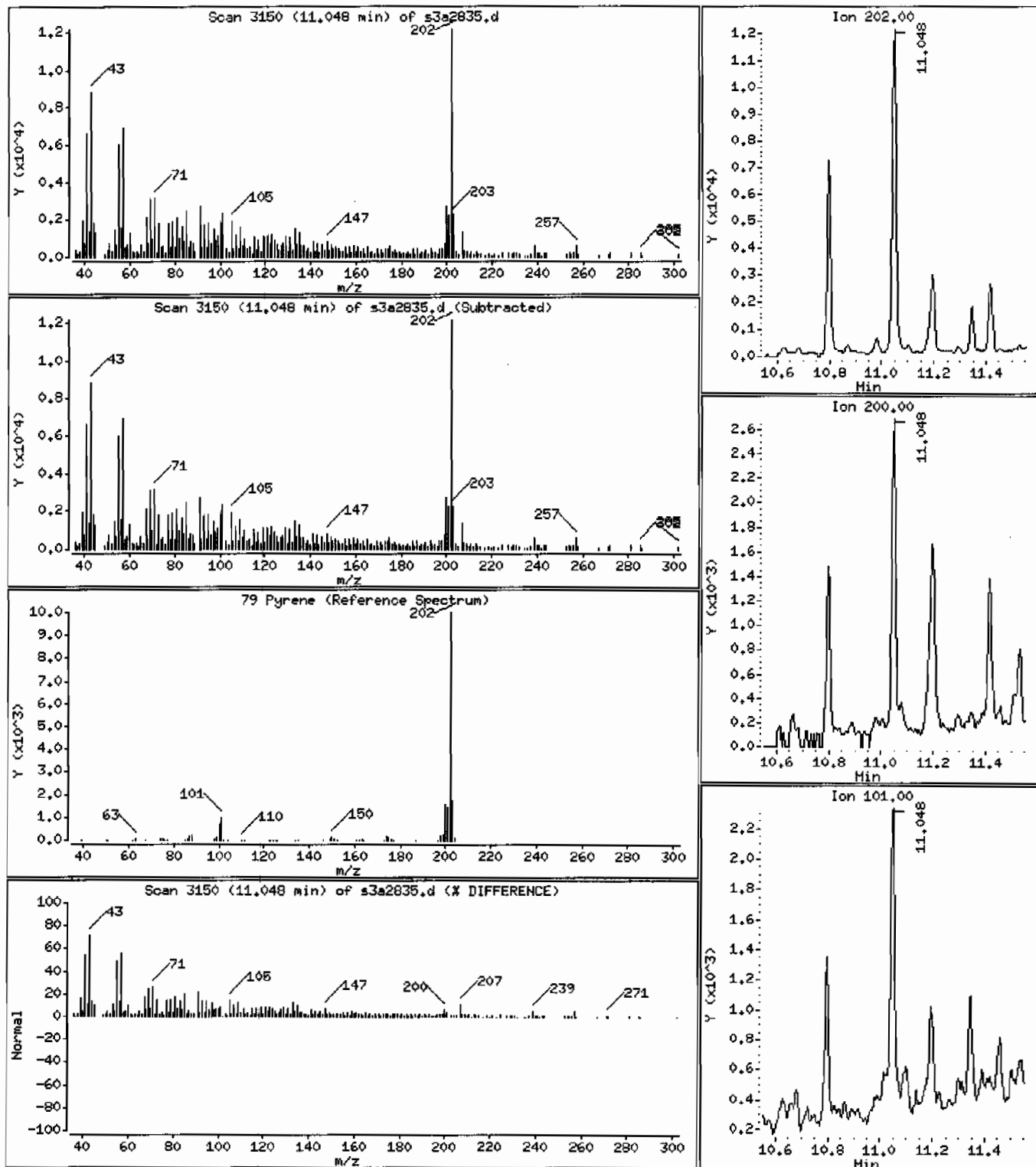
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 22.2 ug/Kg



Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: MSD3.1

Sample Info: 12451140061944874111SVHF111LANL

Volume Injected (uL): 0.5

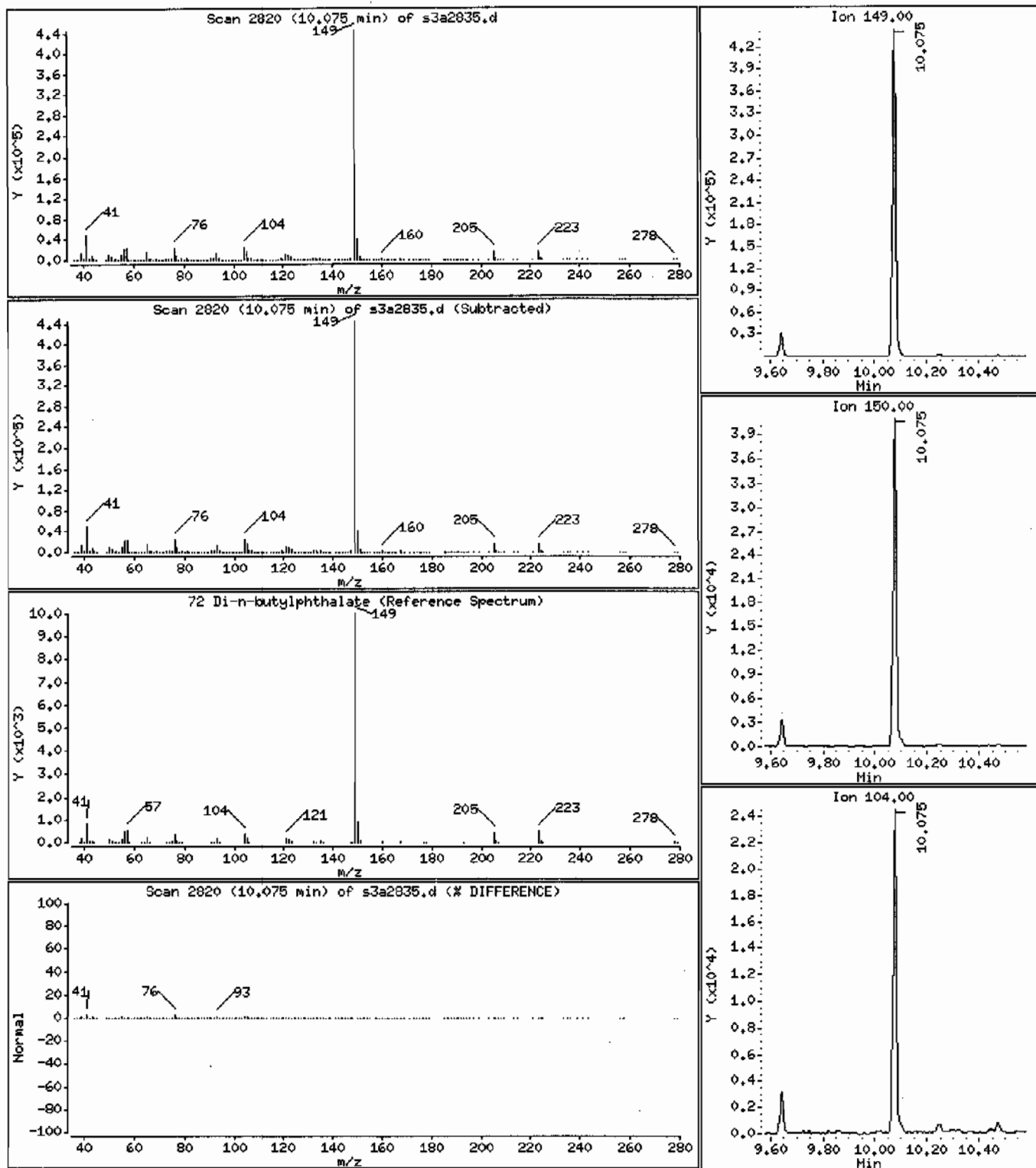
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

72 Di-n-butylphthalate

Concentration: 353 ug/Kg



Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: MSD3.i

Sample Info: 12451140061944874111SVMF111LANL

Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Unknown

Propane, 2,2-dimethoxy-

Pentane, 3-methoxy-

1-Propanol, 2-methyl-

CAS Number

Library

Entry

Quality

Formula

Weight

77-76-9

NIST05.L

4663

39

C5H12O2

104

36839-67-5

NIST05.L

4336

17

C6H14O

102

78-83-1

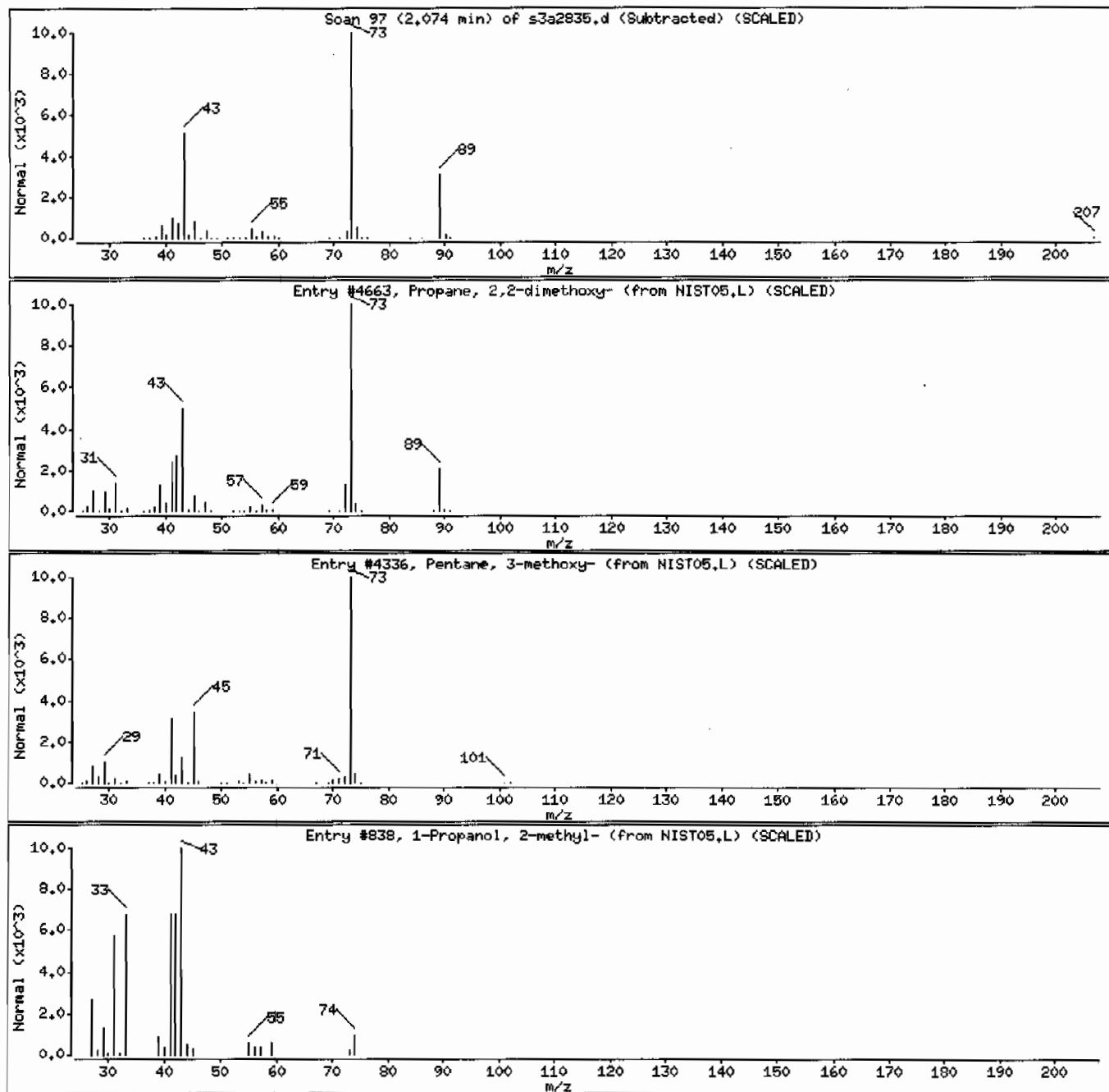
NIST05.L

838

9

C4H10O

74



Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: MSD3.i

Sample Info: 1245114006194487411SVHF111LANL

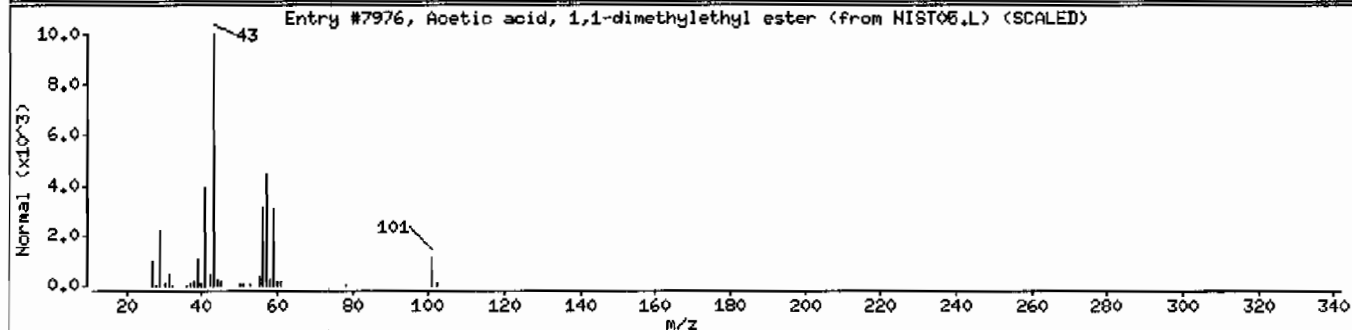
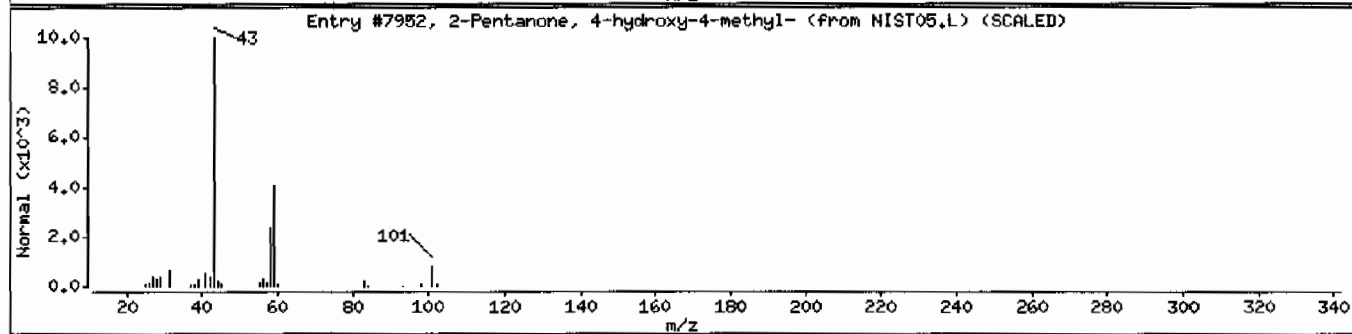
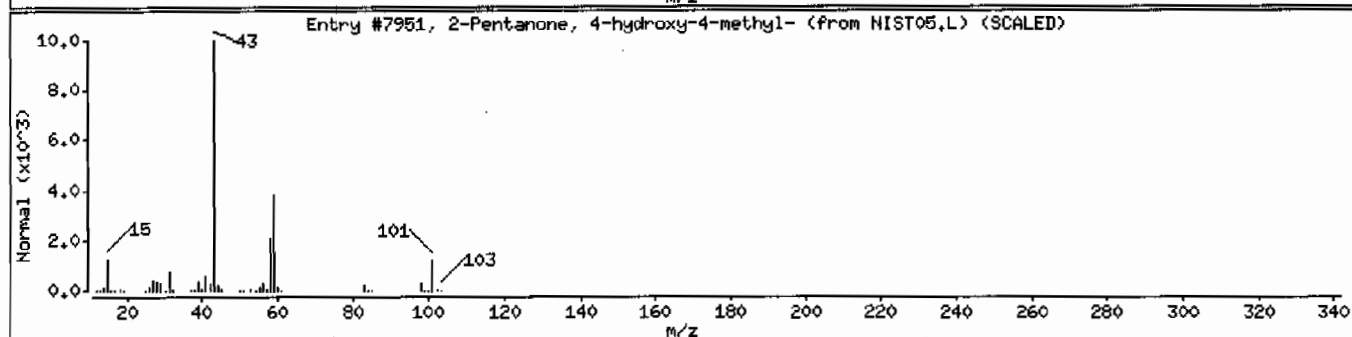
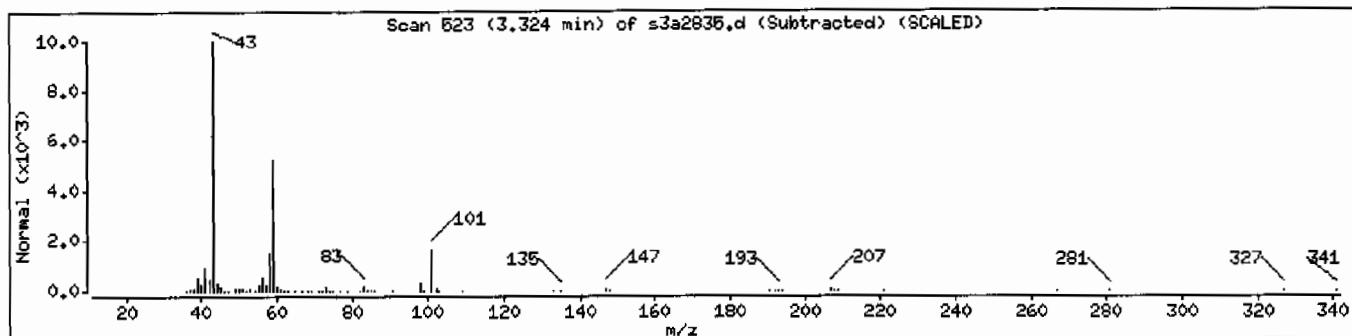
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match        | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--------------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown Aldol Condensate             |            |          |       |         |         |        |
| 2-Pentanone, 4-hydroxy-4-methyl-     | 123-42-2   | NIST05.L | 7951  | 59      | C6H12O2 | 116    |
| 2-Pentanone, 4-hydroxy-4-methyl-     | 123-42-2   | NIST05.L | 7952  | 50      | C6H12O2 | 116    |
| Acetic acid, 1,1-dimethylethyl ester | 540-88-5   | NIST05.L | 7976  | 38      | C6H12O2 | 116    |



Date: 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: MSD3.i

Sample Info: 1245114006194487411SVHF111LANL

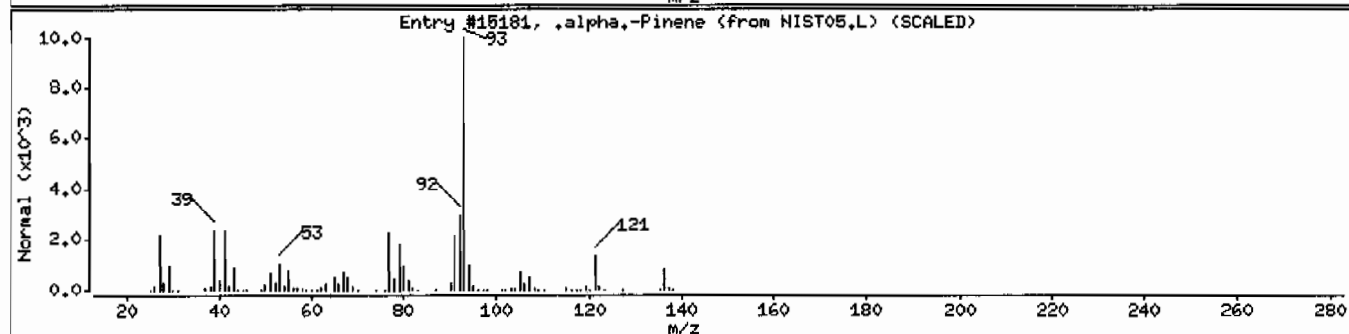
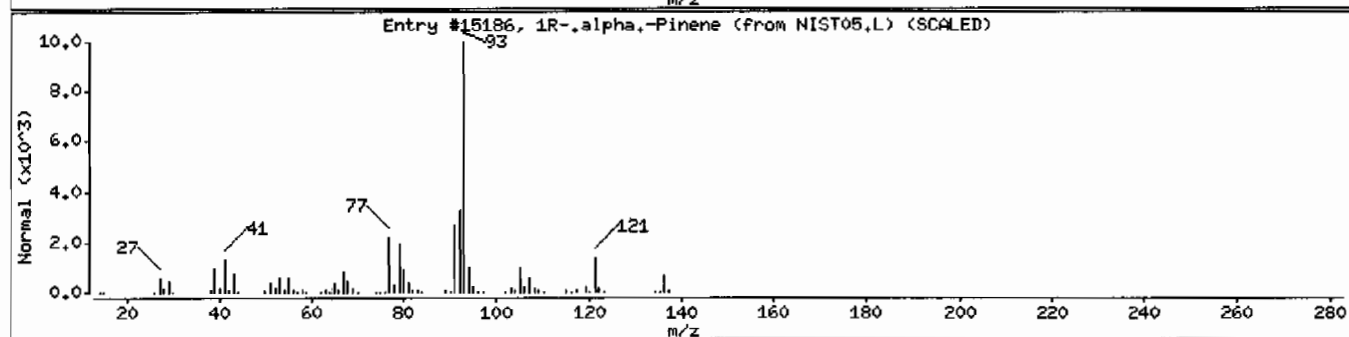
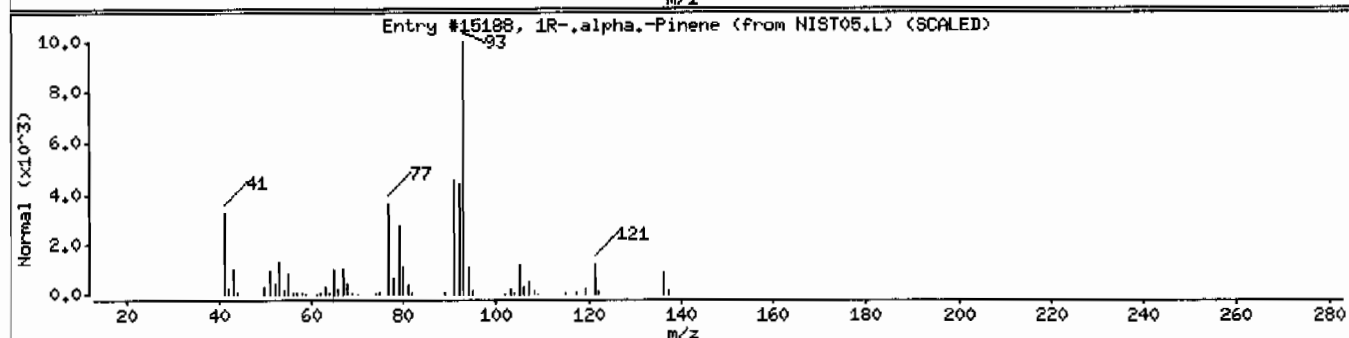
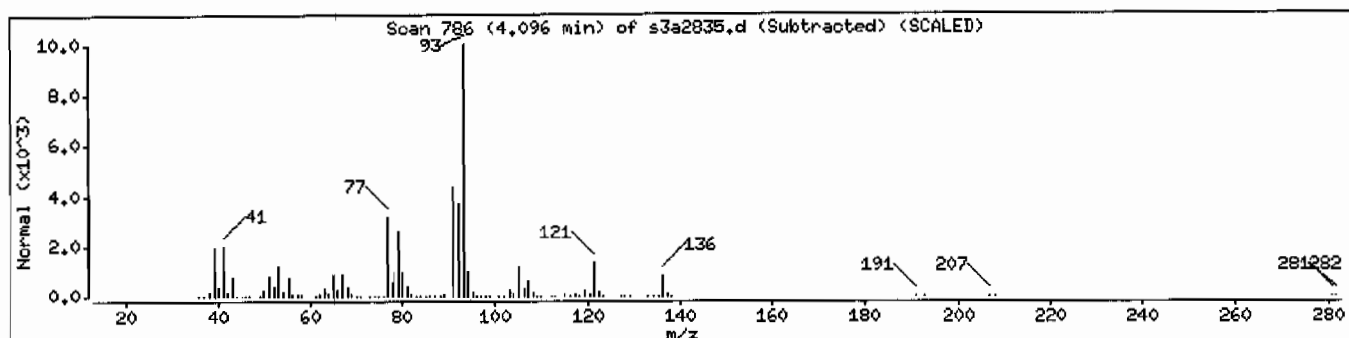
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| 1R-,alpha.-Pinene             | 7785-70-8  | NIST05.L | 15188 | 97      | C10H16  | 136    |
| 1R-,alpha.-Pinene             | 7785-70-8  | NIST05.L | 15186 | 96      | C10H16  | 136    |
| ,alpha.-Pinene                | 80-56-8    | NIST05.L | 15181 | 96      | C10H16  | 136    |





Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: MSD3.1

Sample Info: 12451140061944874111SVHF111LANL

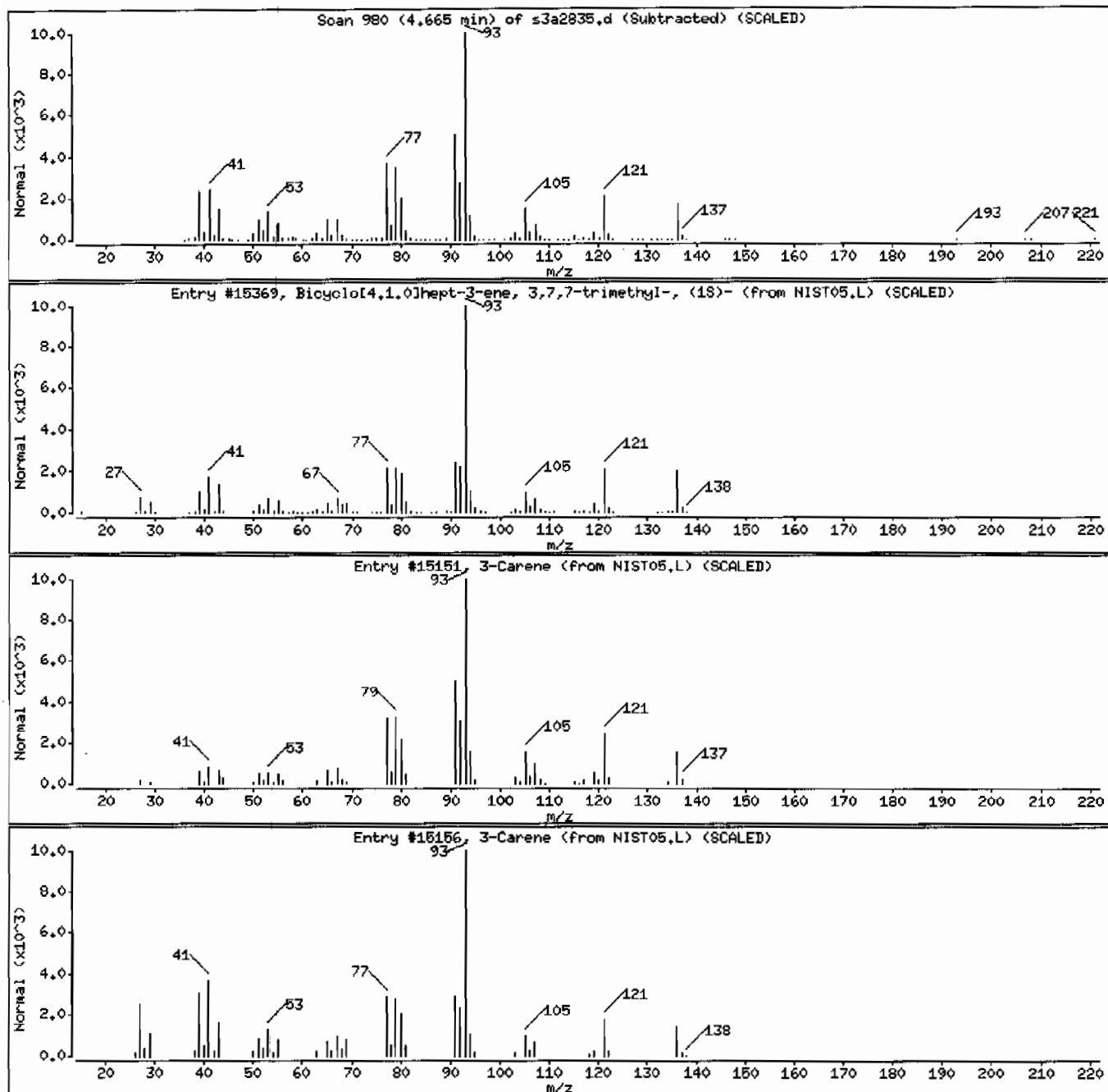
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match             | CAS Number | Library  | Entry | Quality | Formula | Weight |
|---|------------|----------|-------|---------|---------|--------|
| Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl | 498-15-7   | NIST05.L | 15369 | 97      | C10H16  | 136    |
| 3-Carene                                  | 13466-78-9 | NIST05.L | 15151 | 97      | C10H16  | 136    |
| 3-Carene                                  | 13466-78-9 | NIST05.L | 15156 | 96      | C10H16  | 136    |



Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: MSD3.i

Sample Info: 1245114006194487411SVHF111LANL

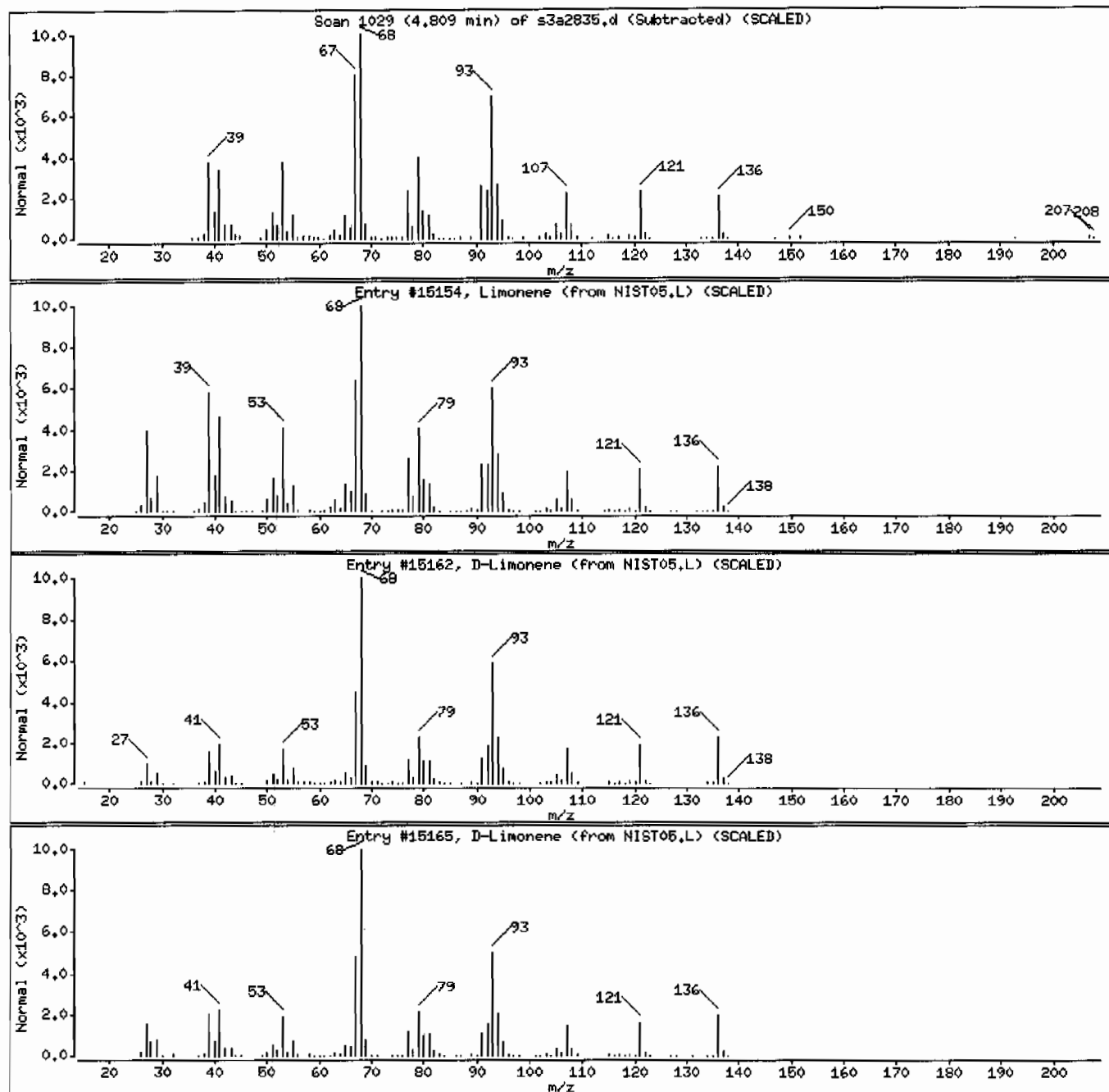
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Limonene                      | 138-86-3   | NIST05.L | 15154 | 95      | C10H16  | 136    |
| D-Limonene                    | 5989-27-5  | NIST05.L | 15162 | 94      | C10H16  | 136    |
| D-Limonene                    | 5989-27-5  | NIST05.L | 15165 | 94      | C10H16  | 136    |



Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: MSD3.i

Sample Info: 1245114006194487411ISVHF111LANL

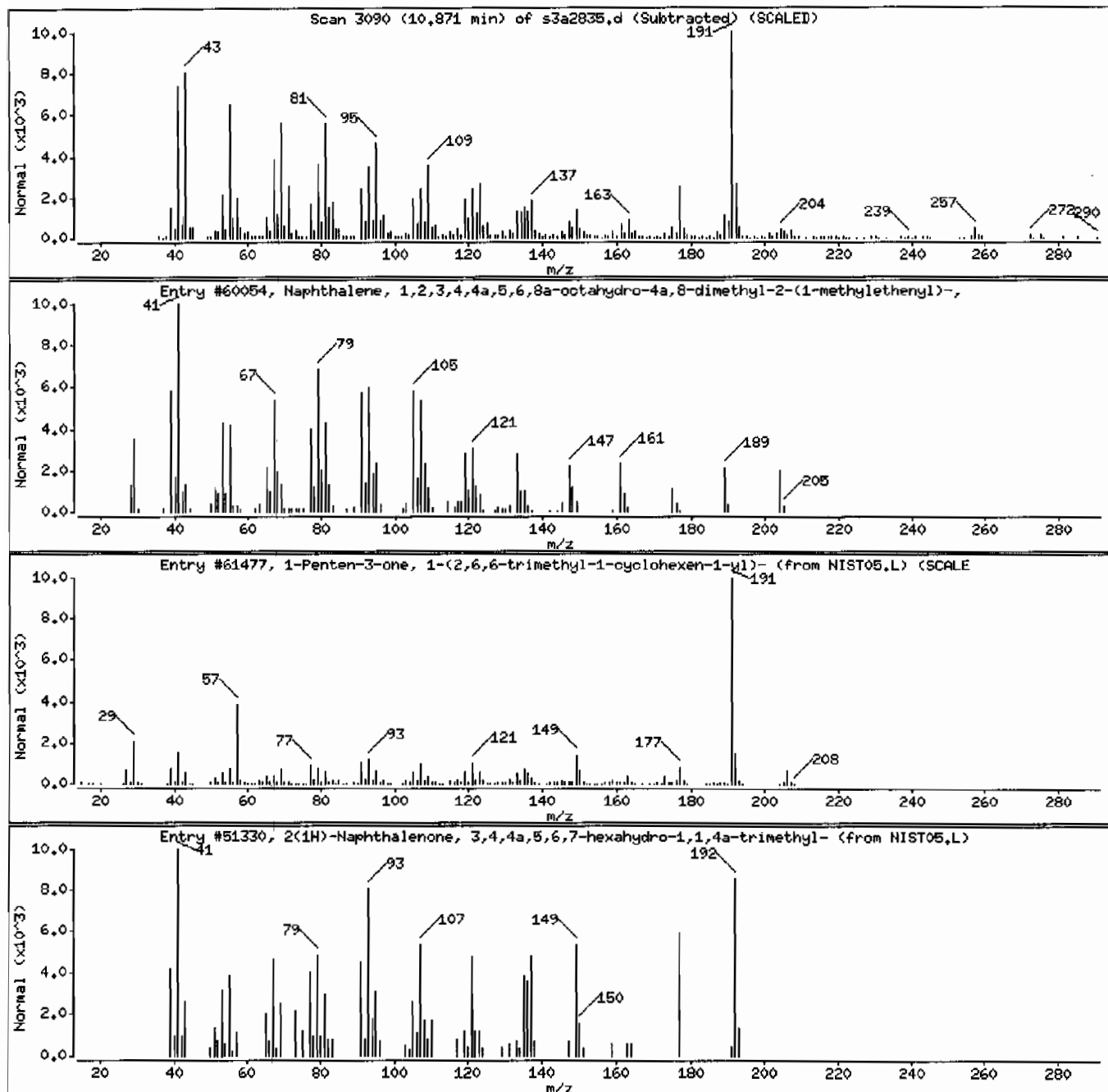
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--|------------|----------|-------|---------|---------|--------|
| Unknown                                  |            |          |       |         |         |        |
| Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro | 473-13-2   | NIST05.L | 60054 | 53      | C15H24  | 204    |
| 1-Penten-3-one, 1-(2,6,6-trimethyl-1-cyc | 127-43-5   | NIST05.L | 61477 | 45      | C14H22O | 206    |
| 2(1H)-Naphthalenone, 3,4,4a,5,6,7-hexahy | 4668-61-5  | NIST05.L | 51330 | 43      | C13H20O | 192    |



Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: MSD3.i

Sample Info: 1245114006194487411SVHF111LANL

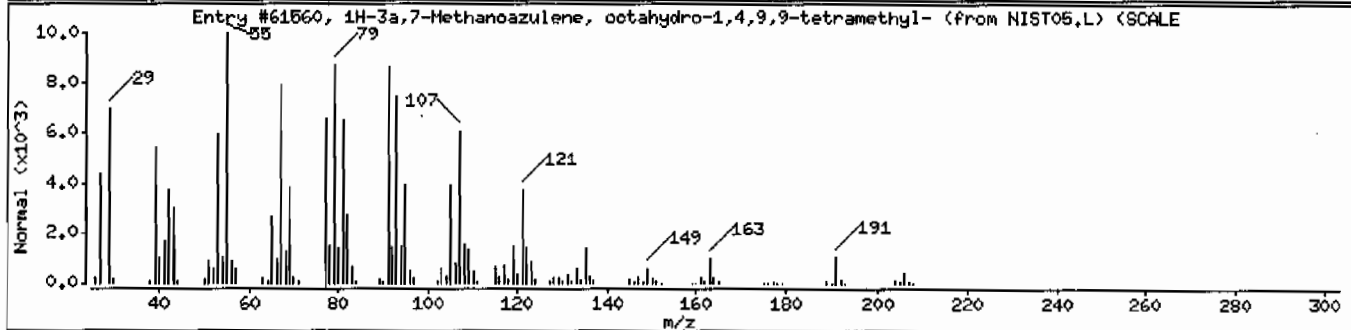
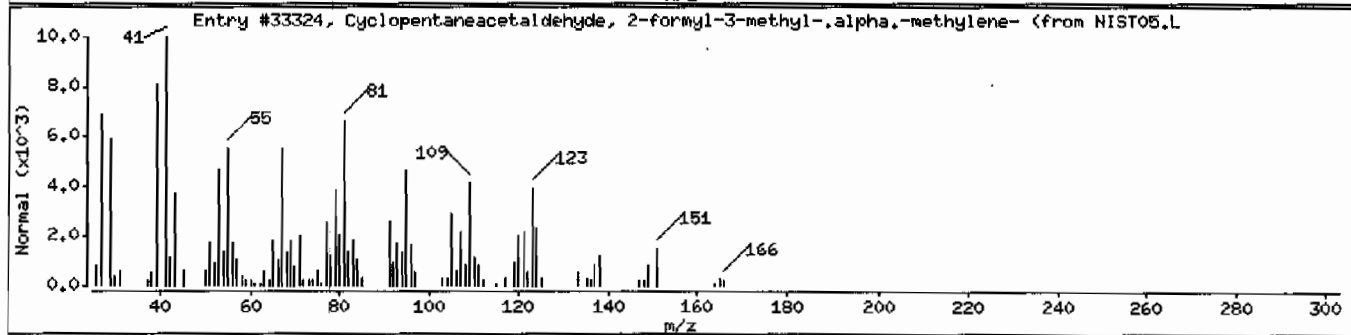
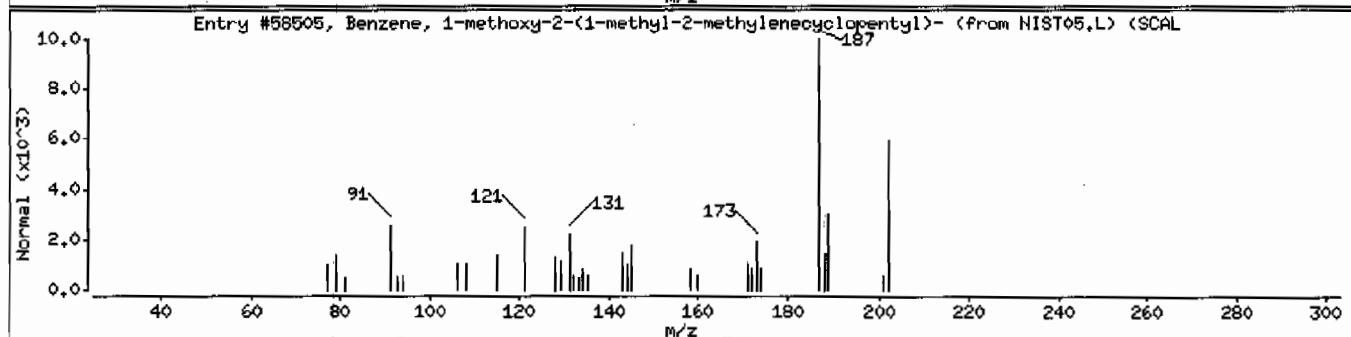
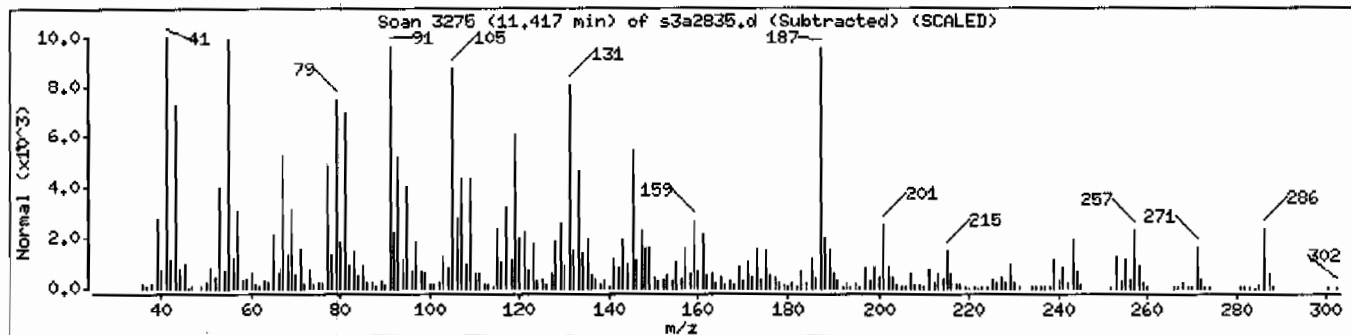
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula  | Weight |
|--|------------|----------|-------|---------|----------|--------|
| Unknown                                  |            |          |       |         |          |        |
| Benzene, 1-methoxy-2-(1-methyl-2-methyle | 39877-94-6 | NIST05.L | 58505 | 43      | C14H18O  | 202    |
| Cyclopentaneacetaldehyde, 2-formyl-3-met | 5951-57-5  | NIST05.L | 33324 | 25      | C10H14O2 | 166    |
| 1H-3a,7-Methanoazulene, octahydro-1,4,9, | 25491-20-7 | NIST05.L | 61560 | 22      | C15H26   | 206    |



Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: MSD3.i

Sample Info: 1245114006194487411SVMF111LANL

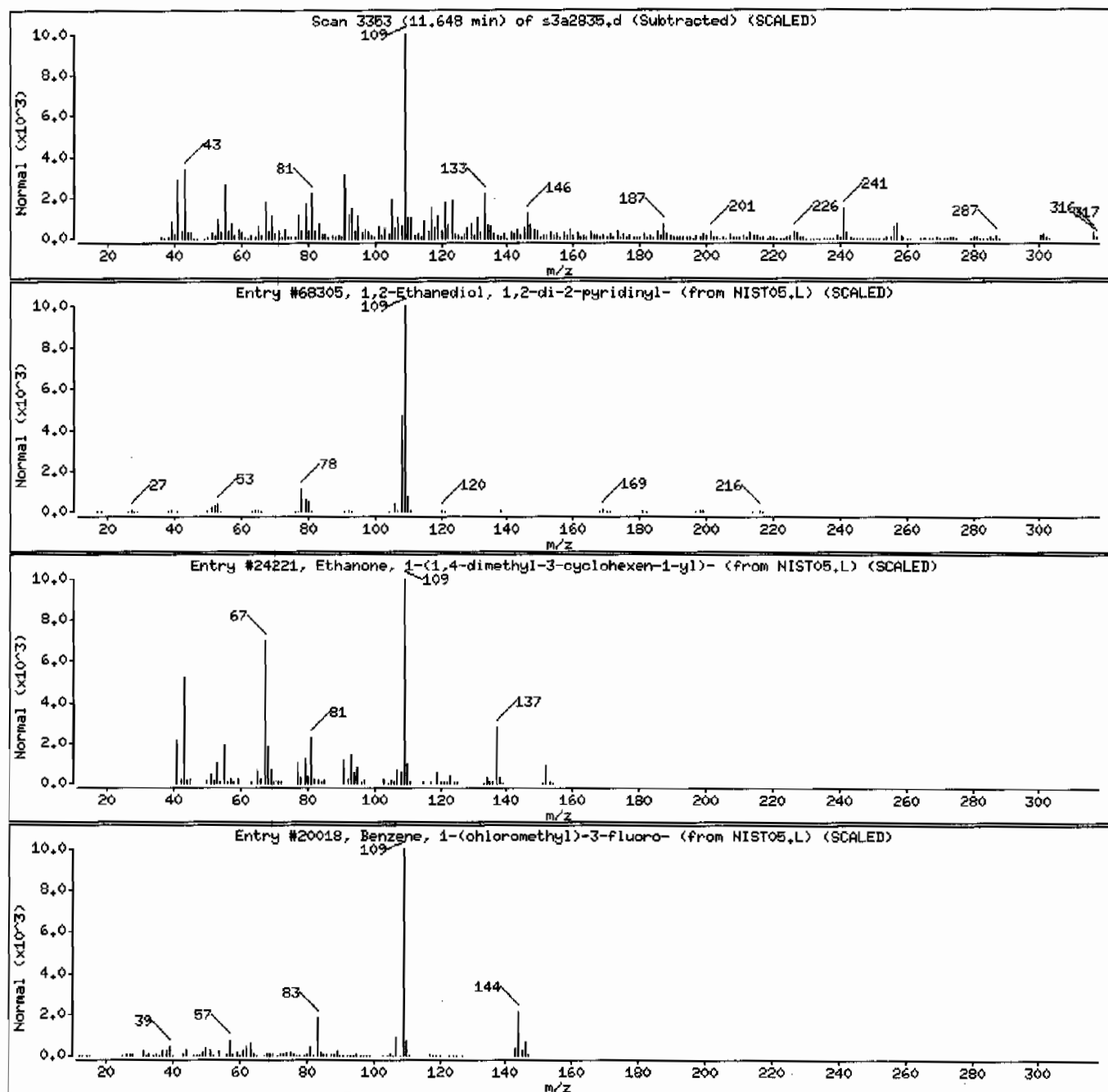
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula    | Weight |
|--|------------|----------|-------|---------|------------|--------|
| Unknown                                  |            |          |       |         |            |        |
| 1,2-Ethanedio1, 1,2-di-2-pyridinyl-      | 1141-05-5  | NIST05.L | 68305 | 38      | C12H12N2O2 | 216    |
| Ethanone, 1-(1,4-dimethyl-3-cyclohexen-1 | 43219-68-7 | NIST05.L | 24221 | 38      | C10H16O    | 152    |
| Benzene, 1-(chloromethyl)-3-fluoro-      | 456-42-8   | NIST05.L | 20018 | 38      | C7H6ClF    | 144    |



Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: MSD3.i

Sample Info: 1245114006194487411SVMF11LANL

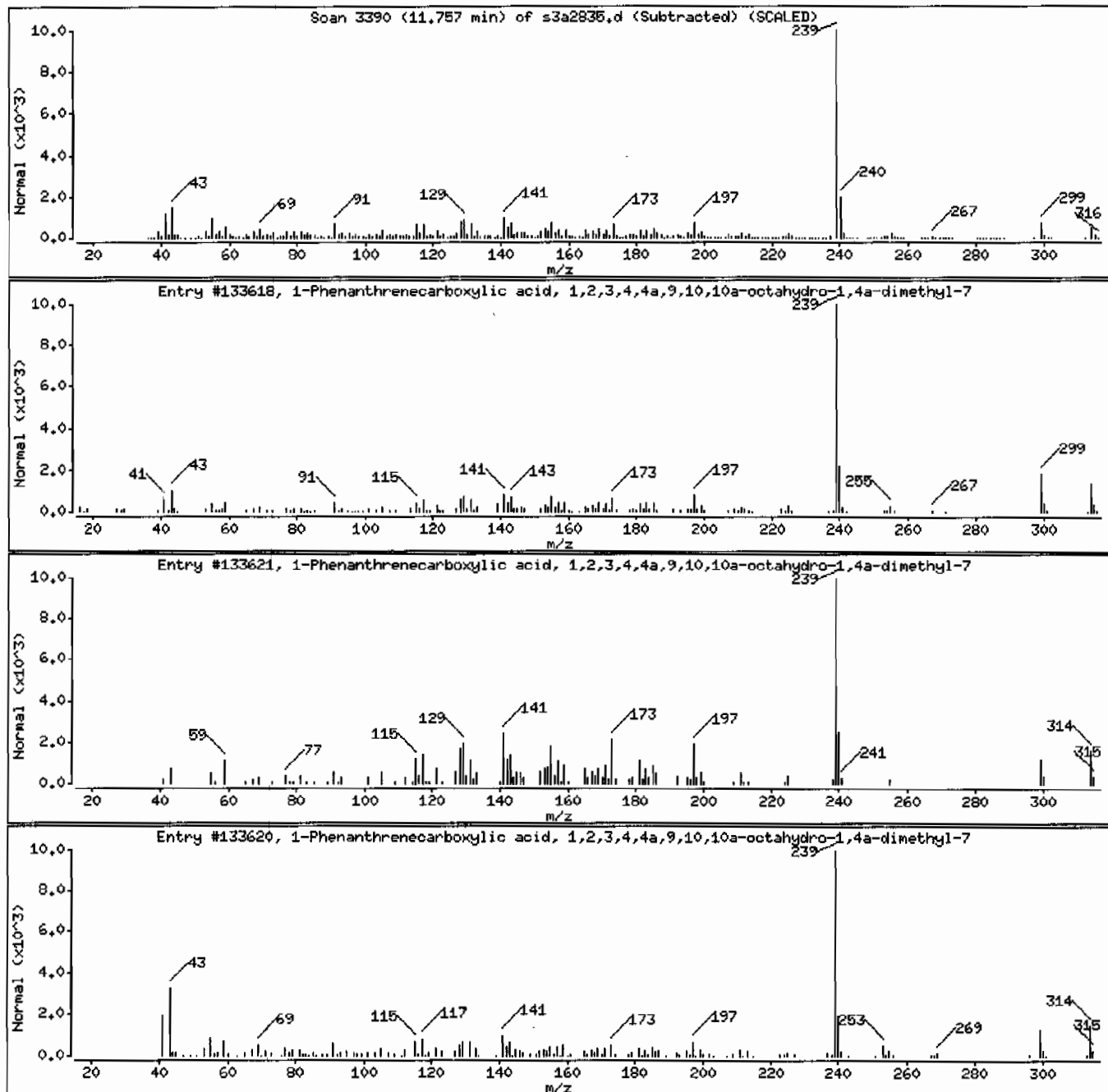
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133618 | 99      | C21H30O2 | 314    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133621 | 95      | C21H30O2 | 314    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133620 | 94      | C21H30O2 | 314    |



Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: MSD3.1

Sample Info: 1245114006194487411SVHF11ILANL

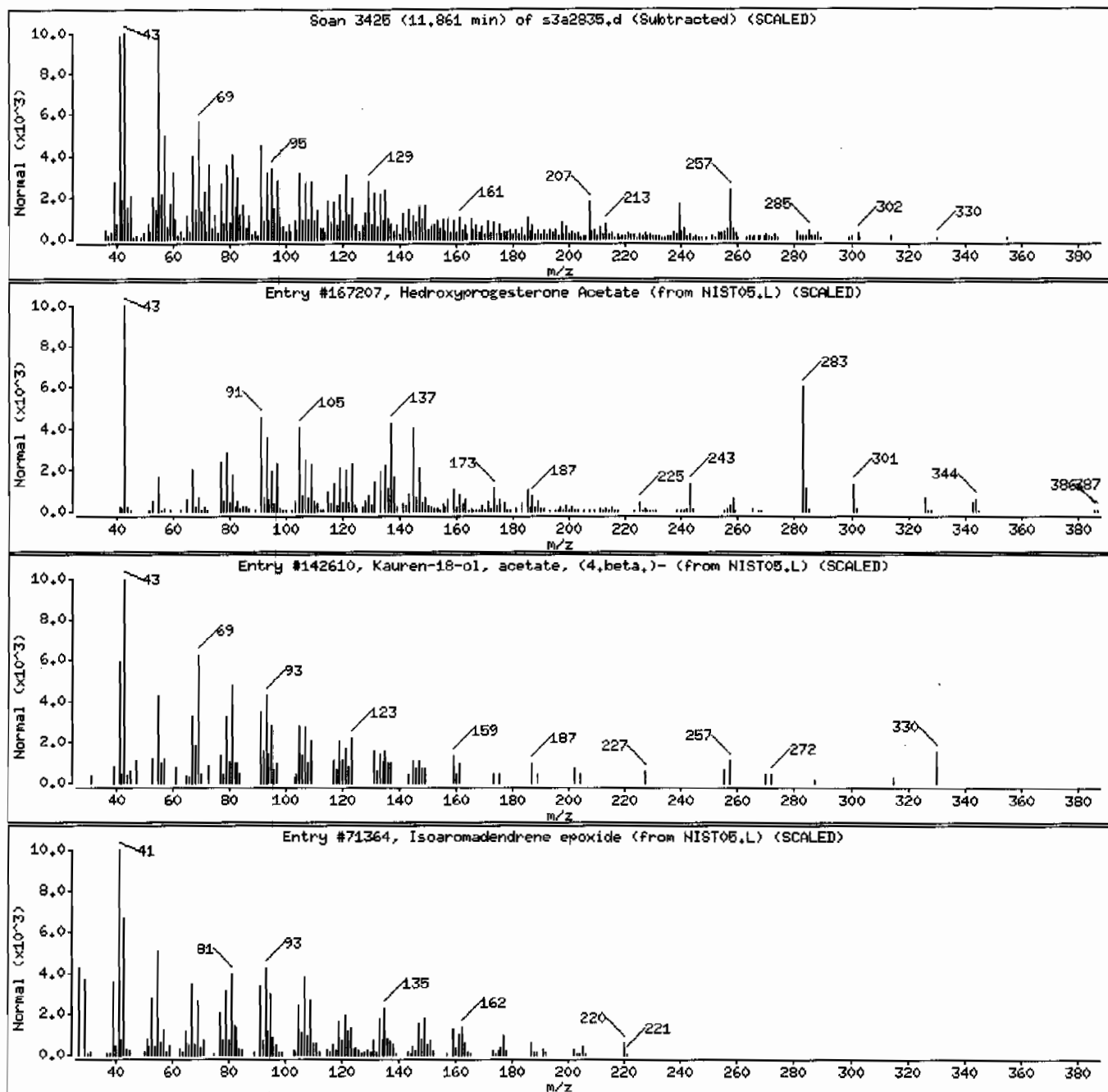
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match     | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|-----------------------------------|--------------|----------|--------|---------|----------|--------|
| Unknown                           |              |          |        |         |          |        |
| Hedroxypregesterone Acetate       | 71-58-9      | NIST05.L | 167207 | 47      | C24H34O4 | 386    |
| Kauren-18-ol, acetate, (4,beta,)- | 72150-74-4   | NIST05.L | 142610 | 41      | C22H34O2 | 330    |
| Isoaromadendrene epoxide          | 1000189-36-6 | NIST05.L | 71364  | 38      | C16H24O  | 220    |



Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: MSD3.i

Sample Info: 1245114006194487411SVHF111LANL

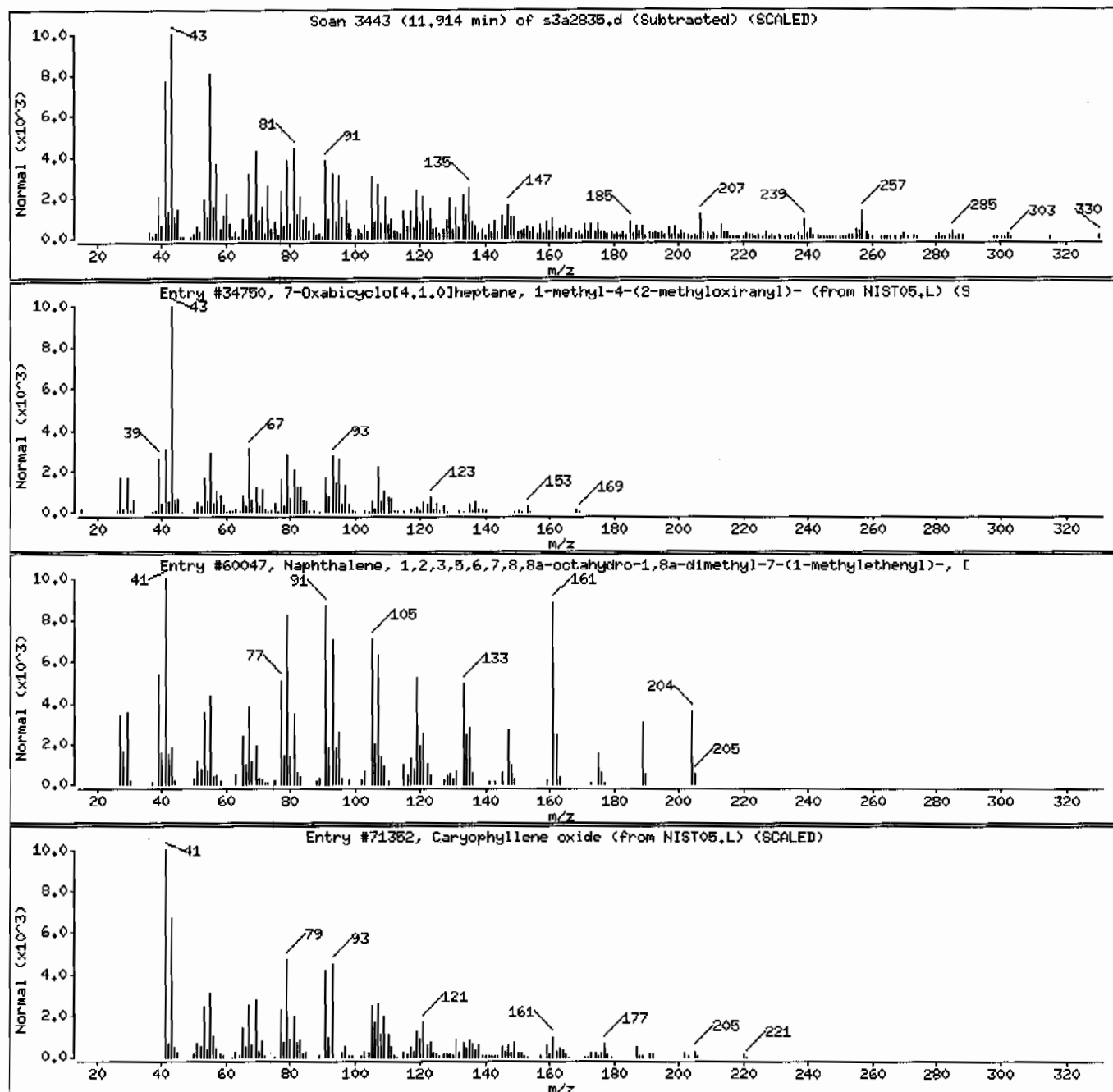
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula  | Weight |
|--|------------|----------|-------|---------|----------|--------|
| Unknown                                  |            |          |       |         |          |        |
| 7-Oxabicyclo[4.1.0]heptane, 1-methyl-4-( | 96-08-2    | NIST05.L | 34750 | 55      | C10H16O2 | 168    |
| Naphthalene, 1,2,3,5,6,7,8,8a-octahydro- | 4630-07-3  | NIST05.L | 60047 | 46      | C15H24   | 204    |
| Caryophyllene oxide                      | 1139-30-6  | NIST05.L | 71362 | 42      | C15H24O  | 220    |





Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: MSD3.i

Sample Info: 1245114006194487411SVHF111LANL

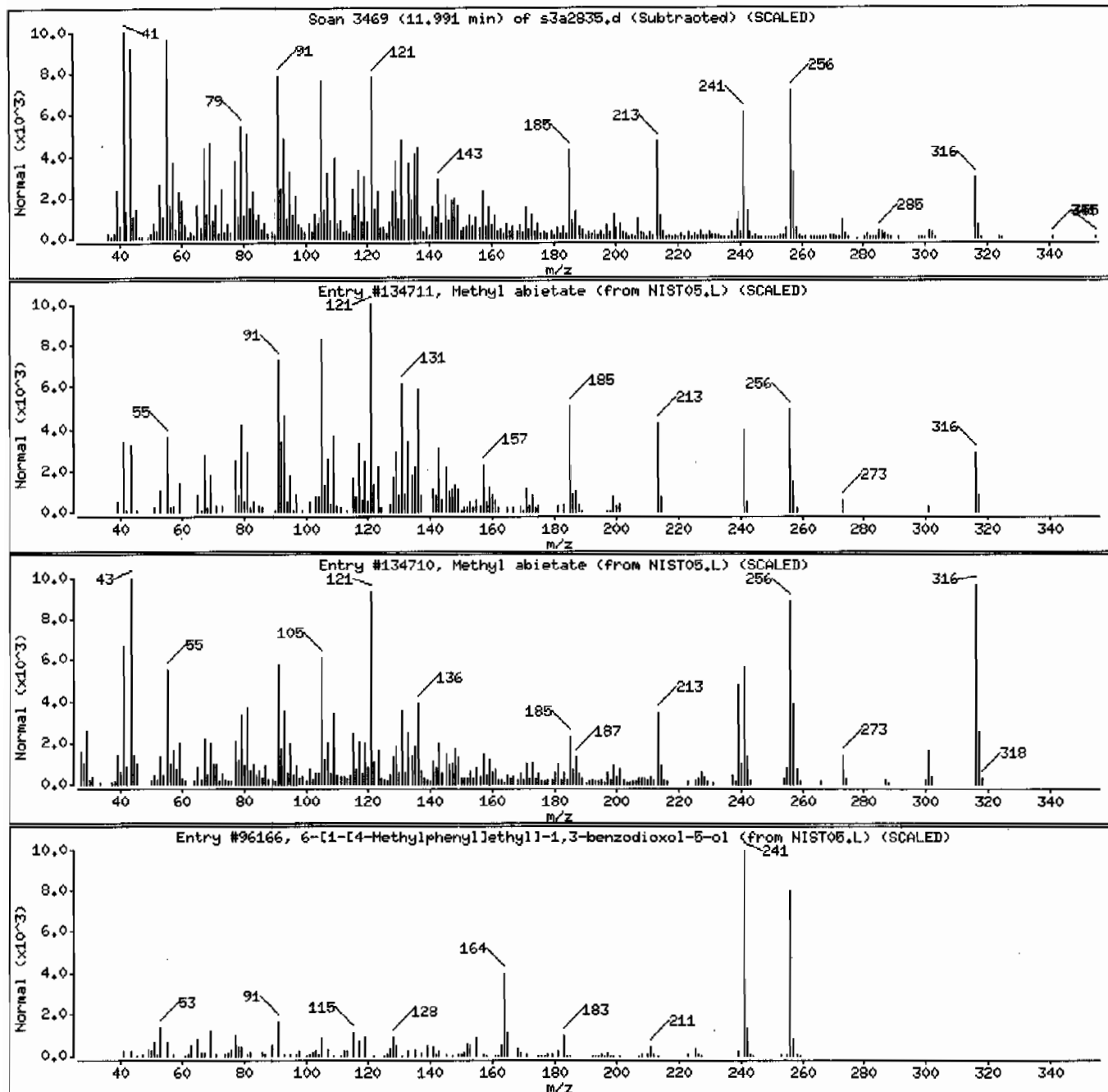
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|--|--------------|----------|--------|---------|----------|--------|
| Methyl abietate                          | 127-25-3     | NIST05.L | 134711 | 98      | C21H32O2 | 316    |
| Methyl abietate                          | 127-25-3     | NIST05.L | 134710 | 78      | C21H32O2 | 316    |
| 6-[1-[4-Methylphenyl]ethyl]-1,3-benzodio | 1000211-52-5 | NIST05.L | 96166  | 56      | C16H16O3 | 256    |



Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: MSD3.i

Sample Info: 12451140061944874111SVHF111LANL

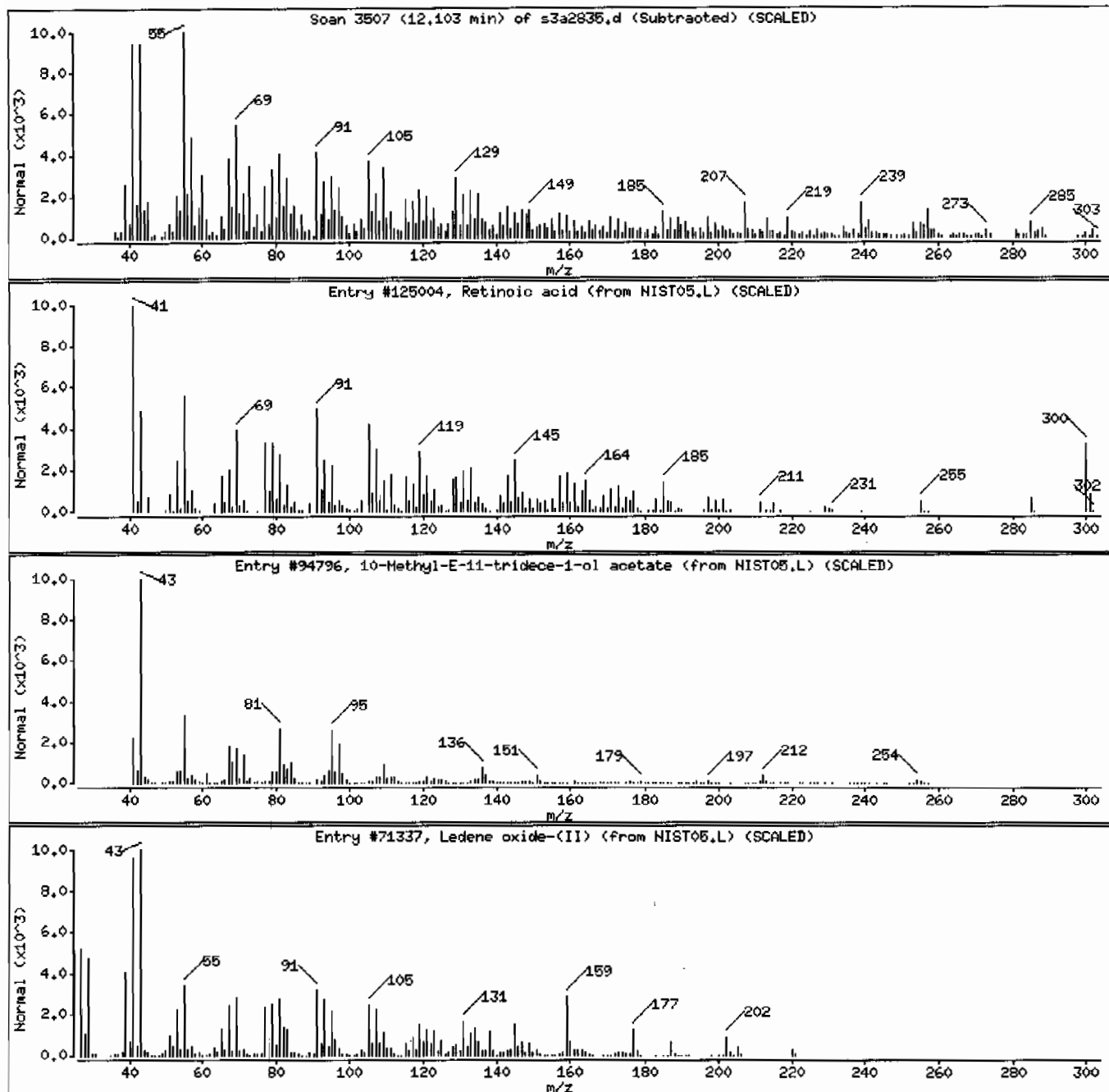
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match       | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|-------------------------------------|--------------|----------|--------|---------|--|--------|
| Unknown                             |              |          |        |         |  |        |
| Retinoic acid                       | 302-79-4     | NIST05.L | 125004 | 55      | C <sub>20</sub> H <sub>28</sub> O <sub>2</sub> | 300    |
| 10-Methyl-E-11-tridece-1-ol acetate | 1000130-97-3 | NIST05.L | 94796  | 44      | C <sub>16</sub> H <sub>30</sub> O <sub>2</sub> | 254    |
| Ledene oxide-(II)                   | 1000159-36-7 | NIST05.L | 71337  | 38      | C <sub>15</sub> H <sub>24</sub> O              | 220    |



Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: MSD3.i

Sample Info: 1245114006194487411SVHF111LANL

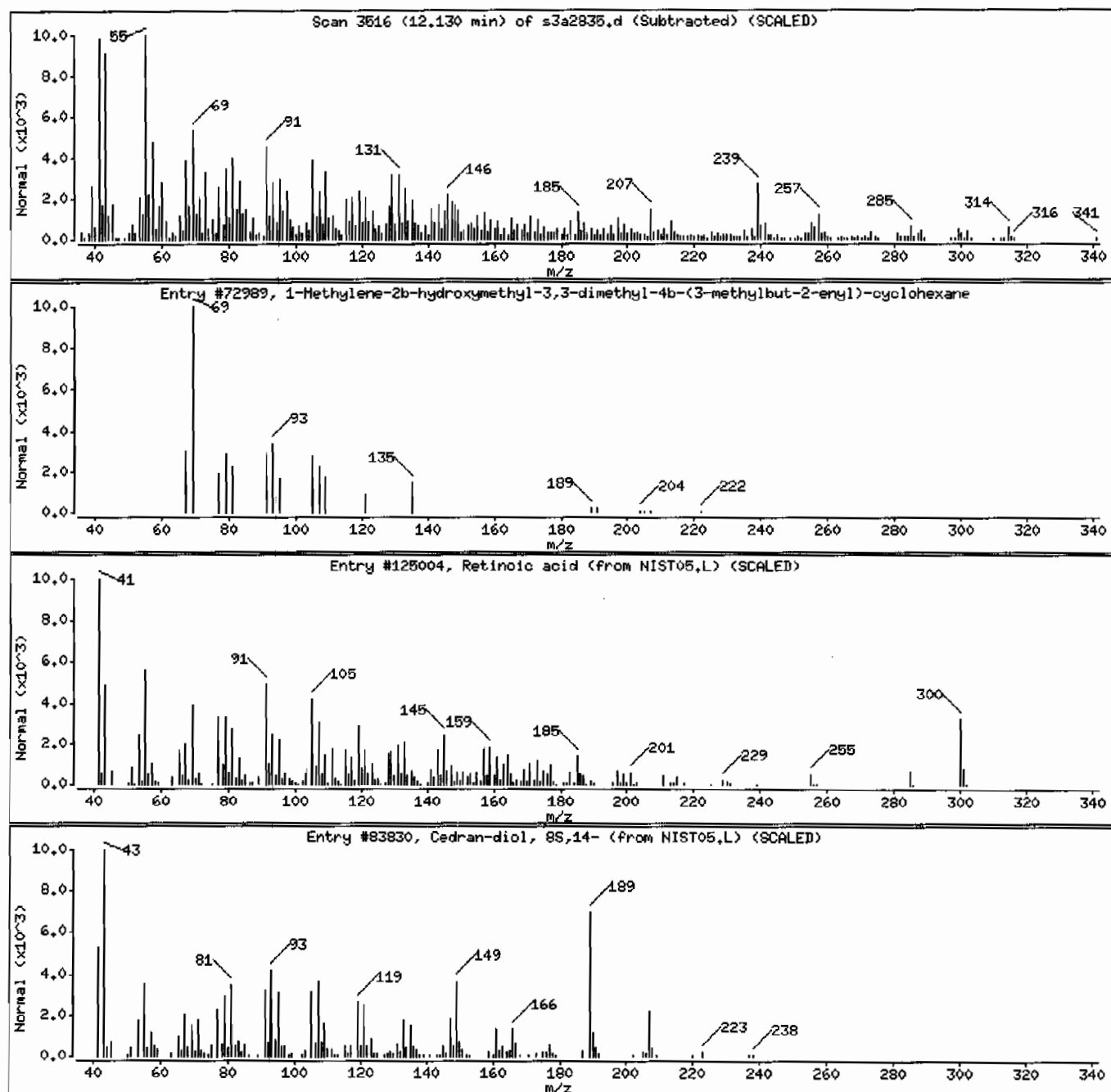
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|--|--------------|----------|--------|---------|----------|--------|
| Unknown                                  |              |          |        |         |          |        |
| 1-Methylene-2b-hydroxymethyl-3,3-dimethy | 1000144-10-6 | NIST05.L | 72989  | 44      | C15H26O  | 222    |
| Retinoic acid                            | 302-79-4     | NIST05.L | 125004 | 25      | C20H28O2 | 300    |
| Cedran-diol, 8S,14-                      | 62600-05-9   | NIST05.L | 83830  | 25      | C15H26O2 | 238    |



Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: MSD3.i

Sample Info: 1245114006194487411SVHF111LANL

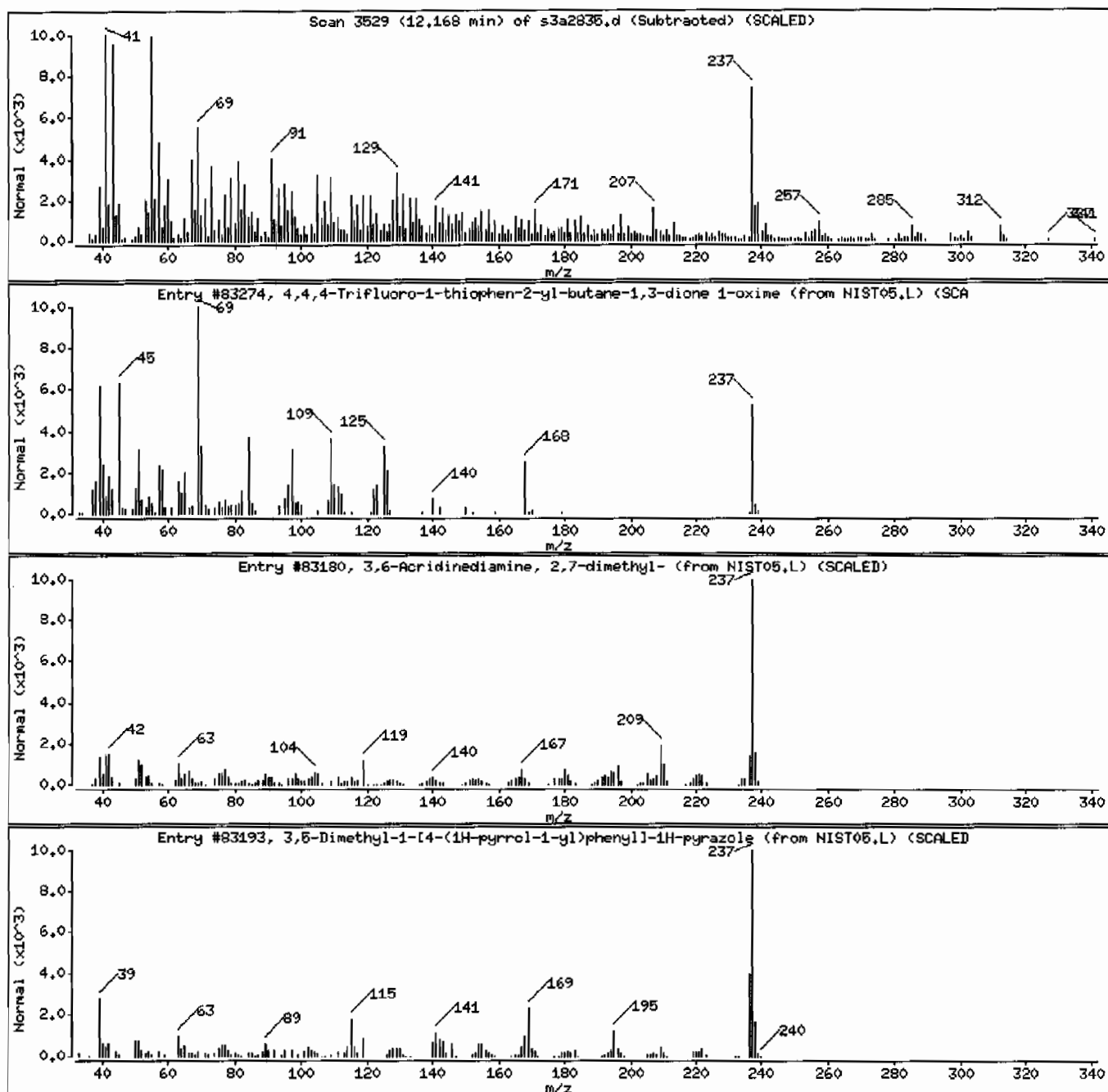
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match             | CAS Number   | Library  | Entry | Quality | Formula    | Weight |
|---|--------------|----------|-------|---------|------------|--------|
| Unknown                                   |              |          |       |         |            |        |
| 4,4,4-Trifluoro-1-thiophen-2-yl-butane-1  | 1000296-91-8 | NIST05.L | 83274 | 43      | C8H6F3NO2S | 237    |
| 3,6-Acridinediamine, 2,7-dimethyl-        | 92-26-2      | NIST05.L | 83180 | 38      | C15H15N3   | 237    |
| 3,5-Dimethyl-1-[4-(1H-pyrrol-1-yl)phenyl] | 257863-12-0  | NIST05.L | 83193 | 30      | C15H15N3   | 237    |



Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: MSD3.i

Sample Info: 1245114006194487411SVHF111LANL

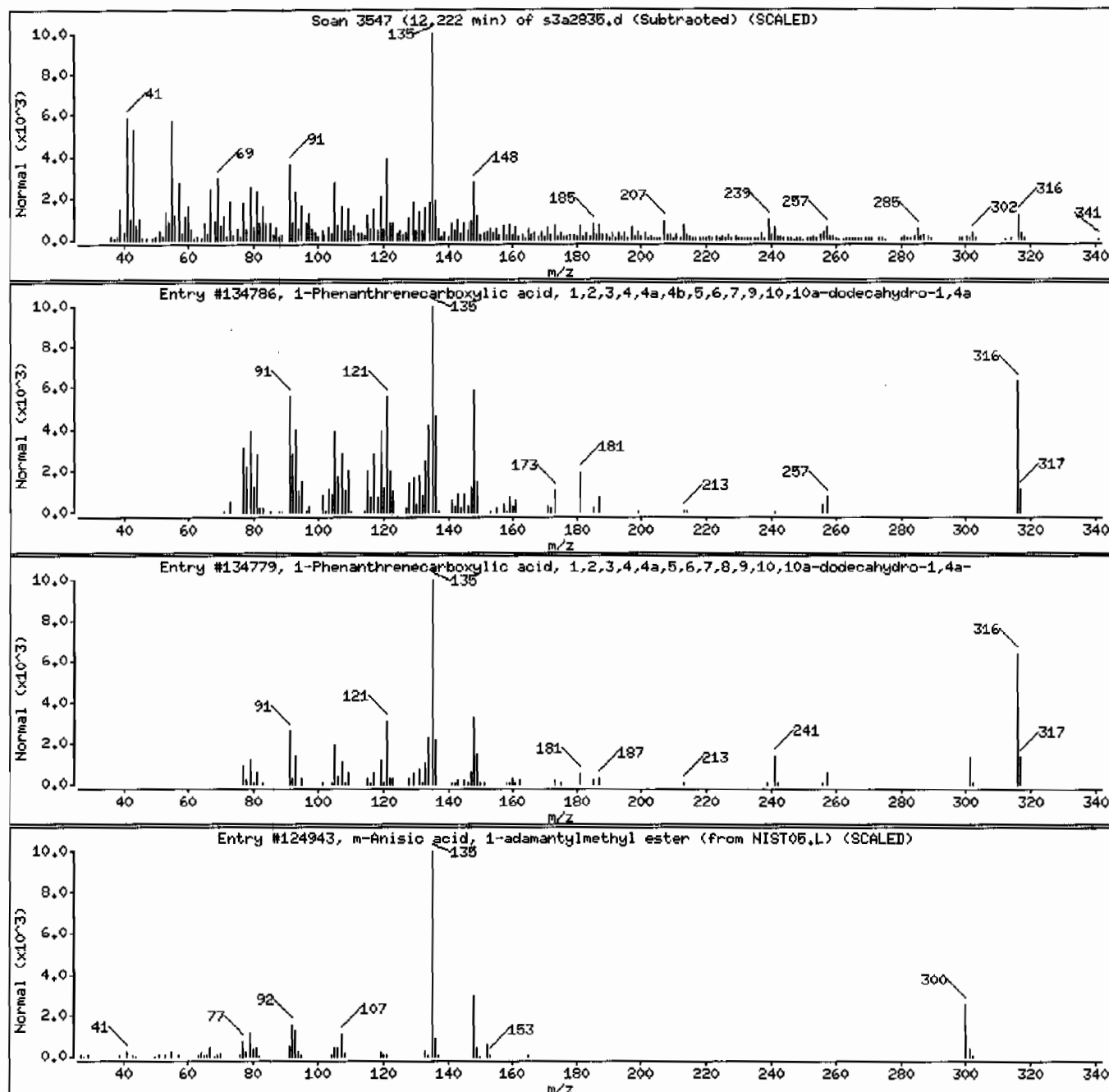
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5HS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|--|--------------|----------|--------|---------|----------|--------|
| Unknown                                  |              |          |        |         |          |        |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 3310-97-2    | NIST05.L | 134786 | 91      | C21H32O2 | 316    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 19402-34-7   | NIST05.L | 134779 | 70      | C21H32O2 | 316    |
| m-Anisic acid, 1-adamantylmethyl ester   | 1000292-25-3 | NIST05.L | 124943 | 55      | C19H24O3 | 300    |



Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: MSD3.i

Sample Info: 1245114006194487411SVHF111LANL

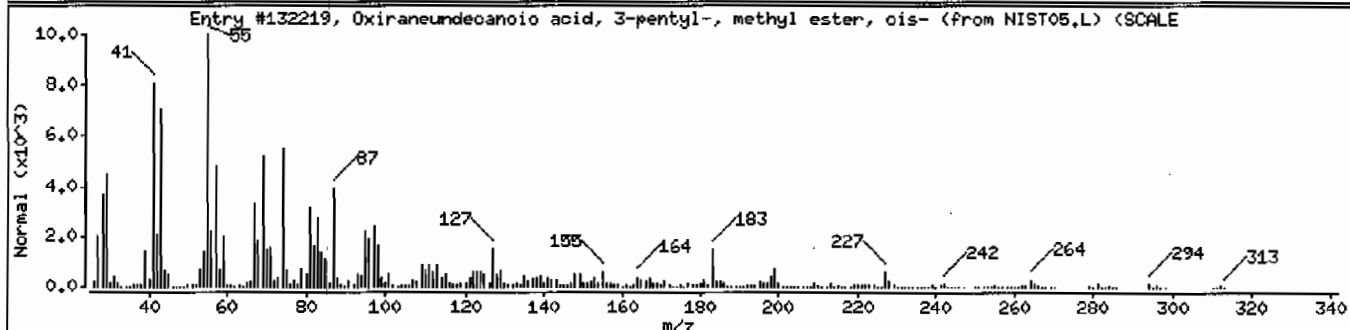
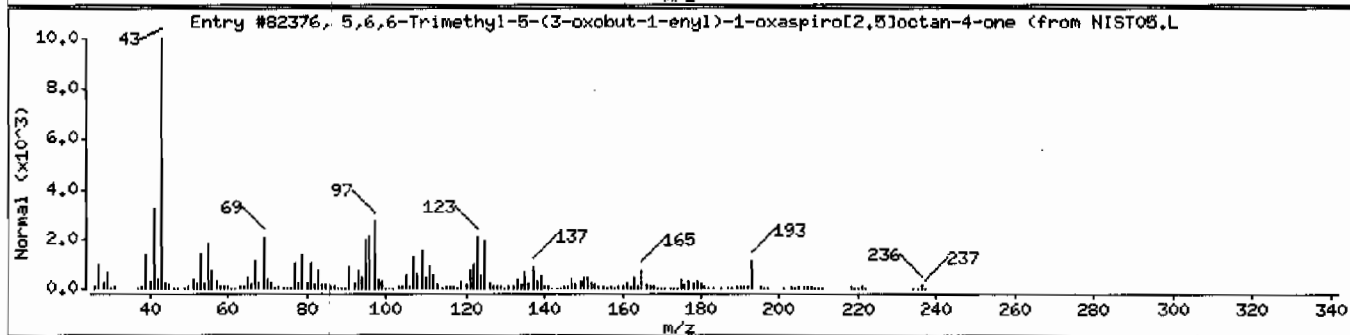
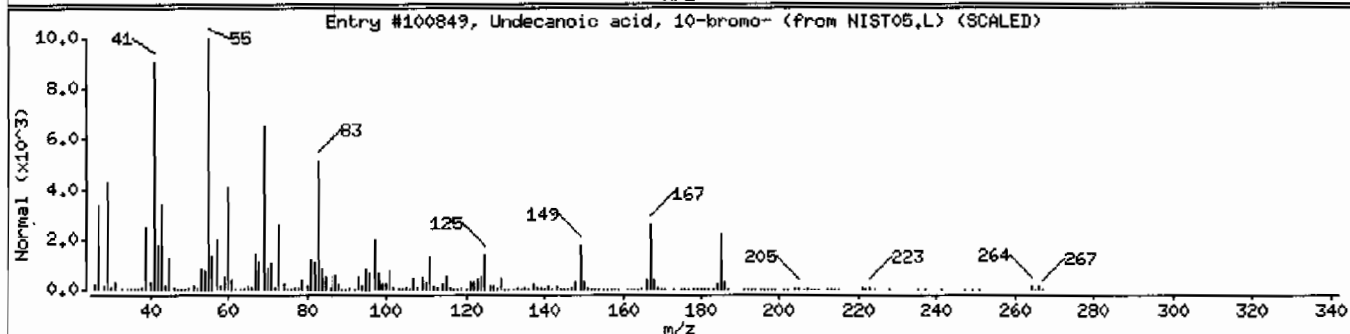
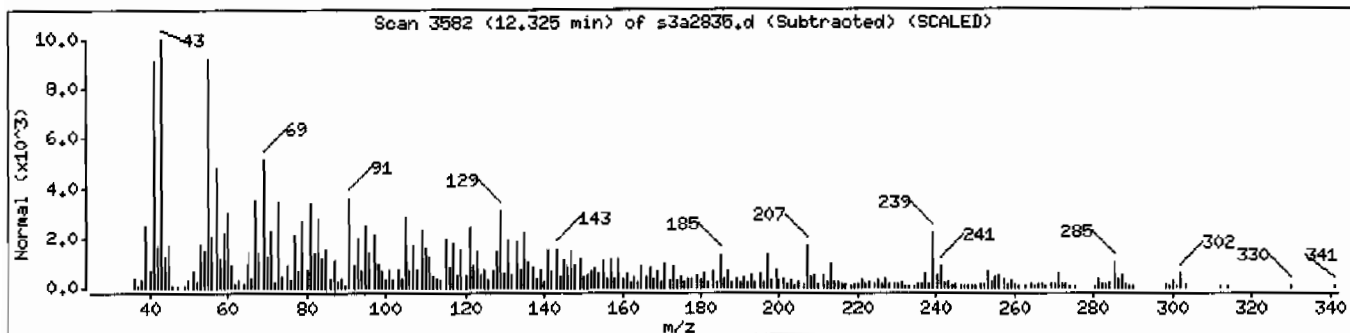
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula    | Weight |
|--|--------------|----------|--------|---------|------------|--------|
| Unknown                                  |              |          |        |         |            |        |
| Undecanoic acid, 10-bromo-               | 18294-93-4   | NIST05.L | 100849 | 44      | C11H21BrO2 | 264    |
| 5,6,6-Trimethyl-5-(3-oxobut-1-enyl)-1-ox | 1000192-73-9 | NIST05.L | 82376  | 43      | C14H20O3   | 236    |
| Oxiraneundecanoic acid, 3-pentyl-, methy | 38520-30-8   | NIST05.L | 132219 | 41      | C19H36O3   | 312    |



Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: MSD3.i

Sample Info: 1245114006194487411ISVMF11ILANL

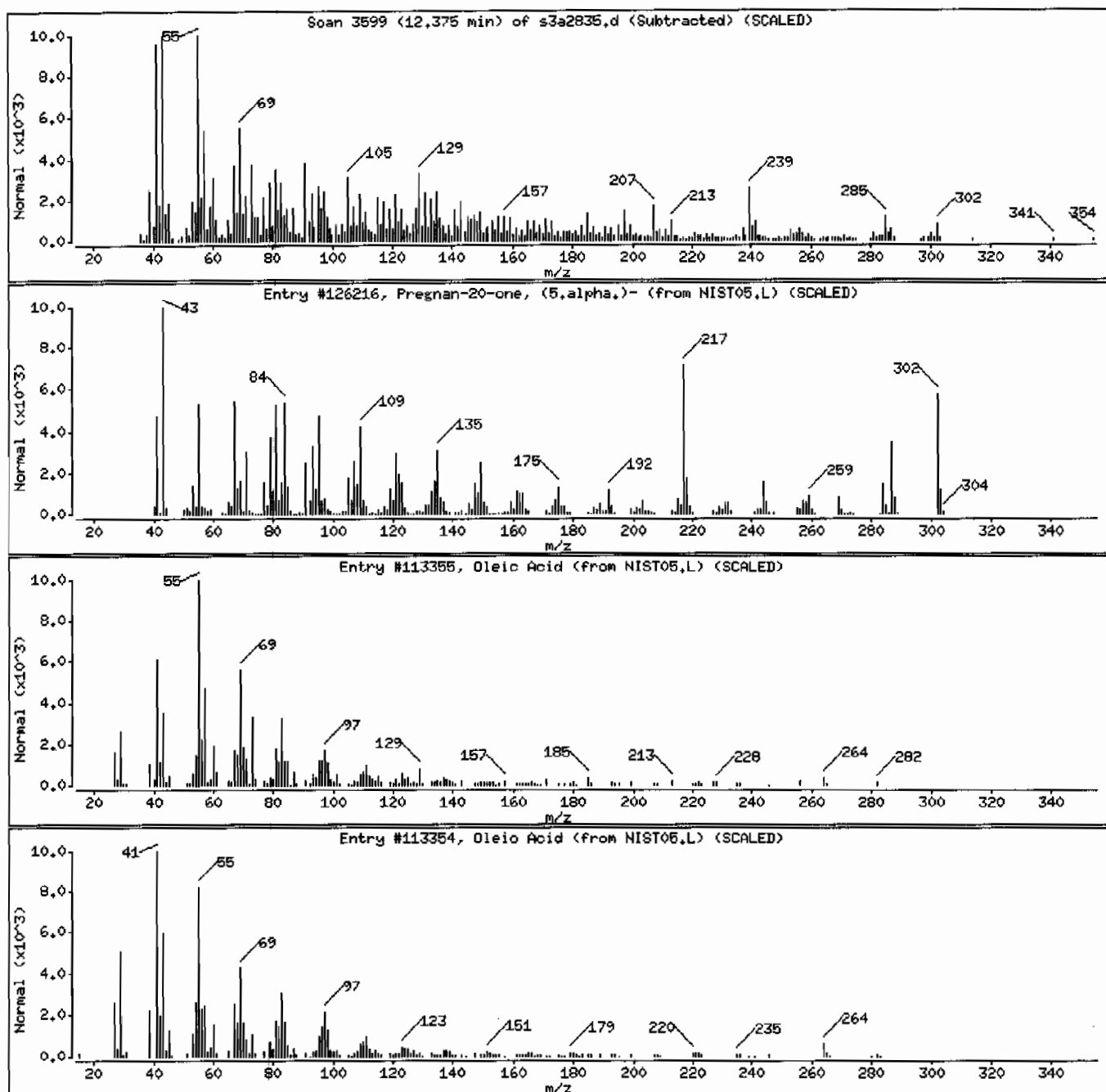
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|-------------------------------|------------|----------|--------|---------|--|--------|
| Unknown                       |            |          |        |         |  |        |
| Pregnan-20-one, (5.alpha.)-   | 848-62-4   | NIST05.L | 126216 | 53      | C <sub>21</sub> H <sub>34</sub> O              | 302    |
| Oleic Acid                    | 112-80-1   | NIST05.L | 113355 | 44      | C <sub>18</sub> H <sub>34</sub> O <sub>2</sub> | 282    |
| Oleic Acid                    | 112-80-1   | NIST05.L | 113354 | 44      | C <sub>18</sub> H <sub>34</sub> O <sub>2</sub> | 282    |



Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: MSD3.i

Sample Info: 1245114006194497411SVHF11ILANL

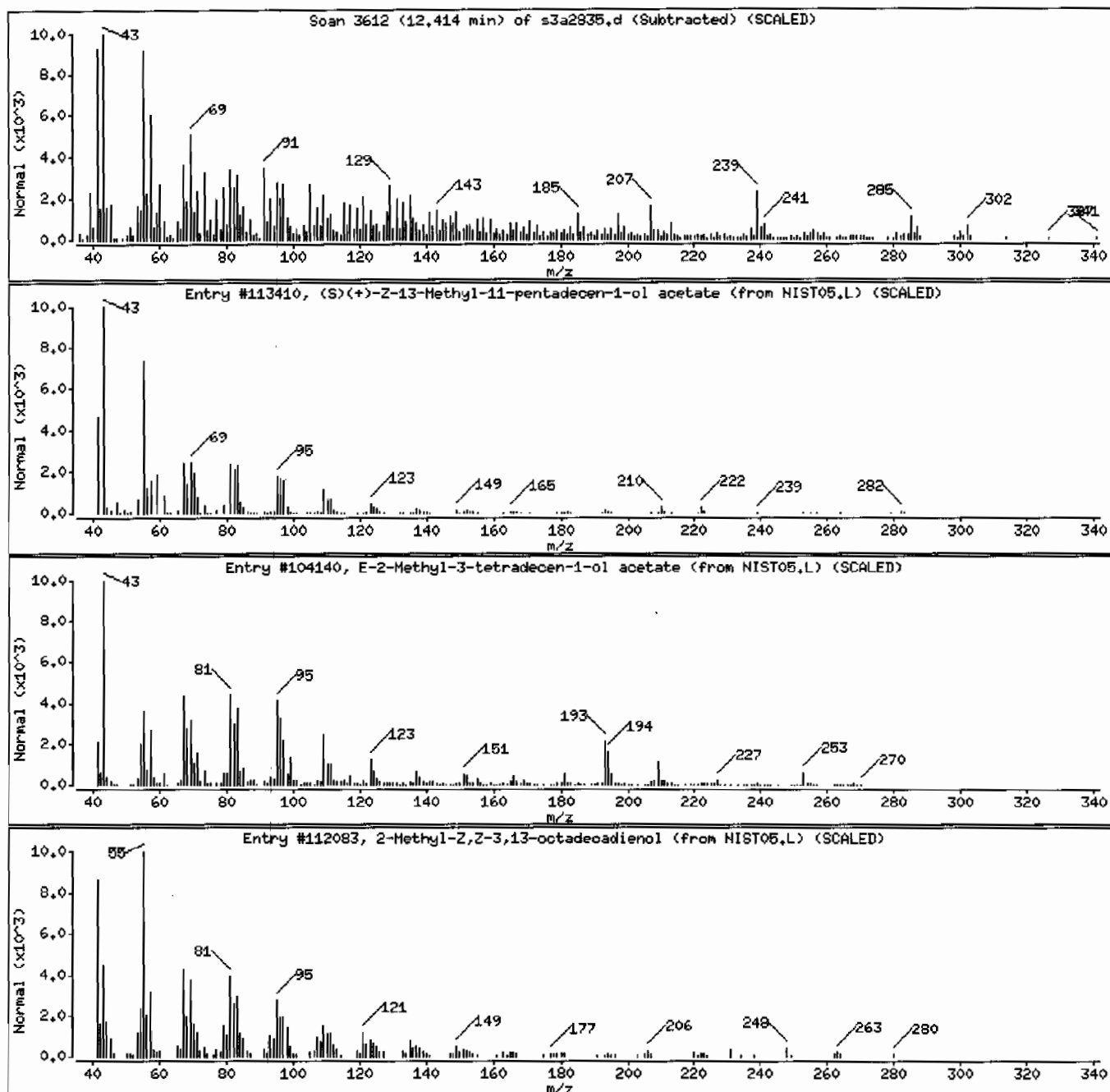
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|--|--------------|----------|--------|---------|----------|--------|
| Unknown                                  |              |          |        |         |          |        |
| (S)(+)-2-13-Methyl-11-pentadecen-1-ol ac | 1000130-84-8 | NIST05.L | 113410 | 56      | C18H34O2 | 282    |
| E-2-Methyl-3-tetradecen-1-ol acetate     | 1000130-81-2 | NIST05.L | 104140 | 50      | C17H32O2 | 268    |
| 2-Methyl-2,2,3,13-octadecadienol         | 1000130-90-5 | NIST05.L | 112083 | 47      | C19H36O  | 280    |





Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: HSD3.i

Sample Info: 1245114006194487411SVHF111LANL

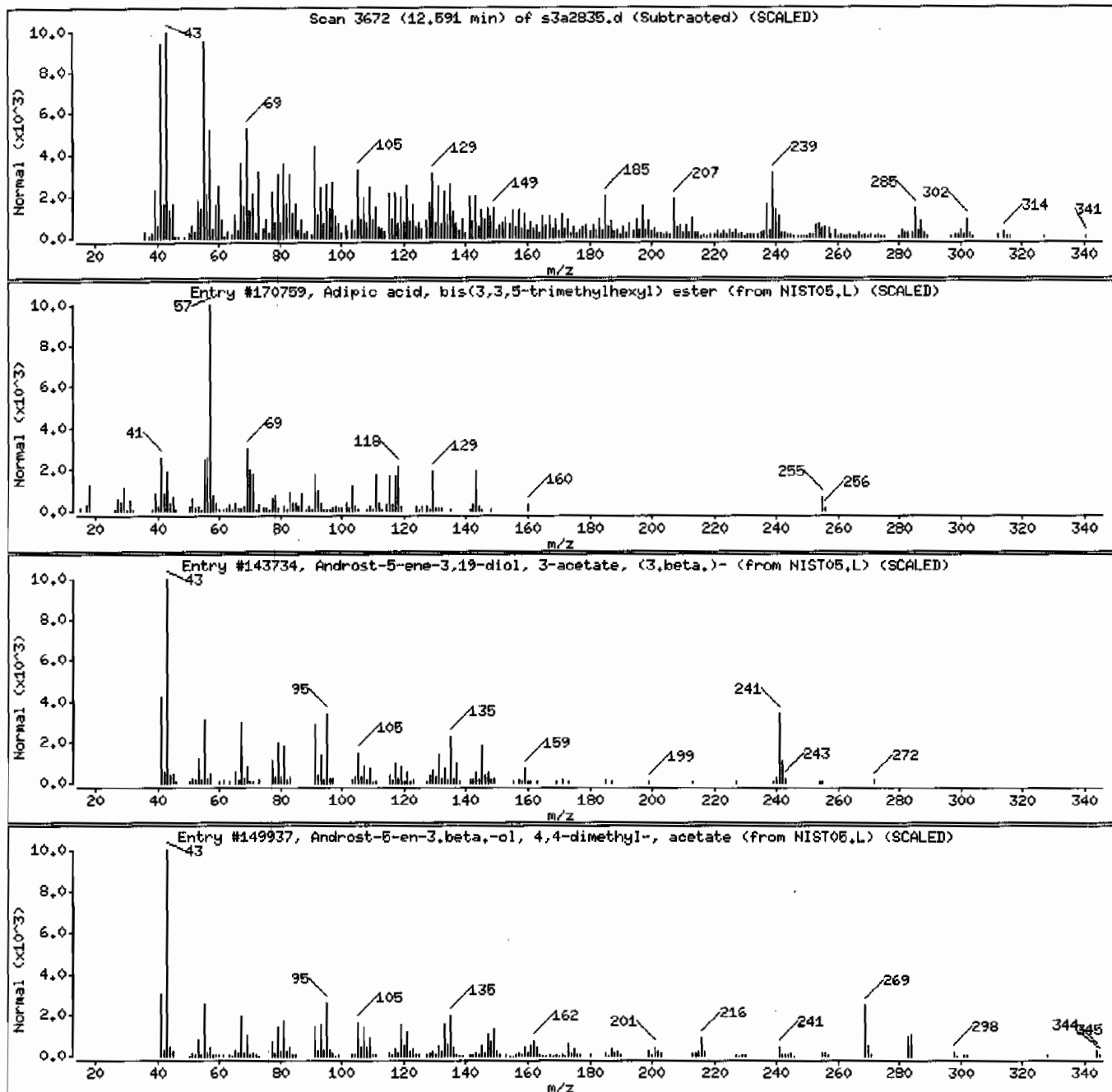
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| Unknown                                  |            |          |        |         |          |        |
| Adipic acid, bis(3,3,5-trimethylhexyl) e | 13007-41-5 | NIST05.L | 170759 | 12      | C24H46O4 | 398    |
| Androst-5-ene-3,19-diol, 3-acetate, (3,b | 55320-48-4 | NIST05.L | 143734 | 12      | C21H32O3 | 332    |
| Androst-5-en-3,beta,-ol, 4,4-dimethyl-,  | 7673-18-9  | NIST05.L | 149937 | 11      | C23H36O2 | 344    |



Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: MSD3.1

Sample Info: 1245114006194487411SVHF111LANL

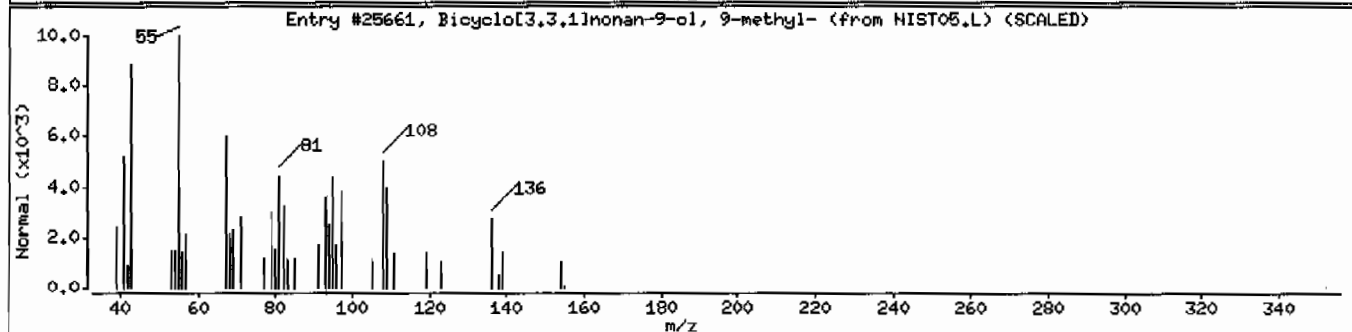
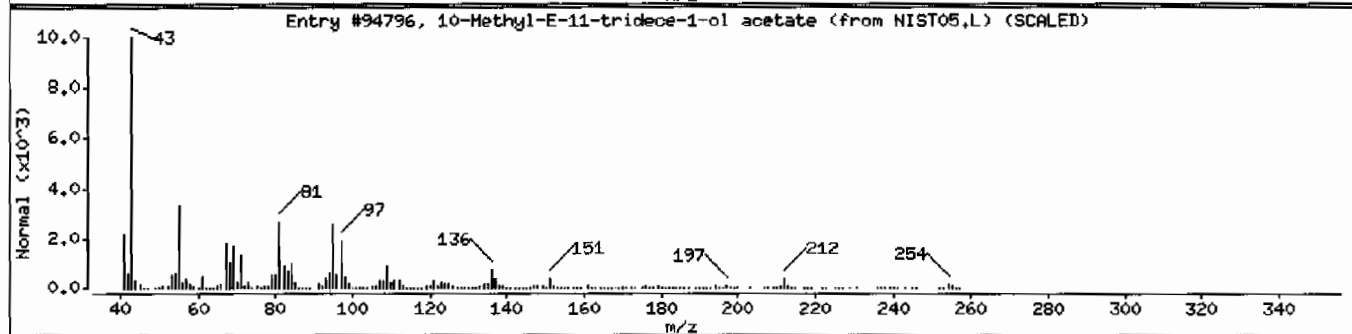
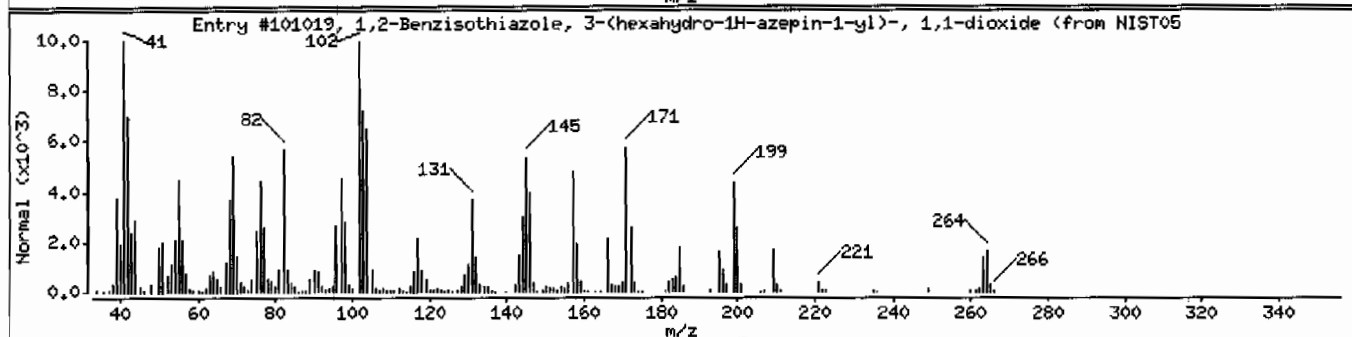
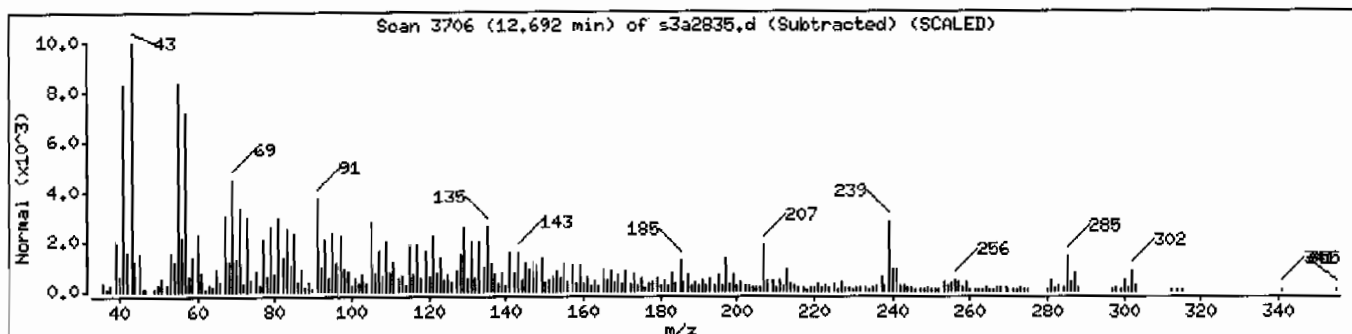
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match                                   | CAS Number   | Library  | Entry  | Quality | Formula     | Weight |
|---|--------------|----------|--------|---------|-------------|--------|
| 1,2-Benzisothiazole, 3-(hexahydro-1H-azepin-1-yl)-, 1,1-dioxide | 309735-29-3  | NIST05.L | 101019 | 90      | C13H16N2O2S | 264    |
| 10-Methyl-E-11-tridece-1-ol acetate                             | 1000130-97-3 | NIST05.L | 94796  | 44      | C16H30O2    | 254    |
| Bicyclo[3.3.1]nonan-9-ol, 9-methyl-                             | 33832-25-6   | NIST05.L | 25661  | 38      | C10H18O     | 154    |



Date : 29-JAN-2010 00:54

Client ID: RE15-10-8413

Instrument: MSD3.i

Sample Info: 1245114006194487411|SVMF11|LANL

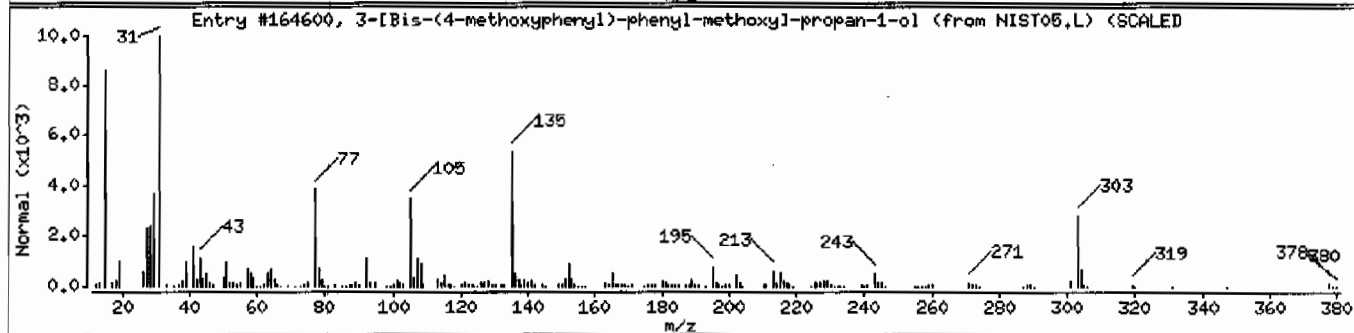
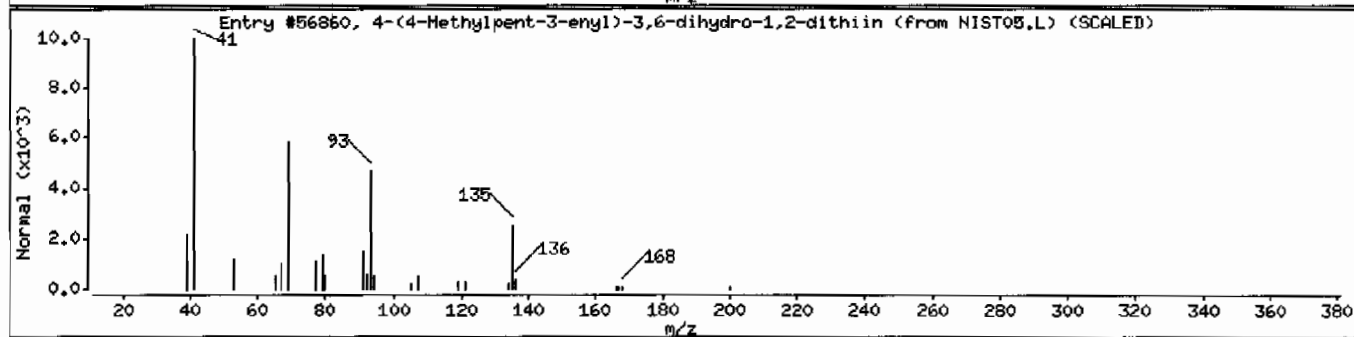
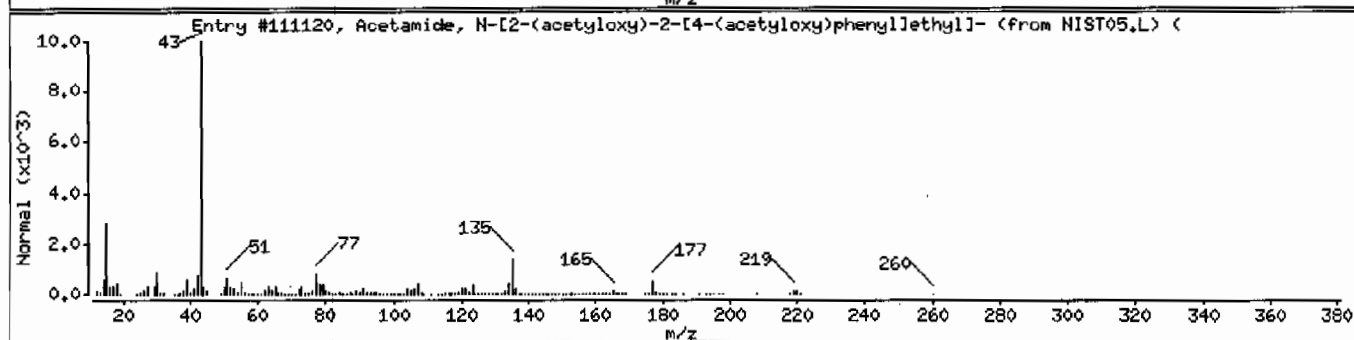
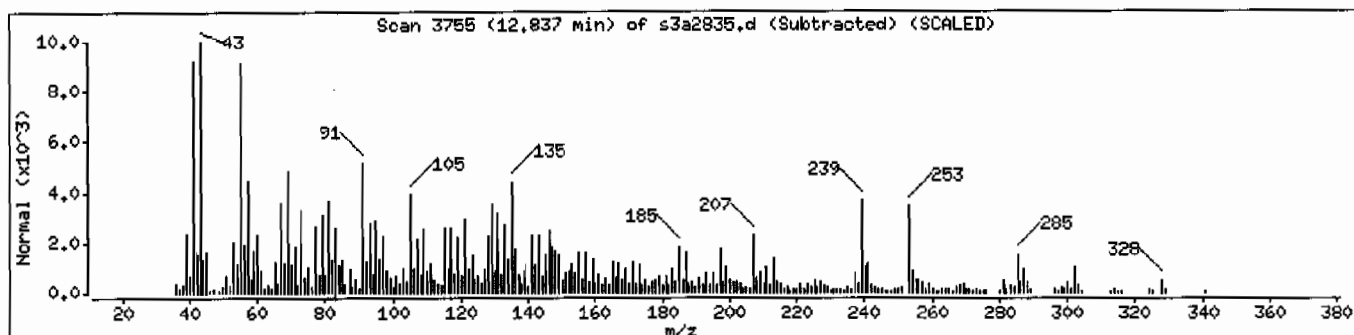
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number  | Library  | Entry  | Quality | Formula   | Weight |
|--|-------------|----------|--------|---------|-----------|--------|
| Unknown                                  |             |          |        |         |           |        |
| Acetamide, N-[2-(acetyloxy)-2-[4-(acetyl | 55044-38-7  | NIST05.L | 111120 | 10      | C14H17NO5 | 279    |
| 4-(4-Methylpent-3-enyl)-3,6-dihydro-1,2- | 73198-23-5  | NIST05.L | 56860  | 10      | C10H16S2  | 200    |
| 3-[Bis-(4-methoxyphenyl)-phenyl-methoxy] | 110676-04-2 | NIST05.L | 164600 | 10      | C24H26O4  | 378    |



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114011

Client ID: RE15-10-8416  
Batch ID: 944874  
Run Date: 01/29/2010 17:36  
Prep Date: 01/25/2010 21:06  
Data File: s3a2915.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.J  
Analyst: JLD1  
Aliquot: 30.17 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 367    | ug/kg | 73.3    | 367     |
| 108-95-2   | Phenol                        | U         | 367    | ug/kg | 73.3    | 367     |
| 95-57-8    | 2-Chlorophenol                | U         | 367    | ug/kg | 73.3    | 367     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 367    | ug/kg | 73.3    | 367     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 367    | ug/kg | 73.3    | 367     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 367    | ug/kg | 73.3    | 367     |
| 83-32-9    | Acenaphthene                  | U         | 36.7   | ug/kg | 12.1    | 36.7    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 367    | ug/kg | 36.7    | 367     |
| 100-02-7   | 4-Nitrophenol                 | U         | 367    | ug/kg | 121     | 367     |
| 87-86-5    | Pentachlorophenol             | U         | 367    | ug/kg | 91.6    | 367     |
| 129-00-0   | Pyrene                        | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 110-86-1   | Pyridine                      | U         | 367    | ug/kg | 73.3    | 367     |
| 62-53-3    | Aniline                       | U         | 367    | ug/kg | 110     | 367     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 367    | ug/kg | 73.3    | 367     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 367    | ug/kg | 73.3    | 367     |
| 100-51-6   | Benzyl alcohol                | U         | 367    | ug/kg | 110     | 367     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 367    | ug/kg | 73.3    | 367     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 367    | ug/kg | 73.3    | 367     |
| 95-48-7    | o-Cresol                      | U         | 367    | ug/kg | 73.3    | 367     |
| 65794-96-9 | m,p-Cresols                   | U         | 367    | ug/kg | 110     | 367     |
| 67-72-1    | Hexachloroethane              | U         | 367    | ug/kg | 73.3    | 367     |
| 98-95-3    | Nitrobenzene                  | U         | 367    | ug/kg | 73.3    | 367     |
| 78-59-1    | Isophorone                    | U         | 367    | ug/kg | 73.3    | 367     |
| 88-75-5    | 2-Nitrophenol                 | U         | 367    | ug/kg | 73.3    | 367     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 367    | ug/kg | 128     | 367     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 367    | ug/kg | 73.3    | 367     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 367    | ug/kg | 73.3    | 367     |
| 65-85-0    | Benzoic acid                  | U         | 733    | ug/kg | 183     | 733     |
| 91-20-3    | Naphthalene                   | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 106-47-8   | 4-Chloroaniline               | U         | 367    | ug/kg | 73.3    | 367     |
| 87-68-3    | Hexachlorobutadiene           | U         | 367    | ug/kg | 73.3    | 367     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 36.7   | ug/kg | 7.33    | 36.7    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 367    | ug/kg | 73.3    | 367     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 367    | ug/kg | 73.3    | 367     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 367    | ug/kg | 73.3    | 367     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 36.7   | ug/kg | 12.1    | 36.7    |
| 88-74-4    | 2-Nitroaniline                | U         | 367    | ug/kg | 73.3    | 367     |
| 99-09-2    | o-Nitroaniline                |           |        |       |         |         |
|            | 3-Nitroaniline                | U         | 367    | ug/kg | 73.3    | 367     |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1324  
Lab Sample ID: 245114011

Client ID: RE15-10-8416  
Batch ID: 944874  
Run Date: 01/29/2010 17:36  
Prep Date: 01/25/2010 21:06  
Data File: s3a2915.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3J  
Analyst: JLD1  
Aliquot: 30.17 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|----------------------------|-----------|--------|-------|---------|---------|
|           | <i>m</i> -Nitroaniline     |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate          | U         | 367    | ug/kg | 73.3    | 367     |
| 606-20-2  | 2,6-Dinitrotoluene         | U         | 367    | ug/kg | 36.7    | 367     |
| 208-96-8  | Acenaphthylene             | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 51-28-5   | 2,4-Dinitrophenol          | U         | 733    | ug/kg | 139     | 733     |
| 132-64-9  | Dibenzofuran               | U         | 367    | ug/kg | 73.3    | 367     |
| 84-66-2   | Diethylphthalate           | U         | 367    | ug/kg | 73.3    | 367     |
| 86-73-7   | Fluorene                   | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 7005-72-3 | 4-Chlorophenylphenylether  | U         | 367    | ug/kg | 73.3    | 367     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol | U         | 367    | ug/kg | 73.3    | 367     |
| 100-01-6  | 4-Nitroaniline             | U         | 367    | ug/kg | 110     | 367     |
|           | <i>p</i> -Nitroaniline     |           |        |       |         |         |
| 122-39-4  | Diphenylamine              | U         | 367    | ug/kg | 73.3    | 367     |
| 122-66-7  | Azobenzene                 | U         | 367    | ug/kg | 73.3    | 367     |
|           | 1,2-Diphenylhydrazine      |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether   | U         | 367    | ug/kg | 73.3    | 367     |
| 118-74-1  | Hexachlorobenzene          | U         | 367    | ug/kg | 73.3    | 367     |
| 85-01-8   | Phenanthrene               | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 120-12-7  | Anthracene                 | U         | 36.7   | ug/kg | 7.33    | 36.7    |
| 84-74-2   | Di-n-butylphthalate        | U         | 367    | ug/kg | 73.3    | 367     |
| 206-44-0  | Fluoranthene               | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 85-68-7   | Butylbenzylphthalate       | U         | 367    | ug/kg | 73.3    | 367     |
| 56-55-3   | Benzo(a)anthracene         | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 91-94-1   | 3,3'-Dichlorobenzidine     | U         | 367    | ug/kg | 110     | 367     |
| 218-01-9  | Chrysene                   | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | U         | 367    | ug/kg | 73.3    | 367     |
| 117-84-0  | Di-n-octylphthalate        | U         | 367    | ug/kg | 73.3    | 367     |
| 205-99-2  | Benzo(b)fluoranthene       | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 207-08-9  | Benzo(k)fluoranthene       | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 50-32-8   | Benzo(a)pyrene             | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene     | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 53-70-3   | Dibenzo(a,h)anthracene     | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 191-24-2  | Benzo(ghi)perylene         | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 120-82-1  | 1,2,4-Trichlorobenzene     | U         | 367    | ug/kg | 73.3    | 367     |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.04 | 3140      | ug/kg |     | J    |
|         | Unknown                               | 2.2  | 266       | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114011

Client ID: RE15-10-8416  
Batch ID: 944874  
Run Date: 01/29/2010 17:36  
Prep Date: 01/25/2010 21:06  
Data File: s3a2915.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.17 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.  | Parmname                                 | Qualifier | Result    | Units | MDL/LOD | PQL/LOQ |
|--|--|-----------|-----------|-------|---------|---------|
| <b>Tentatively Identified Compound Summary</b> |  |           |           |       |         |         |
| CAS No.  | Tentatively Identified Compound (TIC)    | RT        | Estimated | Units | Fit     | Qual    |
|  | Unknown Aldol Condensate                 | 3.26      | 182       | ug/kg |         | JA      |
| 498-15-7                                       | Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy | 4.59      | 152       | ug/kg | 97      | NJ      |
|  | Unknown                                  | 11.29     | 152       | ug/kg |         | J       |
|  | Unknown                                  | 11.33     | 241       | ug/kg |         | J       |
|  | Unknown                                  | 11.55     | 185       | ug/kg |         | J       |
| 1235-74-1                                      | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.67     | 222       | ug/kg | 99      | NJ      |
|  | Unknown                                  | 11.89     | 163       | ug/kg |         | J       |
|  | Unknown                                  | 13.71     | 154       | ug/kg |         | J       |
|  | Unknown                                  | 14.15     | 191       | ug/kg |         | J       |
|  | Unknown                                  | 15.22     | 3090      | ug/kg |         | J       |
|  | Unknown                                  | 15.52     | 152       | ug/kg |         | J       |
|  | Unknown                                  | 16.03     | 3180      | ug/kg |         | J       |
|  | Unknown                                  | 16.17     | 235       | ug/kg |         | J       |
|  | Unknown                                  | 16.49     | 178       | ug/kg |         | J       |
| 83-46-5  | .beta.-Sitosterol                        | 17.27     | 733       | ug/kg | 95      | NJ      |
|  | Unknown                                  | 17.36     | 275       | ug/kg |         | J       |
|  | Unknown                                  | 17.37     | 390       | ug/kg |         | J       |

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012910a.b/s3a2915.d  
Lab Smp Id: 245114011 Client Smp ID: RE15-10-8416  
Inj Date : 29-JAN-2010 17:36  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |245114011|944874|1|SVMF|1|LANL  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012910a.b/MSD3-8270R-AQA-012110.m  
Meth Date : 30-Jan-2010 14:32 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 8  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1324.sub  
Target Version: 3.50  
Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.17000  | weight of sample          |
| M    | 9.57070   | % moisture                |

Cpnd Variable Local Compound Variable

| Compounds                   | QUANT SIG |        |        |         | CONCENTRATIONS       |                  |
|-----------------------------|-----------|--------|--------|---------|----------------------|------------------|
|                             | MASS      | RT     | EXP RT | REL RT  | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/Kg) |
| * 10 1,4-Dichlorobenzene-d4 | 152       | 4.647  | 4.648  | (1.000) | 578221               | 40.0000          |
| * 29 Naphthalene-d8         | 136       | 5.918  | 5.923  | (1.000) | 2197391              | 40.0000          |
| * 46 Acenaphthene-d10       | 164       | 7.789  | 7.792  | (1.000) | 1198309              | 40.0000          |
| * 67 Phenanthrene-d10       | 188       | 9.399  | 9.403  | (1.000) | 1922801              | 40.0000          |
| * 91 Chrysene-d12           | 240       | 12.371 | 12.377 | (1.000) | 1054671              | 40.0000          |
| * 98 Perylene-d12           | 264       | 14.610 | 14.616 | (1.000) | 534652               | 40.0000          |
| \$ 3 2-Fluorophenol         | 112       | 3.491  | 3.481  | (0.751) | 1047416              | 69.6140 2550     |
| \$ 5 Phenol-d5              | 99        | 4.260  | 4.261  | (0.917) | 1290431              | 68.2419 2500     |
| \$ 20 Nitrobenzene-d5       | 82        | 5.182  | 5.186  | (0.876) | 630735               | 38.8578 1420     |
| \$ 39 2-Fluorobiphenyl      | 172       | 7.049  | 7.051  | (0.905) | 1188965              | 38.3862 1410     |
| \$ 60 2,4,6-Tribromophenol  | 329       | 8.638  | 8.642  | (1.109) | 246204               | 71.6705 2630     |
| \$ 81 p-Terphenyl-d14       | 244       | 11.116 | 11.113 | (0.899) | 1018073              | 56.1608 2060     |

## ION RATIO REPORT

## SV REPORT

Data file: s3a2915.d

Report Date: 01/30/2010 14:37

Lab. ID: 245114011

SampleType: SAMPLE

Injection Date: 29-JAN-2010 17:36

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245114011|944874|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012910a.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1324

Sample Matrix: SOIL

| MASS                      | RESPONSE | RT             | EXPECT RT | TARGET RANGE | RATIO | QUAL |
|---------------------------|----------|----------------|-----------|--------------|-------|------|
| =====                     |          |                |           |              |       |      |
| 4 Aniline                 |          | CAS#: 62-53-3  |           |              |       |      |
| 66                        | 74617    | 4.26           | 4.34      | 80-120       | 100   | (T)  |
| 93                        | 8292     | 4.31           | 4.34      | 197-257      | 11    | (Q)  |
| -----                     |          |                |           |              |       |      |
| 17 N-Nitrosodipropylamine |          | CAS#: 621-64-7 |           |              |       |      |
| 70                        | 91632    | 5.18           | 5.02      | 80-120       | 100   | (T)  |
| 42                        | 59787    | 5.18           | 5.02      | 49-109       | 65    | (T)  |
| -----                     |          |                |           |              |       |      |
| 40 2-Chloronaphthalene    |          | CAS#: 91-58-7  |           |              |       |      |
| 162                       | 22774    | 7.39           | 7.19      | 80-120       | 100   | (T)  |
| 164                       | 1356     | 7.39           | 7.19      | 2- 62        | 6     | (T)  |
| 127                       | 1802     | 7.39           | 7.19      | 10- 70       | 8     | (QT) |
| -----                     |          |                |           |              |       |      |
| 42 o-Nitroaniline         |          | CAS#: 88-74-4  |           |              |       |      |
| 65                        | 31187    | 7.39           | 7.30      | 80-120       | 100   | (T)  |
| 92                        | 34698    | 7.39           | 7.30      | 31- 91       | 111   | (QT) |
| 138                       | 2564     | 7.39           | 7.30      | 67-127       | 8     | (QT) |
| -----                     |          |                |           |              |       |      |
| 41 m-Nitroaniline         |          | CAS#: 99-09-2  |           |              |       |      |
| 138                       | 205      | 7.79           | 7.74      | 80-120       | 100   | ( )  |
| 92                        | 7933     | 7.79           | 7.74      | 81-141       | 3852  | (Q)  |
| 108                       | 27533    | 7.79           | 7.74      | 0- 40        | 13368 | (Q)  |
| -----                     |          |                |           |              |       |      |
| 44 2,6-Dinitrotoluene     |          | CAS#: 606-20-2 |           |              |       |      |
| 165                       | 155676   | 7.79           | 7.99      | 80-120       | 100   | (T)  |
| 63                        | 2841     | 7.79           | 7.99      | 26- 86       | 2     | (QT) |
| -----                     |          |                |           |              |       |      |



| MASS                  | RESPONSE | RT             | EXPECT RT | TARGET RANGE | RATIO | QUAL |
|-----------------------|----------|----------------|-----------|--------------|-------|------|
| 50 2,4-Dinitrotoluene |          | CAS#: 121-14-2 |           |              |       |      |
| 165                   | 155676   | 7.79           | 7.99      | 80-120       | 100   | (T)  |
| 89                    | 2878     | 7.79           | 7.99      | 46-106       | 2     | (QT) |
| 63                    | 2841     | 7.79           | 7.99      | 26- 86       | 2     | (QT) |

|                   |     |                |      |        |     |     |
|-------------------|-----|----------------|------|--------|-----|-----|
| 56 p-Nitroaniline |     | CAS#: 100-01-6 |      |        |     |     |
| 138               | 147 | 8.45           | 8.40 | 80-120 | 100 | ( ) |
| 108               | 136 | 8.43           | 8.40 | 46-106 | 93  | ( ) |
| 92                | 136 | 8.38           | 8.40 | 18- 78 | 93  | (Q) |

|                           |     |               |       |        |     |      |
|---------------------------|-----|---------------|-------|--------|-----|------|
| 90 3,3'-Dichlorobenzidine |     | CAS#: 91-94-1 |       |        |     |      |
| 252                       | 185 | 12.19         | 12.31 | 80-120 | 100 | (T)  |
| 254                       | 170 | 12.16         | 12.31 | 34- 94 | 92  | (T)  |
| 126                       | 582 | 12.18         | 12.31 | 0- 46  | 314 | (QT) |

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012910a.b/s3a2915.d  
Lab Smp Id: 245114011 Client Smp ID: RE15-10-8416  
Inj Date : 29-JAN-2010 17:36  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |245114011|944874|1|SVMF|1|LANL  
Misc Info : |MSD8270 S|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012910a.b/MSD3-8270R-AQA-012110.m  
Meth Date : 30-Jan-2010 14:32 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 8  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1324.sub  
Target Version: 3.50  
Processing Host: hpclp1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.17000  | weight of sample          |
| M    | 9.57070   | % moisture                |

Cpnd Variable

Local Compound Variable

| ISTD                        | RT     | AREA    | AMOUNT |
|-----------------------------|--------|---------|--------|
| =====                       | =====  | =====   | =====  |
| * 10 1,4-Dichlorobenzene-d4 | 4.647  | 3719351 | 40.000 |
| * 91 Chrysene-d12           | 12.371 | 3840939 | 40.000 |
| * 98 Perylene-d12           | 14.610 | 1659578 | 40.000 |

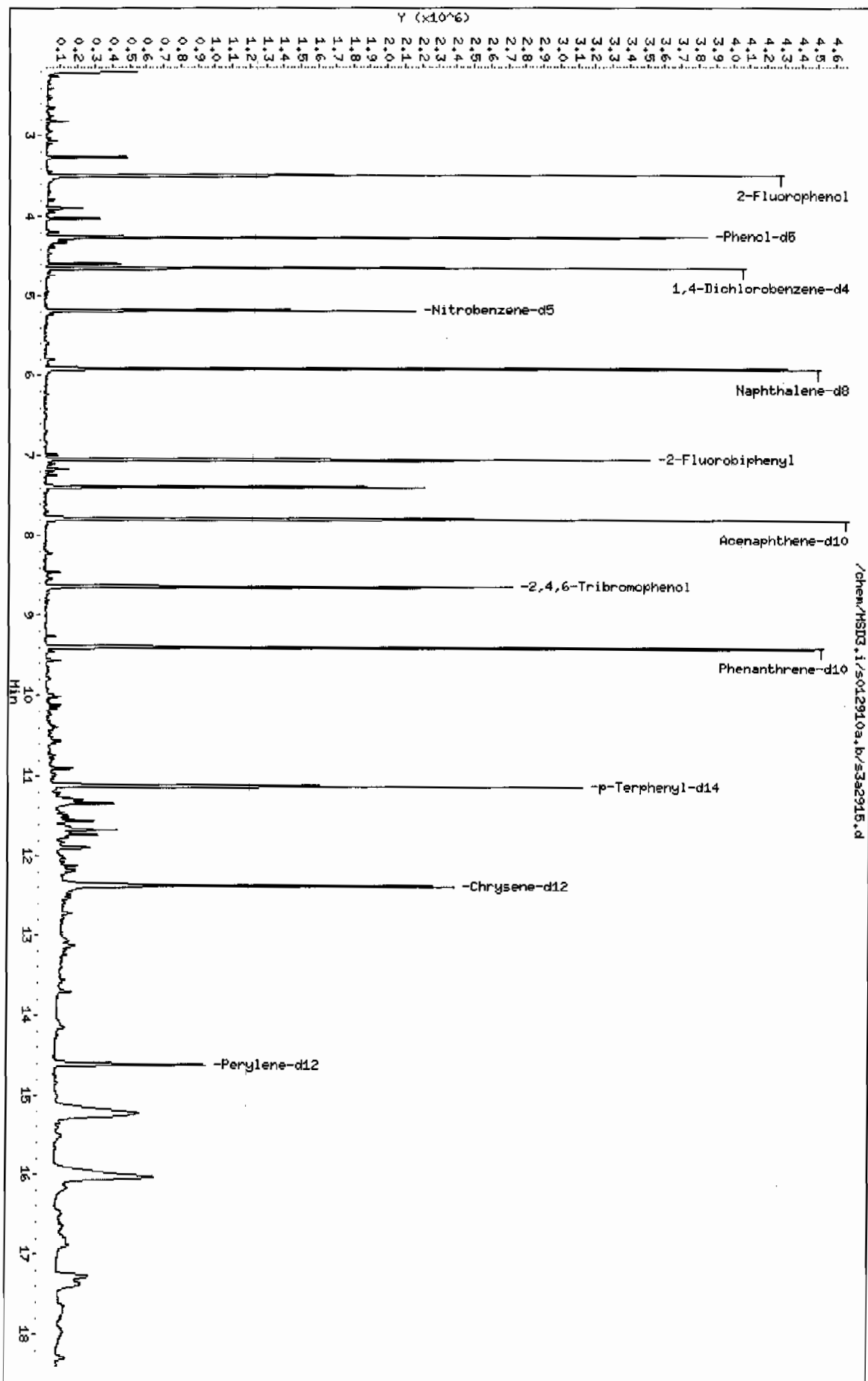
| CONCENTRATIONS |      |               |              | QUANT |         |           |        |
|----------------|------|---------------|--------------|-------|---------|-----------|--------|
| RT             | AREA | ON-COL(ng/ul) | FINAL(ug/Kg) | QUAL  | LIBRARY | LIB ENTRY | CPND # |
| ----           | ---- | -----         | -----        | ----  | -----   | -----     | -----  |

| RT                                       | CONCENTRATIONS |               |              | QUAL | QUANT            |           | CPND # |
|--|----------------|---------------|--------------|------|------------------|-----------|--------|
|  | AREA           | ON-COL(ng/ul) | FINAL(ug/Kg) |      | LIBRARY          | LIB ENTRY |        |
| Unknown                                  |                |               |              |      | CAS #:           |           |        |
| 2.036                                    | 7963003        | 85.6386116    | 3140         | 0    |                  | 0         | 10     |
| Unknown                                  |                |               |              |      | CAS #:           |           |        |
| 2.200                                    | 674903         | 7.25828717    | 266          | 0    |                  | 0         | 10     |
| Unknown Aldol Condensate                 |                |               |              |      | CAS #:           |           |        |
| 3.262                                    | 461011         | 4.95797247    | 182          | 0    |                  | 0         | 10     |
| Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy |                |               |              |      | CAS #: 498-15-7  |           |        |
| 4.589                                    | 385832         | 4.14945303    | 152          | 97   | NIST05.L         | 15369     | 10     |
| Unknown                                  |                |               |              |      | CAS #:           |           |        |
| 11.293                                   | 397385         | 4.13841951    | 152          | 0    |                  | 0         | 91     |
| Unknown                                  |                |               |              |      | CAS #:           |           |        |
| 11.332                                   | 630911         | 6.57038512    | 241          | 0    |                  | 0         | 91     |
| Unknown                                  |                |               |              |      | CAS #:           |           |        |
| 11.553                                   | 483824         | 5.03859777    | 185          | 0    |                  | 0         | 91     |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 |                |               |              |      | CAS #: 1235-74-1 |           |        |
| 11.668                                   | 580428         | 6.04464236    | 222          | 99   | NIST05.L         | 133618    | 91     |
| Unknown                                  |                |               |              |      | CAS #:           |           |        |
| 11.893                                   | 426858         | 4.44535141    | 163          | 0    |                  | 0         | 91     |
| Unknown                                  |                |               |              |      | CAS #:           |           |        |
| 13.706                                   | 174840         | 4.21409244    | 154          | 0    |                  | 0         | 98     |
| Unknown                                  |                |               |              |      | CAS #:           |           |        |
| 14.149                                   | 216286         | 5.21302874    | 191          | 0    |                  | 0         | 98     |
| Unknown                                  |                |               |              |      | CAS #:           |           |        |
| 15.218                                   | 3495845        | 84.2586149    | 3090         | 0    |                  | 0         | 98     |
| Unknown                                  |                |               |              |      | CAS #:           |           |        |
| 15.516                                   | 172114         | 4.14838807    | 152          | 0    |                  | 0         | 98     |
| Unknown                                  |                |               |              |      | CAS #:           |           |        |
| 16.027                                   | 3597478        | 86.7082274    | 3180         | 0    |                  | 0         | 98     |
| Unknown                                  |                |               |              |      | CAS #:           |           |        |
| 16.169                                   | 266007         | 6.41143858    | 235          | 0    |                  | 0         | 98     |

| RT                | CONCENTRATIONS |               |              |      | QUANT          |           |        |
|-------------------|----------------|---------------|--------------|------|----------------|-----------|--------|
|                   | AREA           | ON-COL(ng/ul) | FINAL(ug/Kg) | QUAL | LIBRARY        | LIB ENTRY | CPND # |
| Unknown           |                |               |              |      | CAS #:         |           |        |
| 16.488            | 201675         | 4.86086232    | 178          | 0    |                | 0         | 98     |
| .beta.-Sitosterol |                |               |              |      | CAS #: 83-46-5 |           |        |
| 17.270            | 829428         | 19.9912873    | 733          | 95   | NIST05.L       | 174399    | 98     |
| Unknown           |                |               |              |      | CAS #:         |           |        |
| 17.359            | 311088         | 7.49799981    | 275          | 0    |                | 0         | 98     |
| Unknown           |                |               |              |      | CAS #:         |           |        |
| 17.374            | 441450         | 10.6400383    | 390          | 0    |                | 0         | 98     |

Data File: /chem/HSD3.i/s012910a.b/s3a2915.d  
 Date: 29-JAN-2010 17:36  
 Client ID: RE15-10-8416  
 Sample Info: 1245114011/94487411SVNF111LNL  
 Volume Injected (uL): 0.5  
 Column phase: J&W DB-5MS

Instrument: MSD3.i  
 Operator: JLDI  
 Column diameter: 0.20



Date : 29-JAN-2010 17:36

Client ID: RE15-10-8416

Instrument: MSD3.1

Sample Info: 12451140111944874111SVMF111LANL

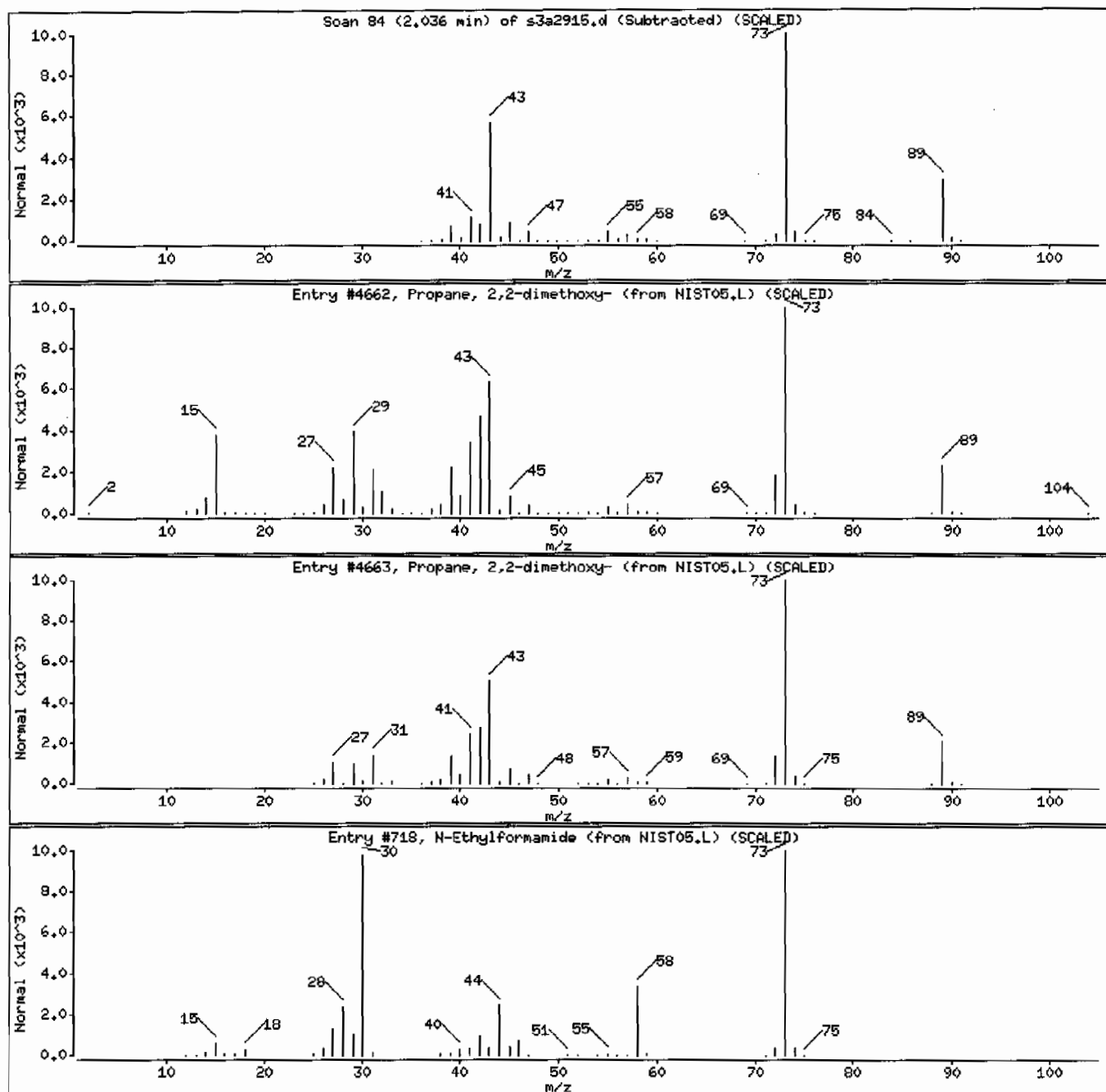
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown                       |            |          |       |         |         |        |
| Propane, 2,2-dimethoxy-       | 77-76-9    | NIST05.L | 4662  | 50      | C5H12O2 | 104    |
| Propane, 2,2-dimethoxy-       | 77-76-9    | NIST05.L | 4663  | 38      | C5H12O2 | 104    |
| N-Ethylformamide              | 627-45-2   | NIST05.L | 718   | 9       | C3H7NO  | 73     |



Date : 29-JAN-2010 17:36

Client ID: RE15-10-8416

Instrument: MSD3.i

Sample Info: 12451140111944874111SVHF111LANL

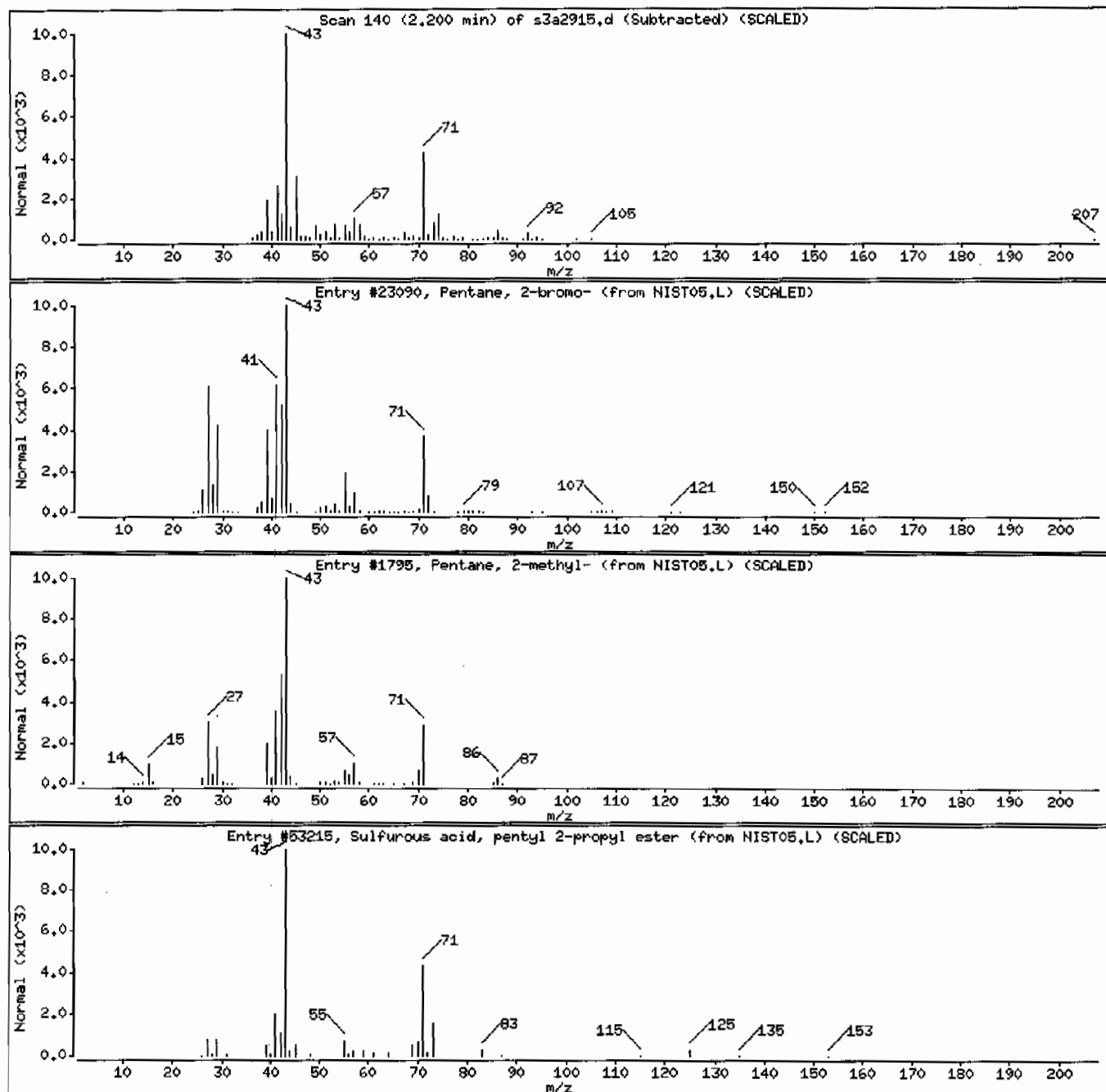
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match         | CAS Number   | Library  | Entry | Quality | Formula  | Weight |
|---------------------------------------|--------------|----------|-------|---------|----------|--------|
| Unknown                               |              |          |       |         |          |        |
| Pentane, 2-bromo-                     | 107-81-3     | NIST05.L | 23090 | 25      | C5H11Br  | 150    |
| Pentane, 2-methyl-                    | 107-83-5     | NIST05.L | 1795  | 22      | C6H14    | 86     |
| Sulfurous acid, pentyl 2-propyl ester | 1000309-11-5 | NIST05.L | 53215 | 17      | C8H18O3S | 194    |



Date : 29-JAN-2010 17:36

Client ID: RE15-10-8416

Instrument: MSD3.i

Sample Info: 1245114011/944874111SVMF111LANL

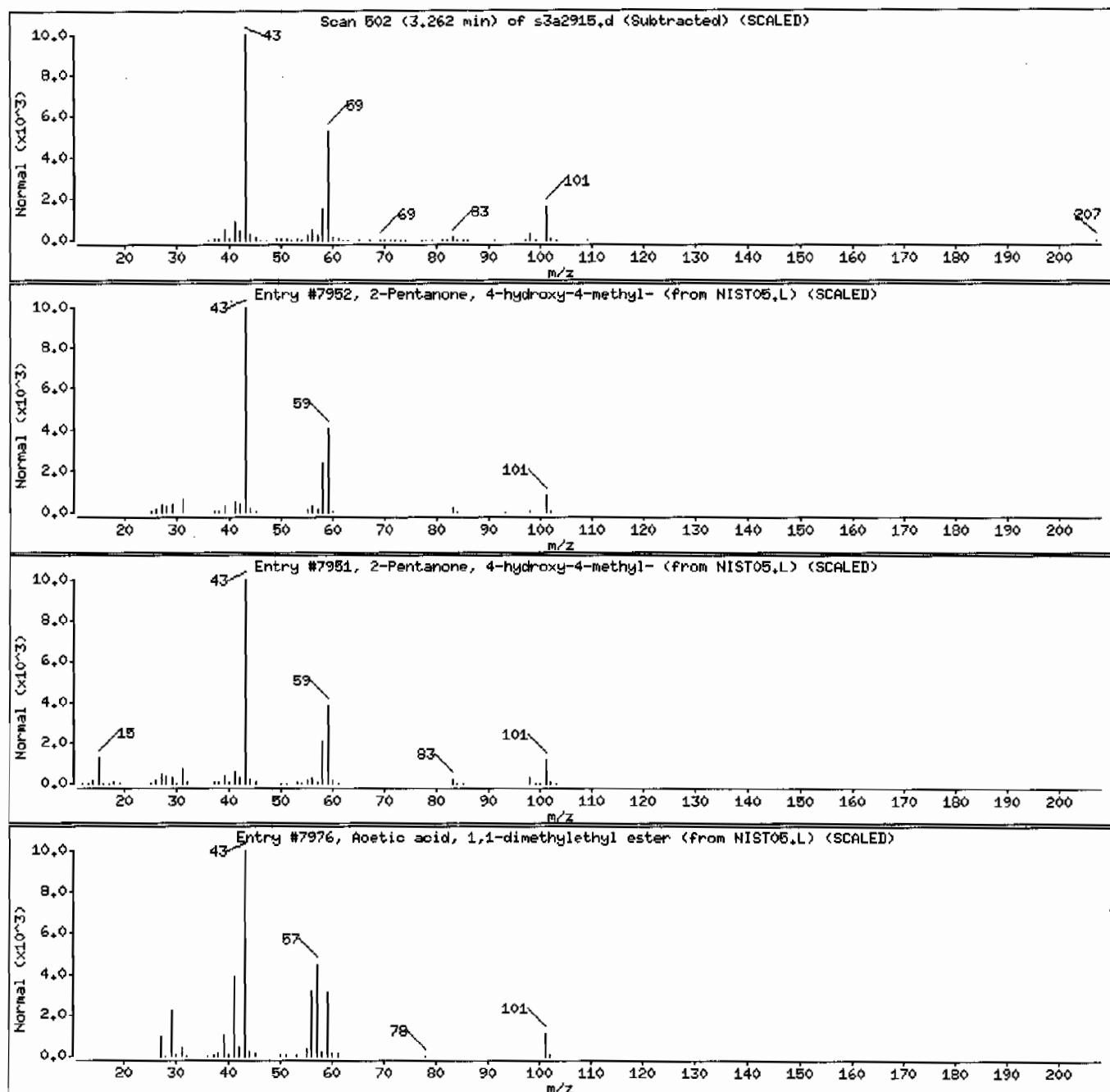
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match        | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--------------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown Aldol Condensate             |            |          |       |         |         |        |
| 2-Pentanone, 4-hydroxy-4-methyl-     | 123-42-2   | NIST05.L | 7952  | 50      | C6H12O2 | 116    |
| 2-Pentanone, 4-hydroxy-4-methyl-     | 123-42-2   | NIST05.L | 7951  | 45      | C6H12O2 | 116    |
| Acetic acid, 1,1-dimethylethyl ester | 540-88-5   | NIST05.L | 7976  | 38      | C6H12O2 | 116    |





Date : 29-JAN-2010 17:36

Client ID: RE15-10-8416

Instrument: MSD3.i

Sample Info: 12451140111944874111SVHF111LANL

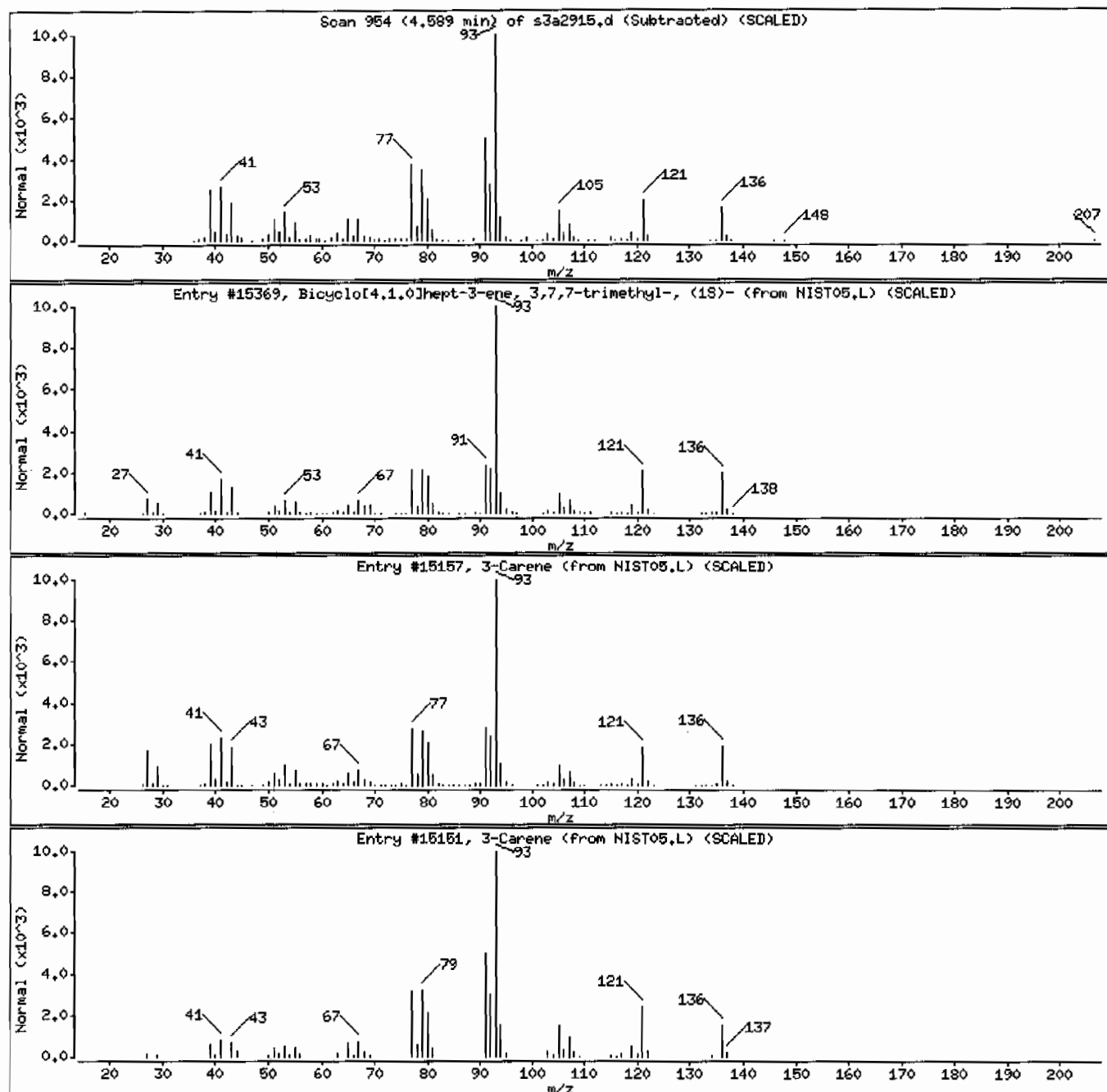
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match              | CAS Number | Library  | Entry | Quality | Formula                         | Weight |
|--|------------|----------|-------|---------|---------------------------------|--------|
| Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl- | 498-15-7   | NIST05.L | 15369 | 97      | C <sub>10</sub> H <sub>16</sub> | 136    |
| 3-Carene                                   | 13466-78-9 | NIST05.L | 15157 | 97      | C <sub>10</sub> H <sub>16</sub> | 136    |
| 3-Carene                                   | 13466-78-9 | NIST05.L | 15151 | 96      | C <sub>10</sub> H <sub>16</sub> | 136    |



Date : 29-JAN-2010 17:36

Client ID: RE15-10-8416

Instrument: MSD3.i

Sample Info: 12451140111944874111SVMF111LANL

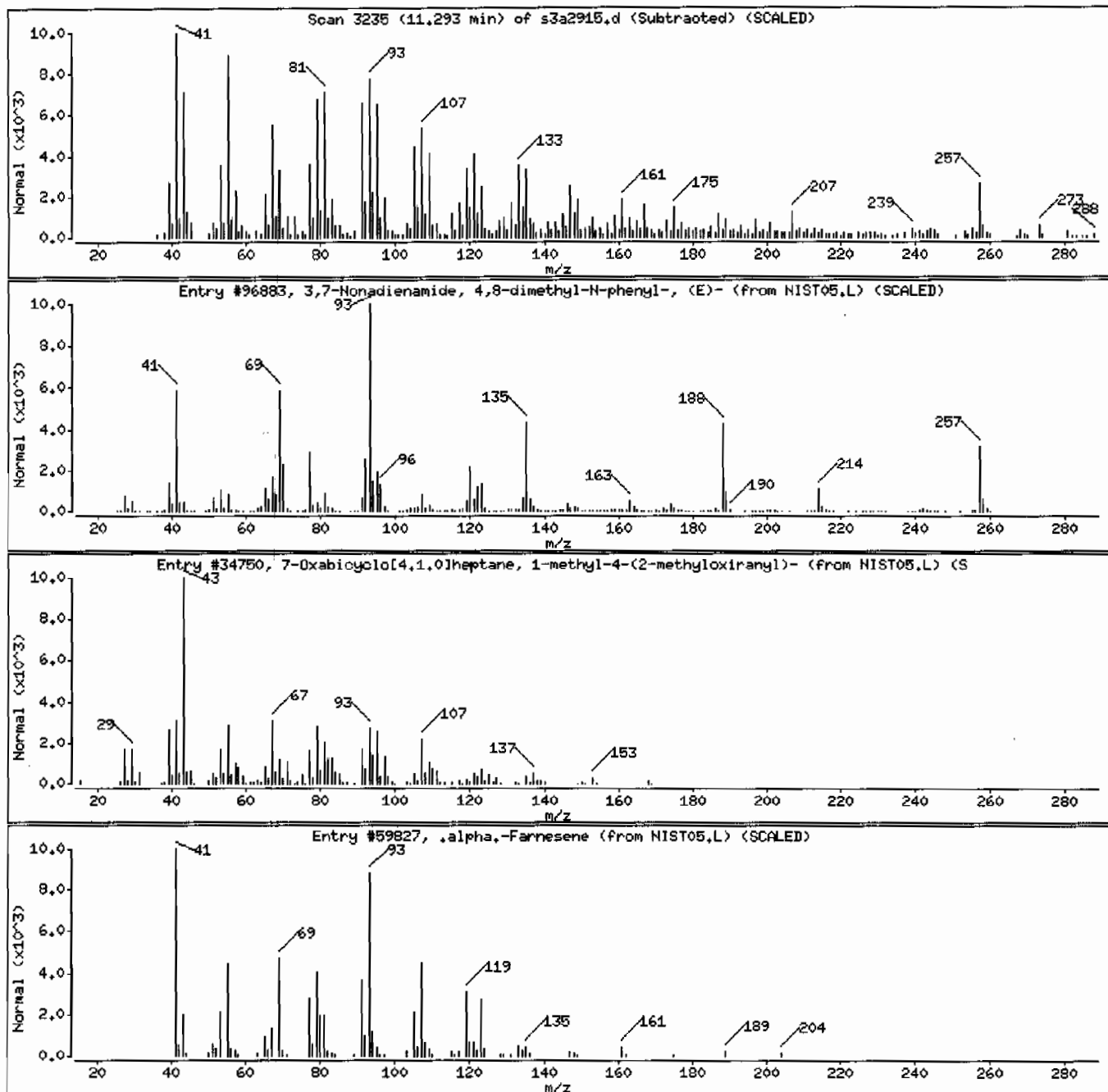
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number  | Library  | Entry | Quality | Formula  | Weight |
|--|-------------|----------|-------|---------|----------|--------|
| Unknown                                  |             |          |       |         |          |        |
| 3,7-Nonadienamide, 4,8-dimethyl-N-phenyl | 104476-99-5 | NIST05.L | 96883 | 51      | C17H23NO | 257    |
| 7-Oxabicyclo[4.1.0]heptane, 1-methyl-4-( | 96-08-2     | NIST05.L | 34750 | 50      | C10H16O2 | 168    |
| .alpha.-Farnesene                        | 502-61-4    | NIST05.L | 59827 | 50      | C15H24   | 204    |



Date : 29-JAN-2010 17:36

Client ID: RE15-10-8416

Instrument: MSD3.i

Sample Info: 1245114011194487411SVHF111LANL

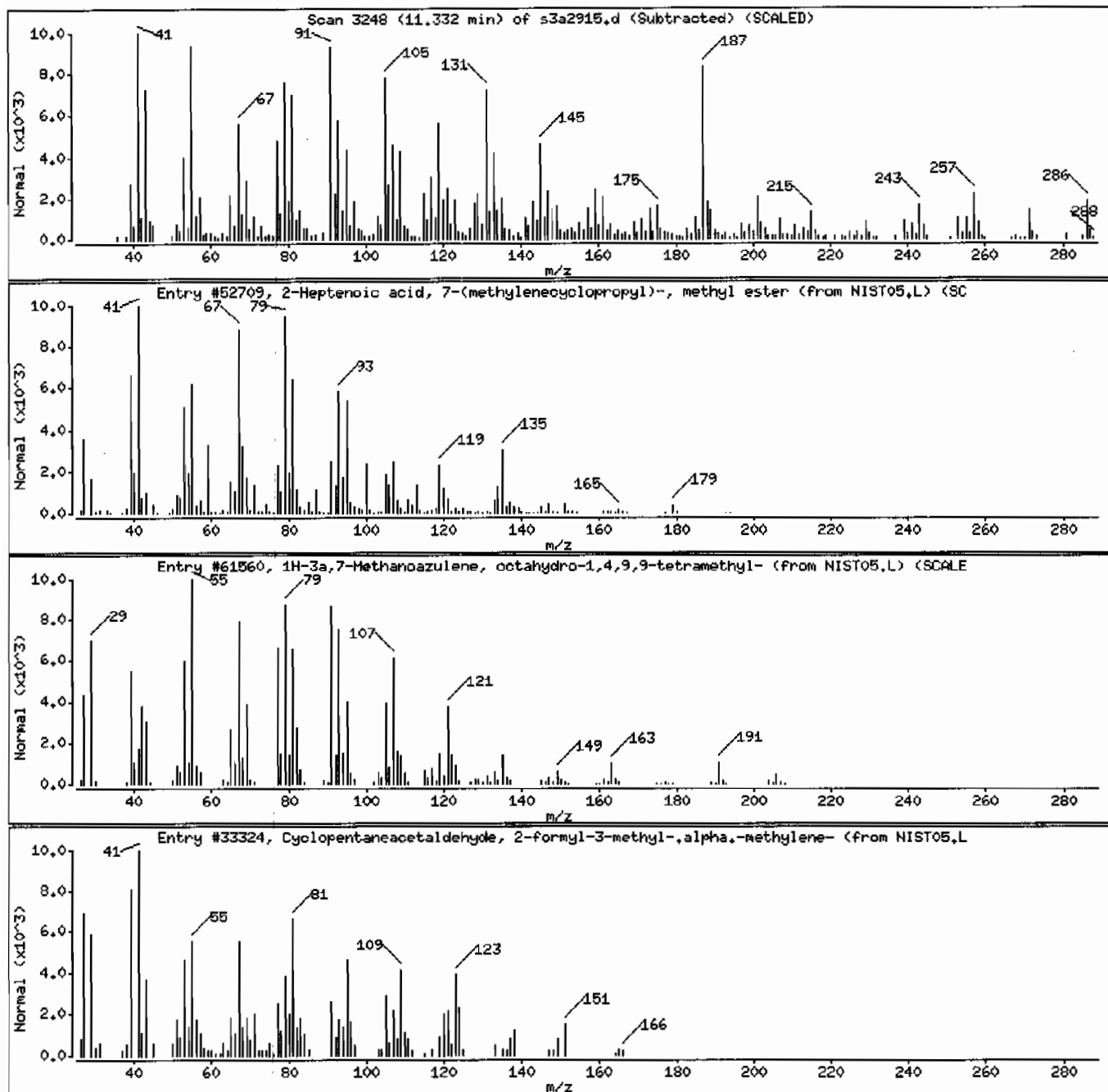
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match              | CAS Number   | Library  | Entry | Quality | Formula  | Weight |
|--|--------------|----------|-------|---------|----------|--------|
| Unknown                                    |              |          |       |         |          |        |
| 2-Heptenoic acid, 7-(methylenecyclopropyl) | 1000158-04-1 | NIST05.L | 52709 | 38      | C12H18O2 | 194    |
| 1H-3a,7-Methanoazulene, octahydro-1,4,9,   | 25491-20-7   | NIST05.L | 61560 | 35      | C15H26   | 206    |
| Cyclopentaneacetaldehyde, 2-formyl-3-met   | 5951-67-5    | NIST05.L | 33324 | 30      | C10H14O2 | 166    |



Date : 29-JAN-2010 17:36

Client ID: RE15-10-8416

Instrument: MSD3.1

Sample Info: 12451140111944874111SVHF111LANL

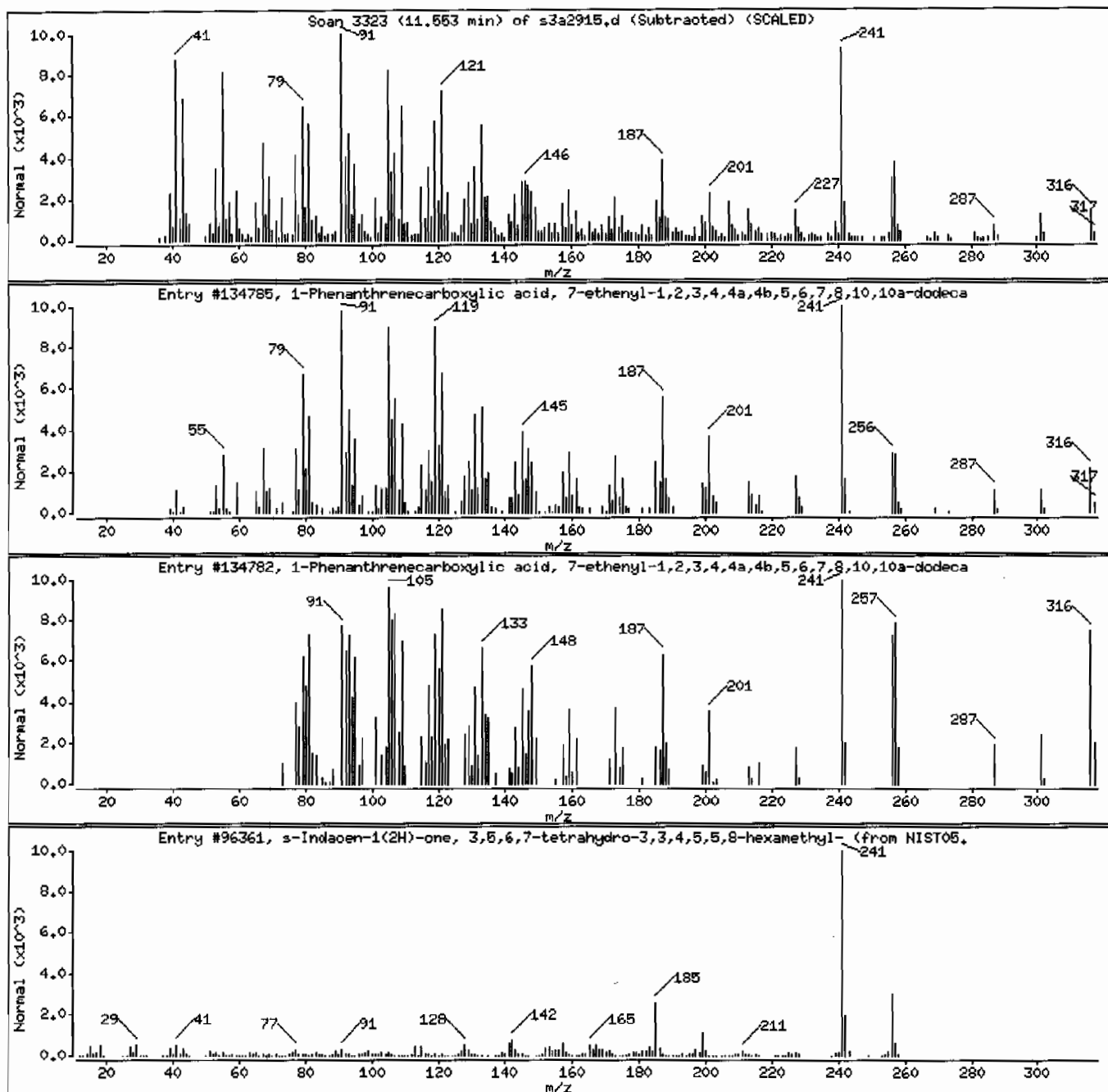
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| Unknown                                  |            |          |        |         |          |        |
| 1-Phenanthrenecarboxylic acid, 7-ethenyl | 1686-62-0  | NIST05.L | 134785 | 70      | C21H32O2 | 316    |
| 1-Phenanthrenecarboxylic acid, 7-ethenyl | 1686-62-0  | NIST05.L | 134782 | 62      | C21H32O2 | 316    |
| s-Indacen-1(2H)-one, 3,6,6,7-tetrahydro- | 38754-94-8 | NIST05.L | 96361  | 59      | C18H24O  | 256    |



Date : 29-JAN-2010 17:36

Client ID: RE15-10-8416

Instrument: MSD3.i

Sample Info: 1245114011/94487411/SVHF11/LANL

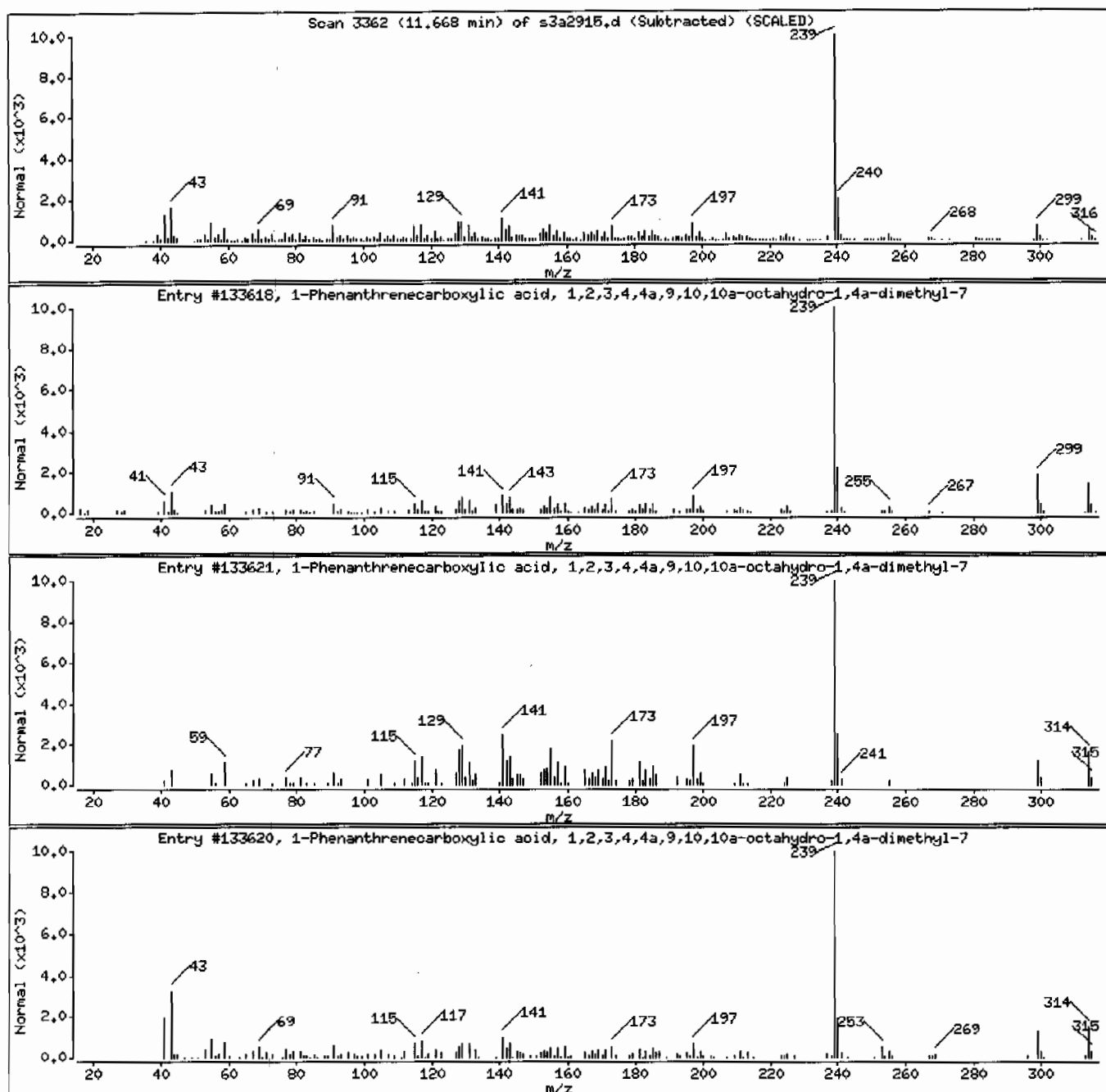
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133618 | 99      | C21H30O2 | 314    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133621 | 95      | C21H30O2 | 314    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133620 | 93      | C21H30O2 | 314    |



Date : 29-JAN-2010 17:36

Client ID: RE15-10-8416

Instrument: MSD3.i

Sample Info: 1245114011194487411SVHF11ILANL

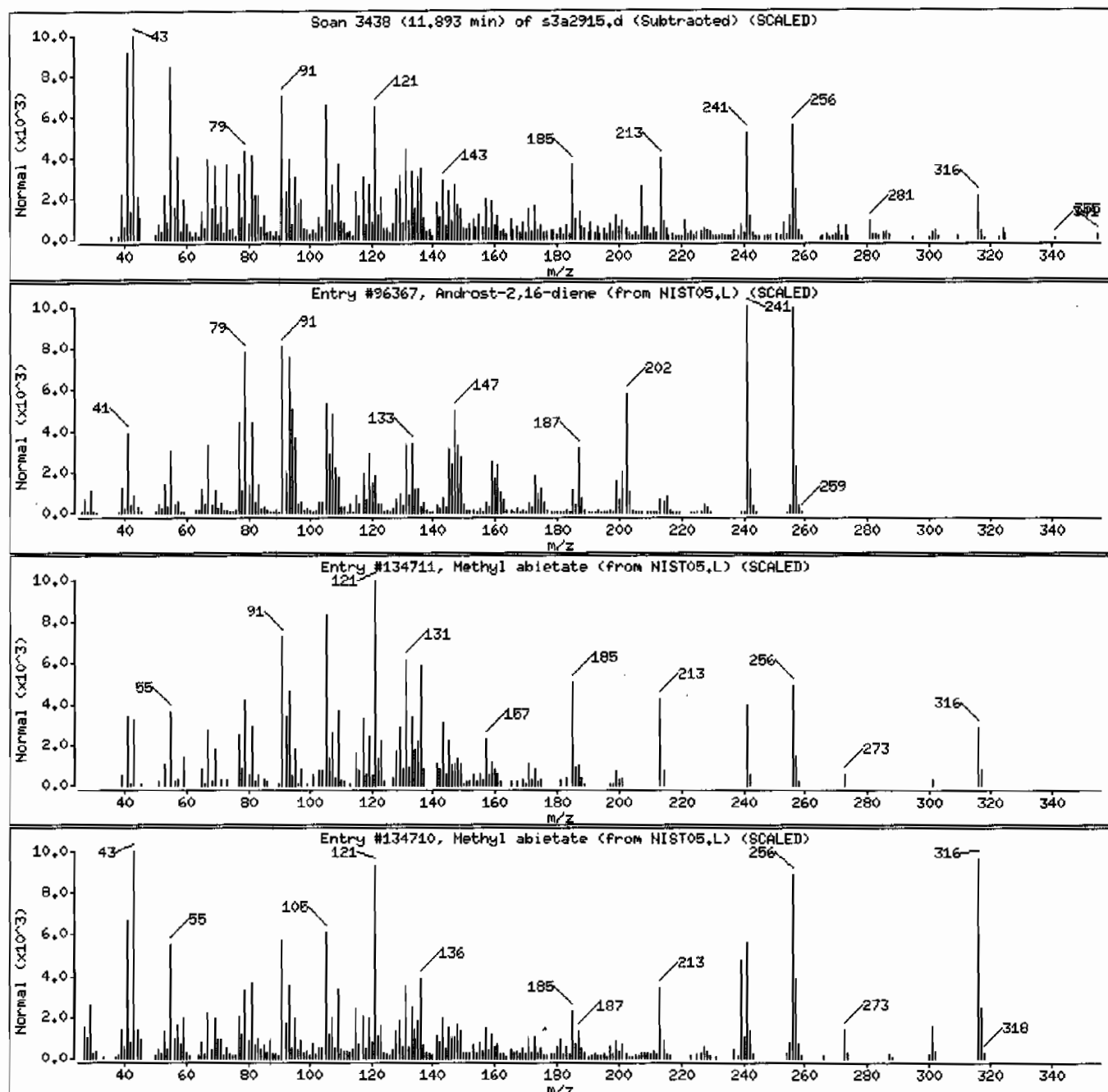
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5HS

Column diameter: 0.20

| Library Search Compound Match | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|-------------------------------|--------------|----------|--------|---------|----------|--------|
| Unknown                       |              |          |        |         |          |        |
| Androst-2,16-diene            | 1000193-07-5 | NIST05.L | 96367  | 64      | C19H28   | 256    |
| Methyl abietate               | 127-25-3     | NIST05.L | 134711 | 60      | C21H32O2 | 316    |
| Methyl abietate               | 127-25-3     | NIST05.L | 134710 | 49      | C21H32O2 | 316    |



Date : 29-JAN-2010 17:36

Client ID: RE15-10-8416

Instrument: MSD3.i

Sample Info: 1245114011/94487411/SVHF11/LANL

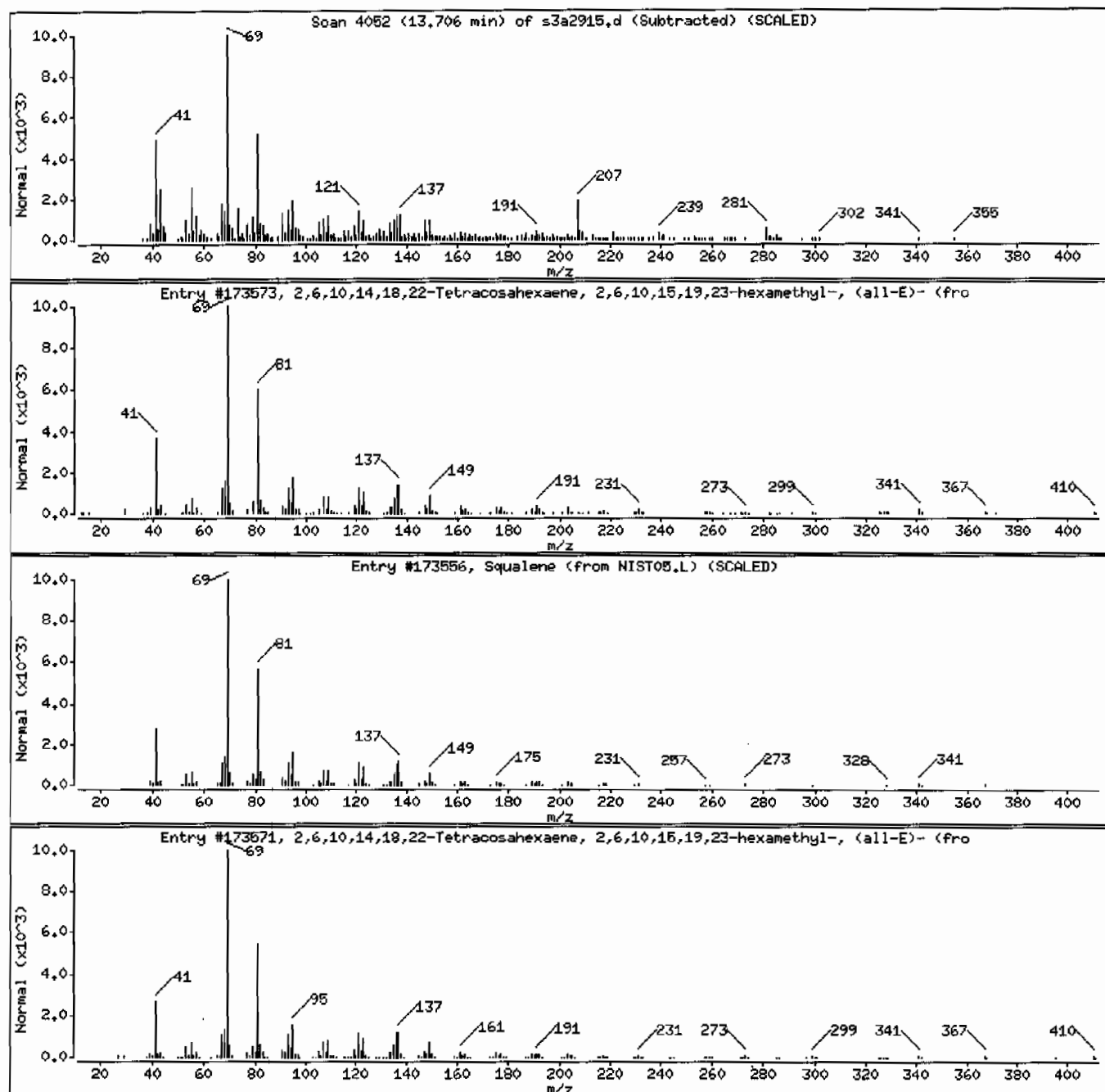
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula | Weight |
|--|------------|----------|--------|---------|---------|--------|
| Unknown                                  |            |          |        |         |         |        |
| 2,6,10,14,18,22-Tetracosahexaene, 2,6,10 | 111-02-4   | NIST05.L | 173573 | 76      | C30H50  | 410    |
| Squalene                                 | 7683-64-9  | NIST05.L | 173556 | 76      | C30H50  | 410    |
| 2,6,10,14,18,22-Tetracosahexaene, 2,6,10 | 111-02-4   | NIST05.L | 173571 | 76      | C30H50  | 410    |



Date : 29-JAN-2010 17:36

Client ID: RE15-10-8416

Instrument: MSD3.i

Sample Info: 1245114011194487411SVHF11ILANL

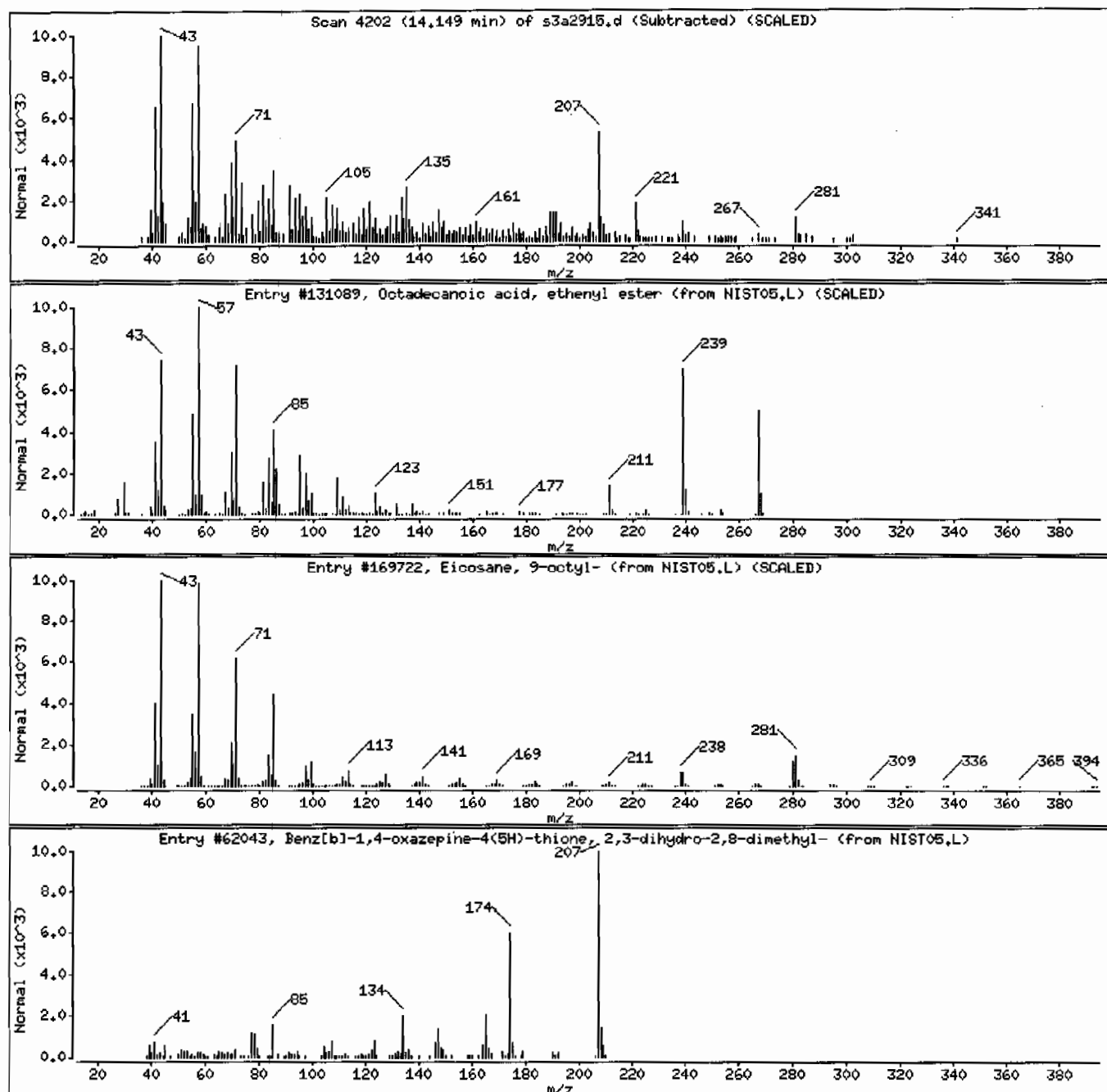
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula   | Weight |
|--|--------------|----------|--------|---------|-----------|--------|
| Unknown                                  |              |          |        |         |           |        |
| Octadecanoic acid, ethenyl ester         | 111-63-7     | NIST05.L | 131089 | 27      | C20H38O2  | 310    |
| Eicosane, 9-octyl-                       | 13475-77-9   | NIST05.L | 169722 | 25      | C28H58    | 394    |
| Benz[b]-1,4-oxazepine-4(5H)-thione, 2,3- | 1000258-63-4 | NIST05.L | 62043  | 22      | C11H13NOS | 207    |





Date : 29-JAN-2010 17:36

Client ID: RE15-10-8416

Instrument: MSD3.i

Sample Info: 124511401194487411SVHF111LANL

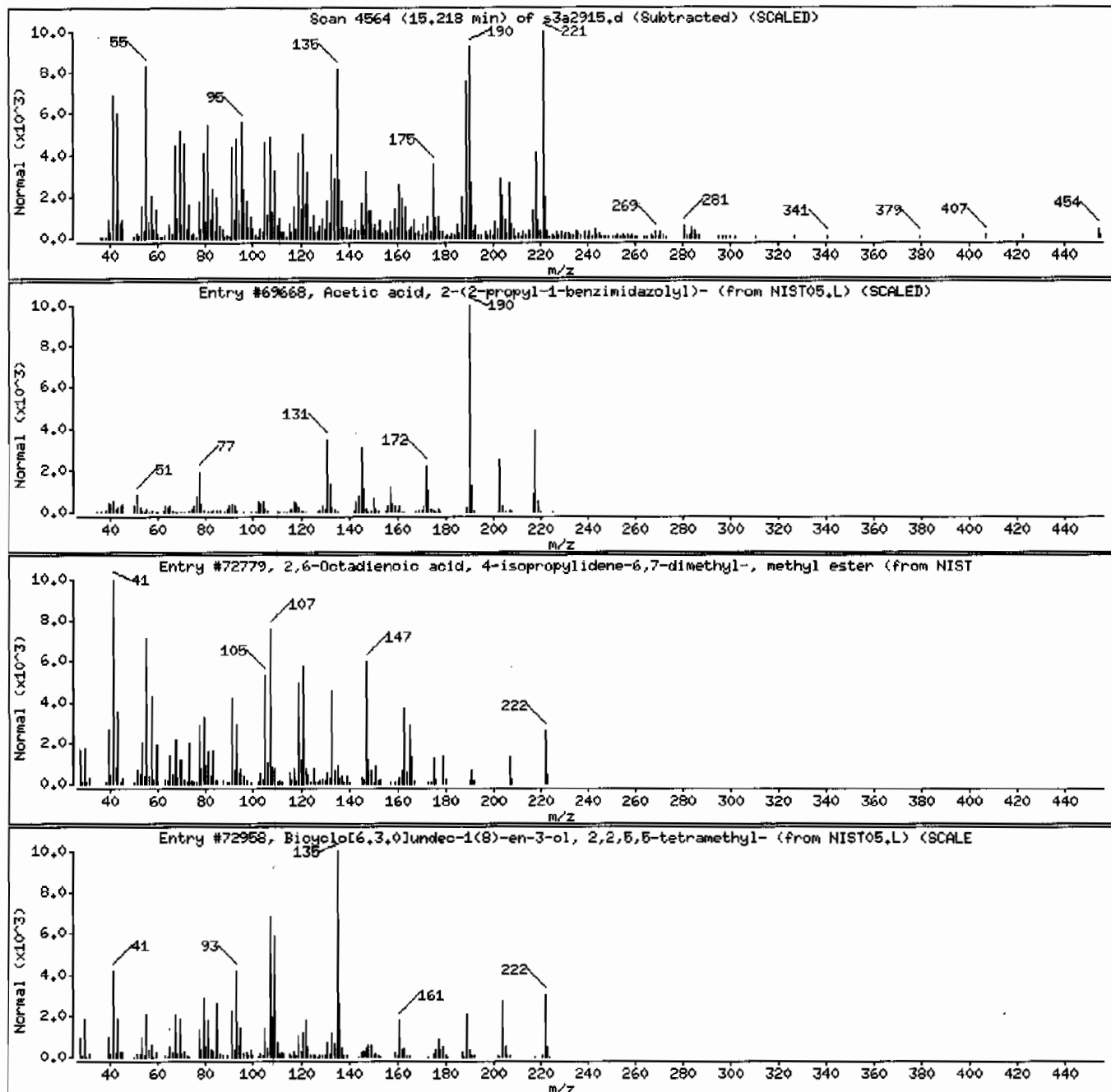
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match                          | CAS Number   | Library  | Entry | Quality | Formula    | Weight |
|--|--------------|----------|-------|---------|------------|--------|
| Unknown  |              |          |       |         |            |        |
| Acetic acid, 2-(2-propyl-1-benzimidazolyl)             | 331736-92-6  | NIST05.L | 69668 | 53      | C12H14N2O2 | 218    |
| 2,6-Octadienoic acid, 4-isopropylidene-6               | 1000151-99-3 | NIST05.L | 72779 | 40      | C14H22O2   | 222    |
| Bicyclo[6.3.0]undec-1(8)-en-3-ol, 2,2,5,5-tetramethyl- | 1000164-02-6 | NIST05.L | 72958 | 35      | C15H26O    | 222    |



Date : 29-JAN-2010 17:36

Client ID: RE15-10-8416

Instrument: MSD3.i

Sample Info: 1245114011\94487411\SVHF11\LANL

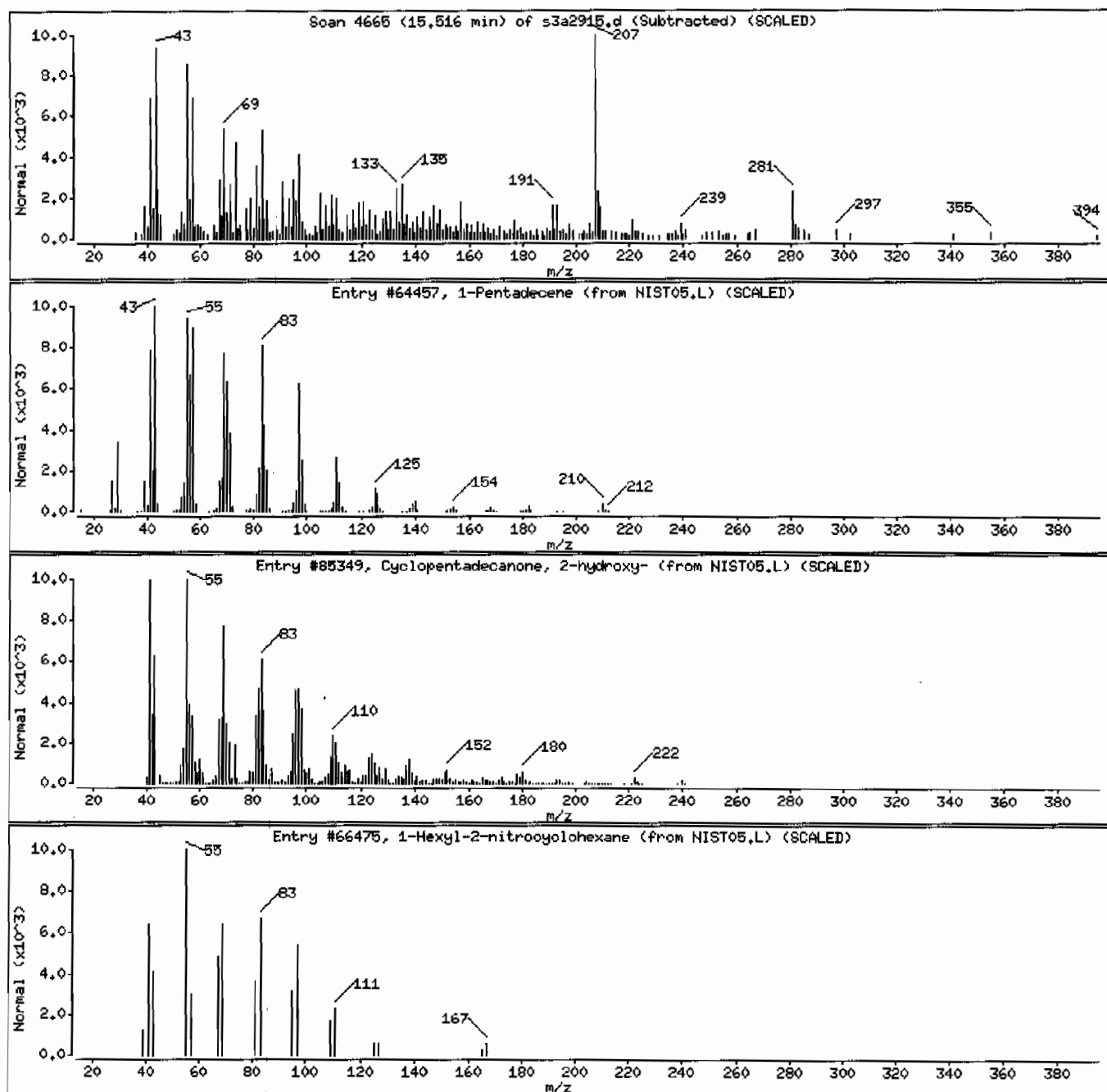
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match  | CAS Number  | Library  | Entry | Quality | Formula   | Height |
|--------------------------------|-------------|----------|-------|---------|---|--------|
| Unknown                        |             |          |       |         |   |        |
| 1-Pentadecene                  | 13360-61-7  | NIST05.L | 64457 | 46      | C <sub>15</sub> H <sub>30</sub>                 | 210    |
| Cyclopentadecanone, 2-hydroxy- | 4727-18-8   | NIST05.L | 85349 | 42      | C <sub>15</sub> H <sub>28</sub> O <sub>2</sub>  | 240    |
| 1-Hexyl-2-nitrocyclohexane     | 118262-04-3 | NIST05.L | 66475 | 27      | C <sub>12</sub> H <sub>23</sub> NO <sub>2</sub> | 213    |



Date : 29-JAN-2010 17:36

Client ID: RE15-10-8416

Instrument: MSD3.i

Sample Info: 1245114011194487411SVHF111LANL

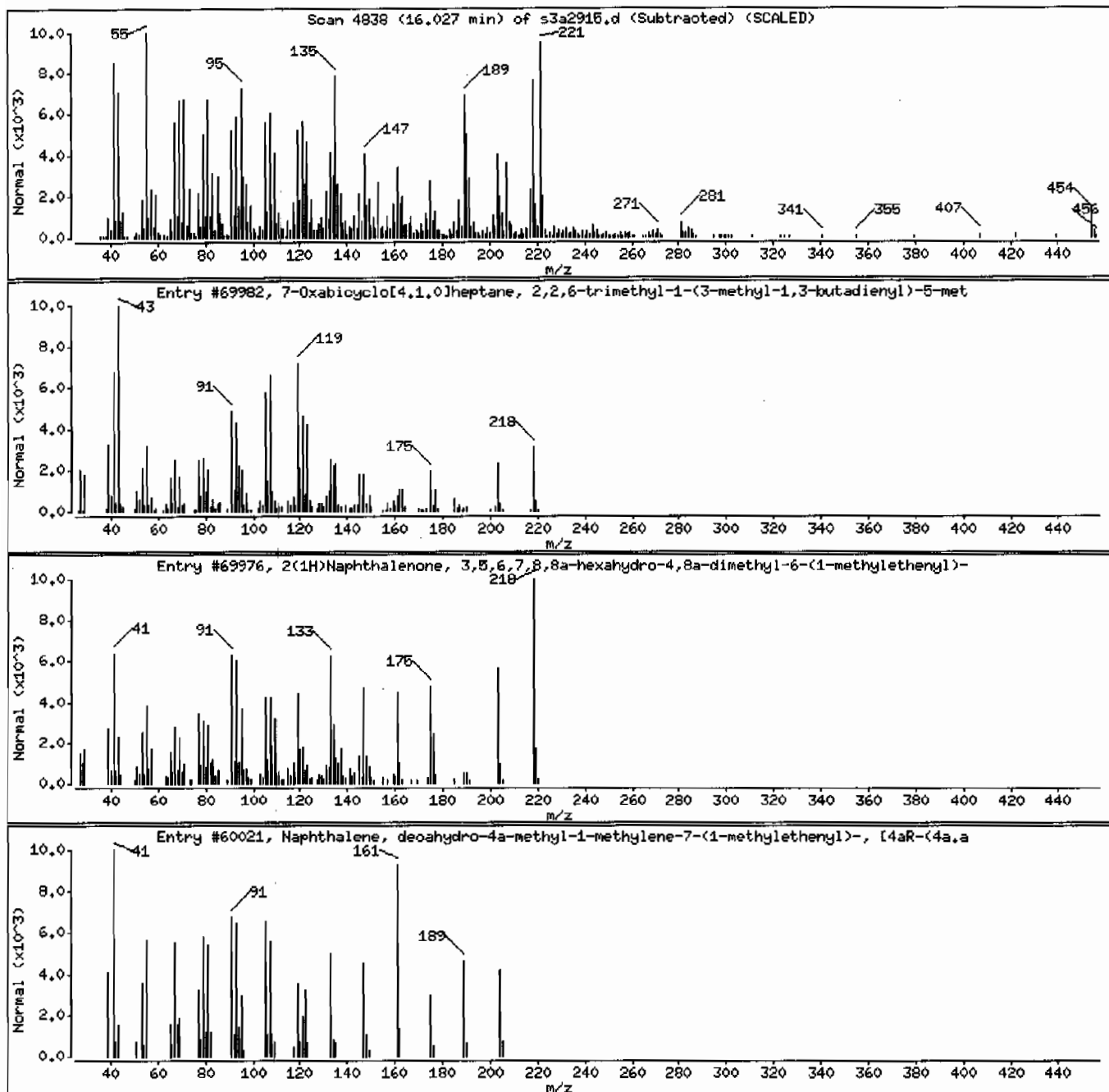
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula | Weight |
|--|--------------|----------|-------|---------|---------|--------|
| Unknown                                  |              |          |       |         |         |        |
| 7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet | 70038-20-9   | NIST05.L | 69982 | 78      | C15H22O | 218    |
| 2(1H)Naphthalenone, 3,5,6,7,8,8a-hexahyd | 1000188-66-5 | NIST05.L | 69976 | 53      | C15H22O | 218    |
| Naphthalene, decahydro-4a-methyl-1-methy | 17066-67-0   | NIST05.L | 60021 | 45      | C15H24  | 204    |



Date : 29-JAN-2010 17:36

Client ID: RE15-10-8416

Instrument: MSD3.i

Sample Info: 1245114011194487411SVMF111LANL

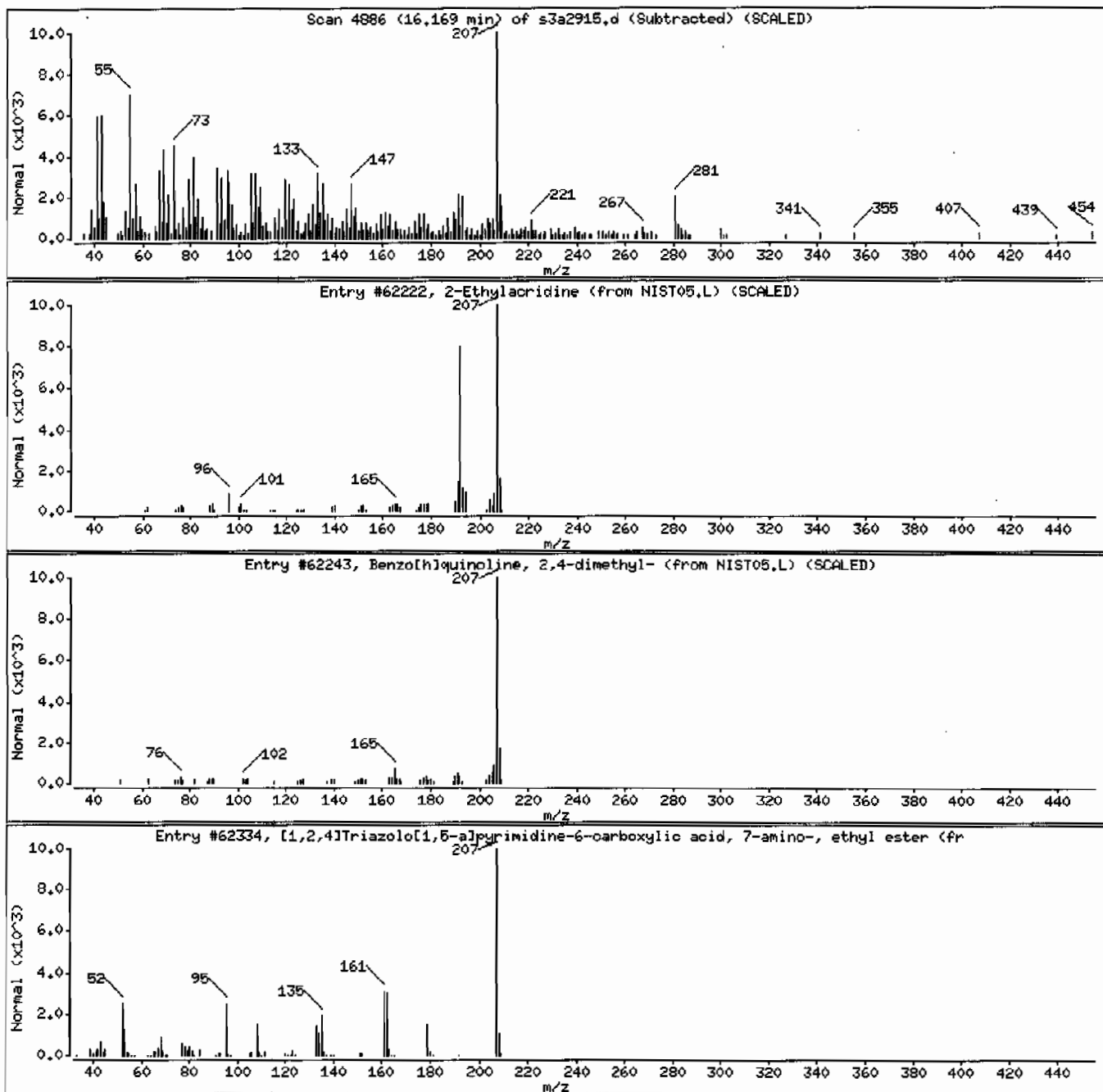
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula  | Weight |
|--|--------------|----------|-------|---------|----------|--------|
| Unknown                                  |              |          |       |         |          |        |
| 2-Ethylacridine                          | 55751-83-2   | NIST05.L | 62222 | 41      | C15H13N  | 207    |
| Benzo[h]quinoline, 2,4-dimethyl-         | 605-67-4     | NIST05.L | 62243 | 38      | C15H13N  | 207    |
| [1,2,4]Triazolo[1,5-a]pyrimidine-6-carbo | 1000316-75-8 | NIST05.L | 62334 | 38      | C8H9N5O2 | 207    |



Date : 29-JAN-2010 17:36

Client ID: RE15-10-8416

Instrument: MSD3.i

Sample Info: 12451140111944874111SVHF111LANL

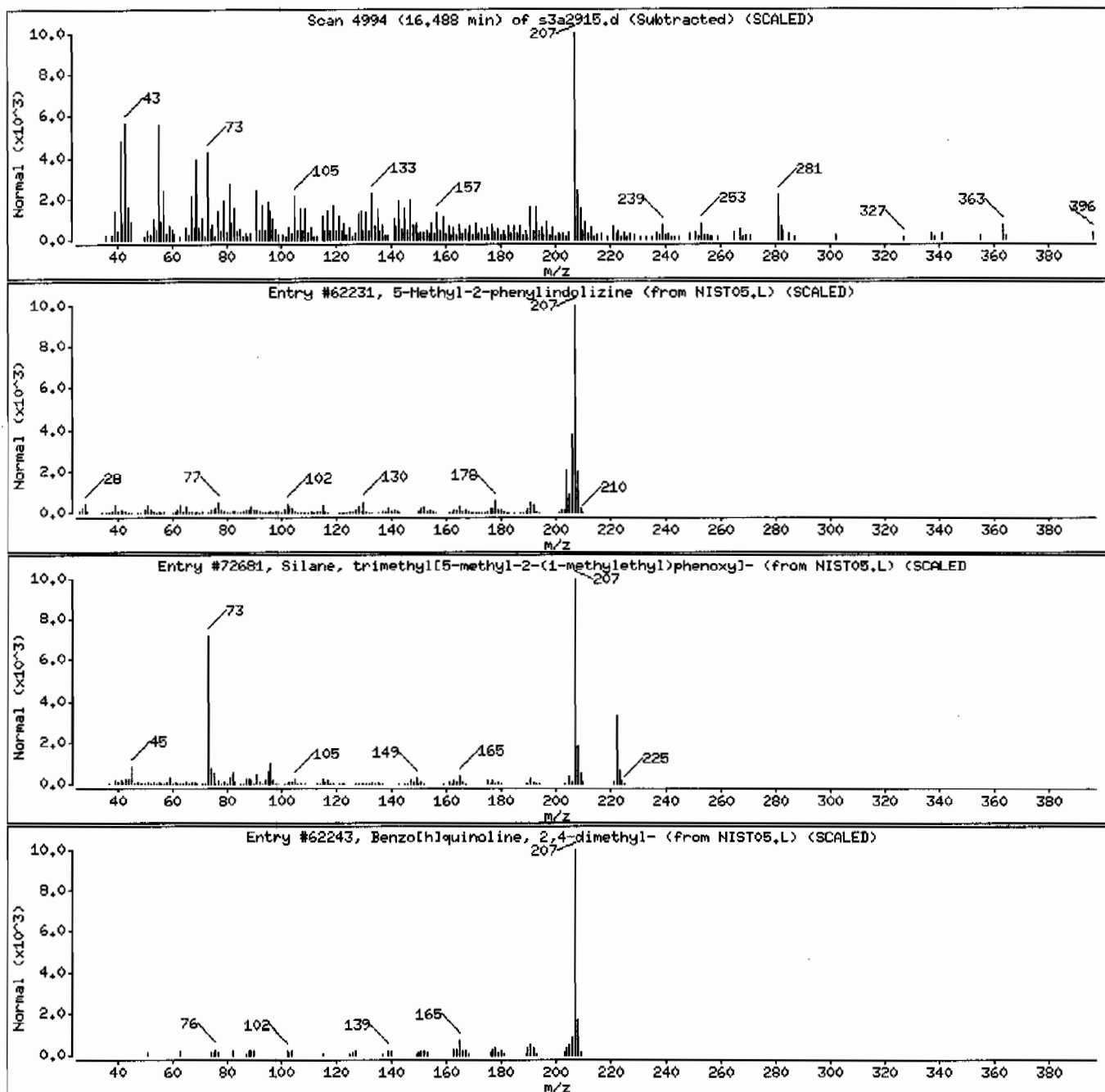
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula   | Weight |
|--|------------|----------|-------|---------|-----------|--------|
| Unknown                                  |            |          |       |         |           |        |
| 5-Methyl-2-phenylindolizine              | 36944-99-7 | NIST05.L | 62231 | 46      | C15H13N   | 207    |
| Silane, trimethyl[5-methyl-2-(1-methylet | 55012-80-1 | NIST05.L | 72681 | 46      | C13H22OSi | 222    |
| Benzo[h]quinoline, 2,4-dimethyl-         | 605-67-4   | NIST05.L | 62243 | 46      | C15H13N   | 207    |



Date : 29-JAN-2010 17:36

Client ID: RE15-10-8416

Instrument: MSD3.1

Sample Info: 1245114011/94487411SVHF111LANL

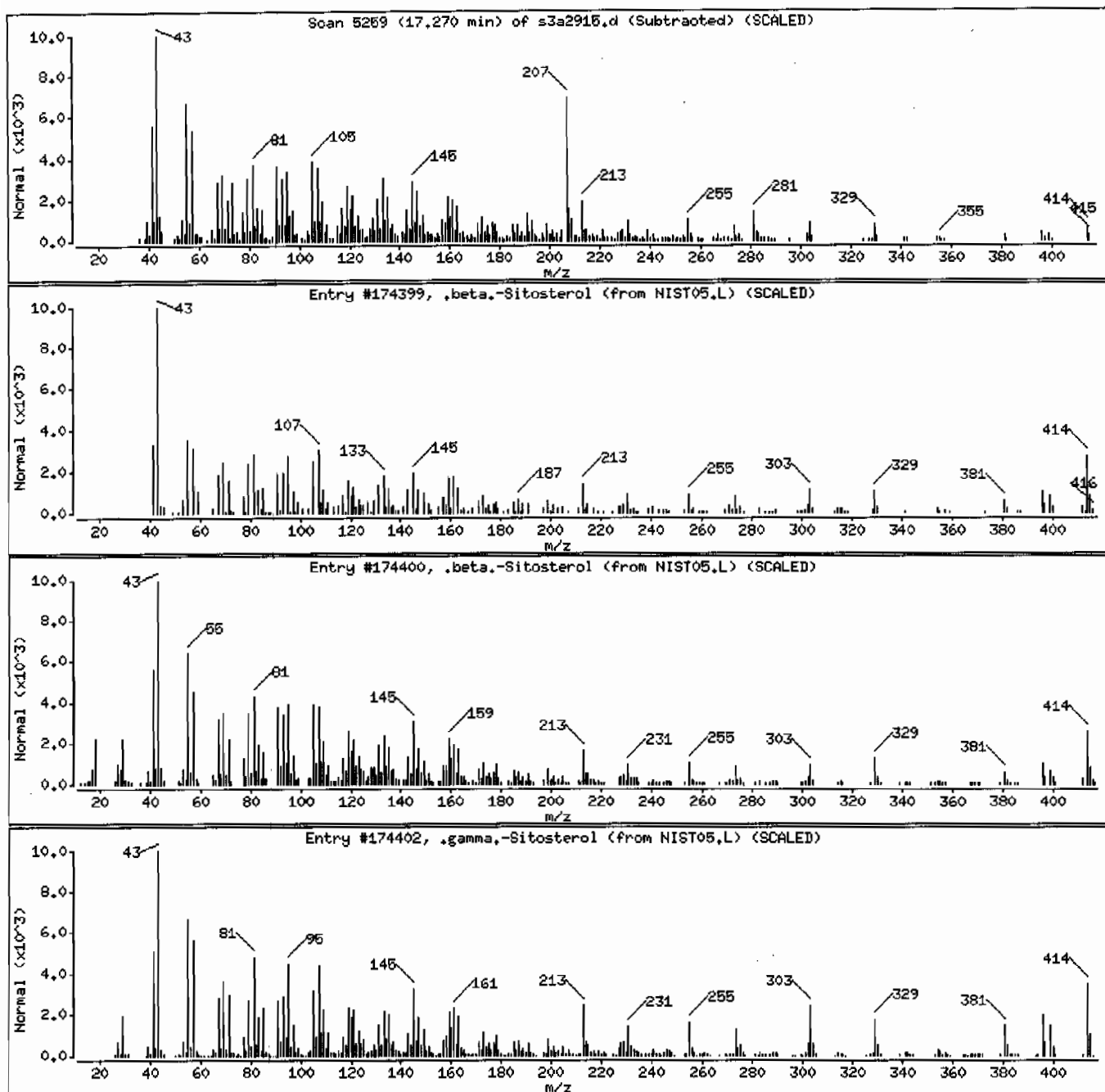
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry  | Quality | Formula | Weight |
|-------------------------------|------------|----------|--------|---------|---------|--------|
| .beta.-Sitosterol             | 83-46-5    | NIST05.L | 174399 | 95      | C29H50O | 414    |
| .beta.-Sitosterol             | 83-46-5    | NIST05.L | 174400 | 93      | C29H50O | 414    |
| .gamma.-Sitosterol            | 83-47-6    | NIST05.L | 174402 | 91      | C29H50O | 414    |



Date: 29-JAN-2010 17:36

Client ID: RE15-10-8416

Instrument: MSD3.i

Sample Info: 1245114011/94487411/SVHF11/LANL

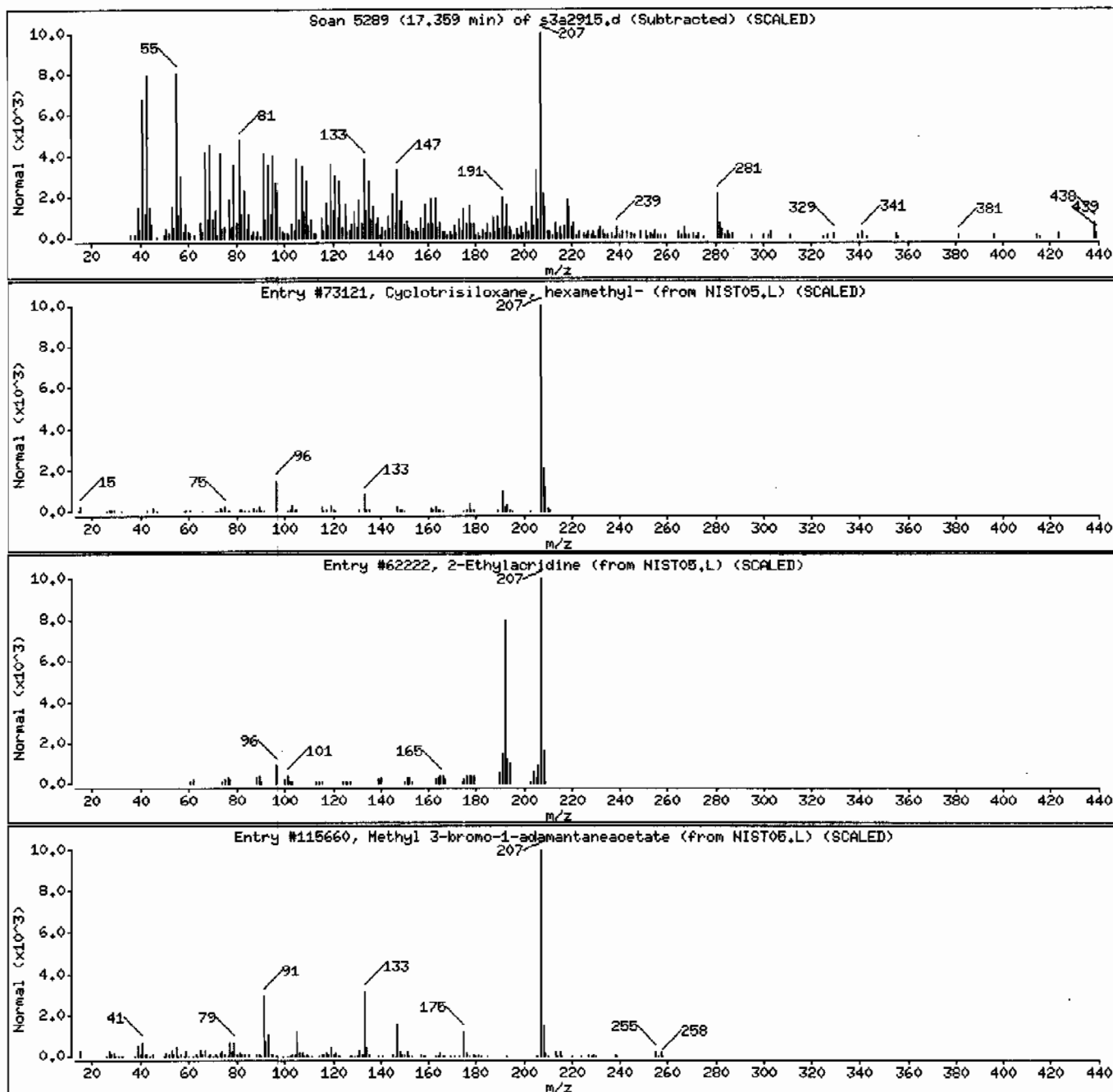
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match      | CAS Number | Library  | Entry  | Quality | Formula    | Weight |
|------------------------------------|------------|----------|--------|---------|------------|--------|
| Unknown                            |            |          |        |         |            |        |
| Cyclotrisiloxane, hexamethyl-      | 541-05-9   | NIST05.L | 73121  | 46      | C6H18O3Si3 | 222    |
| 2-Ethylacridine                    | 55751-83-2 | NIST05.L | 62222  | 42      | C15H13N    | 207    |
| Methyl 3-bromo-1-adamantaneacetate | 14575-01-0 | NIST05.L | 115660 | 38      | C13H19BrO2 | 286    |



Date : 29-JAN-2010 17:36

Client ID: RE15-10-8416

Instrument: MSD3.i

Sample Info: 1245114011194487411SVHF111LANL

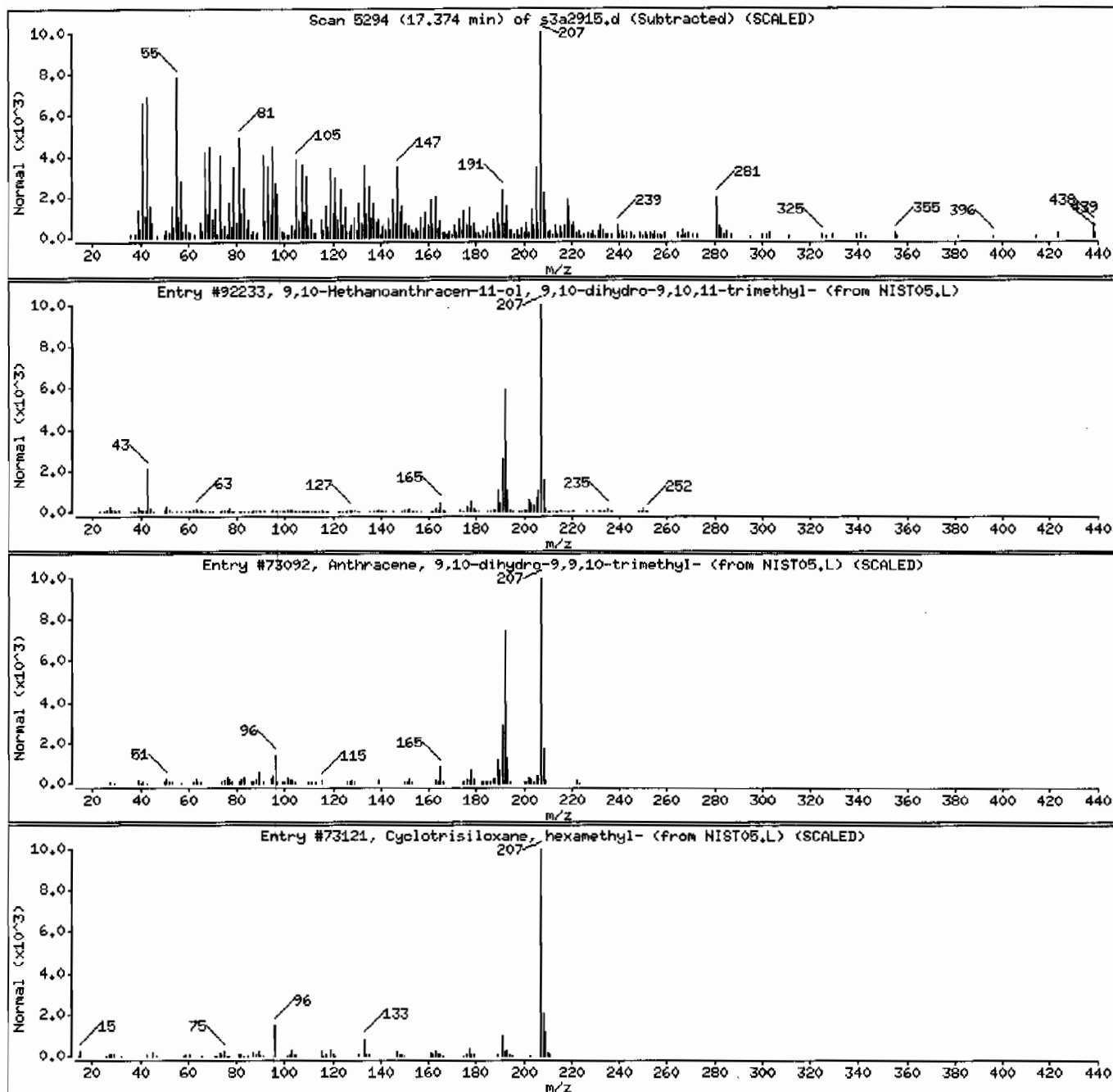
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number  | Library  | Entry | Quality | Formula    | Weight |
|--|-------------|----------|-------|---------|------------|--------|
| Unknown                                  |             |          |       |         |            |        |
| 9,10-Methanoanthracen-11-ol, 9,10-dihydr | 126615-74-5 | NIST05.L | 92233 | 42      | C18H18O    | 250    |
| Anthracene, 9,10-dihydro-9,9,10-trimethy | 14923-29-6  | NIST05.L | 73092 | 38      | C17H18     | 222    |
| Cyclotrisiloxane, hexamethyl-            | 541-05-9    | NIST05.L | 73121 | 38      | C6H18O3Si3 | 222    |





Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1324  
Lab Sample ID: 245114009

Client ID: RE15-10-8417  
Batch ID: 944874  
Run Date: 01/29/2010 01:44  
Prep Date: 01/25/2010 21:06  
Data File: s3a2837.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 350    | ug/kg | 70.1    | 350     |
| 108-95-2   | Phenol                        | U         | 350    | ug/kg | 70.1    | 350     |
| 95-57-8    | 2-Chlorophenol                | U         | 350    | ug/kg | 70.1    | 350     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 350    | ug/kg | 70.1    | 350     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 350    | ug/kg | 70.1    | 350     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 350    | ug/kg | 70.1    | 350     |
| 83-32-9    | Acenaphthene                  | U         | 35.0   | ug/kg | 11.6    | 35.0    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 350    | ug/kg | 35.0    | 350     |
| 100-02-7   | 4-Nitrophenol                 | U         | 350    | ug/kg | 116     | 350     |
| 87-86-5    | Pentachlorophenol             | U         | 350    | ug/kg | 87.6    | 350     |
| 129-00-0   | Pyrene                        | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 110-86-1   | Pyridine                      | U         | 350    | ug/kg | 70.1    | 350     |
| 62-53-3    | Aniline                       | U         | 350    | ug/kg | 105     | 350     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 350    | ug/kg | 70.1    | 350     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 350    | ug/kg | 70.1    | 350     |
| 100-51-6   | Benzyl alcohol                | U         | 350    | ug/kg | 105     | 350     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 350    | ug/kg | 70.1    | 350     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 350    | ug/kg | 70.1    | 350     |
| 95-48-7    | o-Cresol                      | U         | 350    | ug/kg | 70.1    | 350     |
| 65794-96-9 | m,p-Cresols                   | U         | 350    | ug/kg | 105     | 350     |
| 67-72-1    | Hexachloroethane              | U         | 350    | ug/kg | 70.1    | 350     |
| 98-95-3    | Nitrobenzene                  | U         | 350    | ug/kg | 70.1    | 350     |
| 78-59-1    | Isophorone                    | U         | 350    | ug/kg | 70.1    | 350     |
| 88-75-5    | 2-Nitrophenol                 | U         | 350    | ug/kg | 70.1    | 350     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 350    | ug/kg | 123     | 350     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 350    | ug/kg | 70.1    | 350     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 350    | ug/kg | 70.1    | 350     |
| 65-85-0    | Benzoic acid                  | U         | 701    | ug/kg | 175     | 701     |
| 91-20-3    | Naphthalene                   | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 106-47-8   | 4-Chloroaniline               | U         | 350    | ug/kg | 70.1    | 350     |
| 87-68-3    | Hexachlorobutadiene           | U         | 350    | ug/kg | 70.1    | 350     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 35.0   | ug/kg | 7.01    | 35.0    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 350    | ug/kg | 70.1    | 350     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 350    | ug/kg | 70.1    | 350     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 350    | ug/kg | 70.1    | 350     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 35.0   | ug/kg | 11.6    | 35.0    |
| 88-74-4    | 2-Nitroaniline                | U         | 350    | ug/kg | 70.1    | 350     |
| 99-09-2    | <i>o</i> -Nitroaniline        |           |        |       |         |         |
|            | 3-Nitroaniline                | U         | 350    | ug/kg | 70.1    | 350     |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114009

Client ID: RE15-10-8417  
Batch ID: 944874  
Run Date: 01/29/2010 01:44  
Prep Date: 01/25/2010 21:06  
Data File: s3a2837.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|----------------------------|-----------|--------|-------|---------|---------|
|           | <i>m</i> -Nitroaniline     |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate          | U         | 350    | ug/kg | 70.1    | 350     |
| 606-20-2  | 2,6-Dinitrotoluene         | U         | 350    | ug/kg | 35.0    | 350     |
| 208-96-8  | Acenaphthylene             | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 51-28-5   | 2,4-Dinitrophenol          | U         | 701    | ug/kg | 133     | 701     |
| 132-64-9  | Dibenzofuran               | U         | 350    | ug/kg | 70.1    | 350     |
| 84-66-2   | Diethylphthalate           | U         | 350    | ug/kg | 70.1    | 350     |
| 86-73-7   | Fluorene                   | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 7005-72-3 | 4-Chlorophenylphenylether  | U         | 350    | ug/kg | 70.1    | 350     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol | U         | 350    | ug/kg | 70.1    | 350     |
| 100-01-6  | 4-Nitroaniline             | U         | 350    | ug/kg | 105     | 350     |
|           | <i>p</i> -Nitroaniline     |           |        |       |         |         |
| 122-39-4  | Diphenylamine              | U         | 350    | ug/kg | 70.1    | 350     |
| 122-66-7  | Azobenzene                 | U         | 350    | ug/kg | 70.1    | 350     |
|           | 1,2-Diphenylhydrazine      |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether   | U         | 350    | ug/kg | 70.1    | 350     |
| 118-74-1  | Hexachlorobenzene          | U         | 350    | ug/kg | 70.1    | 350     |
| 85-01-8   | Phenanthrene               | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 120-12-7  | Anthracene                 | U         | 35.0   | ug/kg | 7.01    | 35.0    |
| 84-74-2   | Di-n-butylphthalate        | U         | 350    | ug/kg | 70.1    | 350     |
| 206-44-0  | Fluoranthene               | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 85-68-7   | Butylbenzylphthalate       | U         | 350    | ug/kg | 70.1    | 350     |
| 56-55-3   | Benzo(a)anthracene         | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 91-94-1   | 3,3'-Dichlorobenzidine     | U         | 350    | ug/kg | 105     | 350     |
| 218-01-9  | Chrysene                   | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | U         | 350    | ug/kg | 70.1    | 350     |
| 117-84-0  | Di-n-octylphthalate        | U         | 350    | ug/kg | 70.1    | 350     |
| 205-99-2  | Benzo(b)fluoranthene       | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 207-08-9  | Benzo(k)fluoranthene       | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 50-32-8   | Benzo(a)pyrene             | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene     | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 53-70-3   | Dibenzo(a,h)anthracene     | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 191-24-2  | Benzo(ghi)perylene         | U         | 35.0   | ug/kg | 10.5    | 35.0    |
| 120-82-1  | 1,2,4-Trichlorobenzene     | U         | 350    | ug/kg | 70.1    | 350     |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.08 | 4030      | ug/kg |     | J    |
|         | Unknown Aldol Condensate              | 3.33 | 200       | ug/kg |     | JA   |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

Page 3 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114009

Client ID: RE15-10-8417  
Batch ID: 944874  
Run Date: 01/29/2010 01:44  
Prep Date: 01/25/2010 21:06  
Data File: s3a2837.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.  | Parmname                                 | Qualifier | Result    | Units | MDL/LOD | PQL/LOQ |
|--|--|-----------|-----------|-------|---------|---------|
| <b>Tentatively Identified Compound Summary</b> |  |           |           |       |         |         |
| CAS No.  | Tentatively Identified Compound (TIC)    | RT        | Estimated | Units | Fit     | Qual    |
| 7785-70-8                                      | 1R-.alpha.-Pinene                        | 4.1       | 683       | ug/kg | 98      | NJ      |
| 13466-78-9                                     | 3-Carene                                 | 4.66      | 1500      | ug/kg | 97      | NJ      |
|  | Unknown                                  | 11.42     | 279       | ug/kg |         | J       |
|  | Unknown                                  | 11.65     | 180       | ug/kg |         | J       |
| 1235-74-1                                      | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.76     | 208       | ug/kg | 98      | NJ      |
|  | Unknown                                  | 11.82     | 160       | ug/kg |         | J       |
|  | Unknown                                  | 11.98     | 195       | ug/kg |         | J       |
|  | Unknown                                  | 12.96     | 438       | ug/kg |         | J       |
|  | Unknown                                  | 15.65     | 1200      | ug/kg |         | J       |
|  | Unknown                                  | 15.67     | 1460      | ug/kg |         | J       |
|  | Unknown                                  | 16.44     | 2910      | ug/kg |         | J       |
|  | Unknown                                  | 16.56     | 247       | ug/kg |         | J       |
|  | Unknown                                  | 17.65     | 199       | ug/kg |         | J       |
|  | Unknown                                  | 17.78     | 621       | ug/kg |         | J       |

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012810a.b/s3a2837.d  
 Lab Smp Id: 245114009 Client Smp ID: RE15-10-8417  
 Inj Date : 29-JAN-2010 01:44  
 Operator : JLD1 Inst ID: MSD3.i  
 Smp Info : |245114009|944874|1|SVMF|1|LANL  
 Misc Info : |MSD8270\_S|WBN100107-02|  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m  
 Meth Date : 29-Jan-2010 10:49 jen00986 Quant Type: ISTD  
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
 Als bottle: 12  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1324.sub  
 Target Version: 3.50  
 Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.14000  | weight of sample          |
| M    | 5.33570   | % moisture                |

Cpnd Variable Local Compound Variable

| Compounds                   | QUANT SIG |        |        |         | RESPONSE | CONCENTRATIONS       |                  |
|-----------------------------|-----------|--------|--------|---------|----------|----------------------|------------------|
|                             | MASS      | RT     | EXP RT | REL RT  |          | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/Kg) |
| * 10 1,4-Dichlorobenzene-d4 | 152       | 4.723  | 4.722  | (1.000) | 580327   | 40.0000              |                  |
| * 29 Naphthalene-d8         | 136       | 5.997  | 6.003  | (1.000) | 2156422  | 40.0000              |                  |
| * 46 Acenaphthene-d10       | 164       | 7.869  | 7.875  | (1.000) | 1151590  | 40.0000              |                  |
| * 67 Phenanthrene-d10       | 188       | 9.485  | 9.486  | (1.000) | 1695979  | 40.0000              |                  |
| * 91 Chrysene-d12           | 240       | 12.477 | 12.478 | (1.000) | 760340   | 40.0000              |                  |
| * 98 Perylene-d12           | 264       | 14.760 | 14.762 | (1.000) | 396881   | 40.0000              |                  |
| \$ 3 2-Fluorophenol         | 112       | 3.561  | 3.549  | (0.754) | 1041022  | 68.9380              | 2420             |
| \$ 5 Phenol-d5              | 99        | 4.330  | 4.331  | (0.917) | 1211533  | 63.8370              | 2240             |
| \$ 20 Nitrobenzene-d5       | 82        | 5.257  | 5.262  | (0.877) | 577851   | 36.2761              | 1270             |
| \$ 39 2-Fluorobiphenyl      | 172       | 7.126  | 7.128  | (0.906) | 1103155  | 37.0607              | 1300             |
| \$ 60 2,4,6-Tribromophenol  | 329       | 8.721  | 8.724  | (1.108) | 207638   | 62.8960              | 2200             |
| \$ 81 p-Terphenyl-d14       | 244       | 11.198 | 11.196 | (0.898) | 774625   | 59.2728              | 2080             |

## ION RATIO REPORT

## SV REPORT

Data file: s3a2837.d

Report Date: 01/29/2010 11:15

Lab. ID: 245114009

SampleType: SAMPLE

Injection Date: 29-JAN-2010 01:44

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245114009|944874|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1324

Sample Matrix: SOIL

| MASS                      | RESPONSE | RT             | EXPECT RT | TARGET RANGE | RATIO | QUAL |
|---------------------------|----------|----------------|-----------|--------------|-------|------|
| =====                     |          |                |           |              |       |      |
| 4 Aniline                 |          | CAS#: 62-53-3  |           |              |       |      |
| 66                        | 70752    | 4.33           | 4.41      | 80-120       | 100   | (T)  |
| 93                        | 19054    | 4.39           | 4.41      | 201-261      | 27    | (Q)  |
| -----                     |          |                |           |              |       |      |
| 17 N-Nitrosodipropylamine |          | CAS#: 621-64-7 |           |              |       |      |
| 70                        | 84454    | 5.26           | 5.10      | 80-120       | 100   | (T)  |
| 42                        | 56046    | 5.26           | 5.10      | 45-105       | 66    | (T)  |
| -----                     |          |                |           |              |       |      |
| 40 2-Chloronaphthalene    |          | CAS#: 91-58-7  |           |              |       |      |
| 162                       | 27629    | 7.47           | 7.27      | 80-120       | 100   | (T)  |
| 164                       | 1552     | 7.47           | 7.27      | 3- 63        | 6     | (T)  |
| 127                       | 2159     | 7.47           | 7.27      | 10- 70       | 8     | (QT) |
| -----                     |          |                |           |              |       |      |
| 42 o-Nitroaniline         |          | CAS#: 88-74-4  |           |              |       |      |
| 65                        | 36150    | 7.47           | 7.37      | 80-120       | 100   | (T)  |
| 92                        | 40134    | 7.47           | 7.37      | 32- 92       | 111   | (QT) |
| 138                       | 3013     | 7.47           | 7.37      | 72-132       | 8     | (QT) |
| -----                     |          |                |           |              |       |      |
| 41 m-Nitroaniline         |          | CAS#: 99-09-2  |           |              |       |      |
| 138                       | 172      | 7.87           | 7.82      | 80-120       | 100   | ( )  |
| 92                        | 7117     | 7.87           | 7.82      | 80-140       | 4126  | (Q)  |
| 108                       | 25545    | 7.87           | 7.82      | 0- 40        | 14808 | (Q)  |
| -----                     |          |                |           |              |       |      |
| 44 2,6-Dinitrotoluene     |          | CAS#: 606-20-2 |           |              |       |      |
| 165                       | 149291   | 7.87           | 7.63      | 80-120       | 100   | (T)  |
| 63                        | 2271     | 7.87           | 7.63      | 35- 95       | 2     | (QT) |
| -----                     |          |                |           |              |       |      |

| MASS  | RESPONSE               | RT    | EXPECT RT | TARGET RANGE   | RATIO | QUAL |
|-------|------------------------|-------|-----------|----------------|-------|------|
| ===== |                        |       |           |                |       |      |
| 50    | 2,4-Dinitrotoluene     |       |           | CAS#: 121-14-2 |       |      |
| 165   | 149291                 | 7.87  | 8.07      | 80-120         | 100   | (T)  |
| 89    | 2196                   | 7.87  | 8.07      | 43-103         | 1     | (QT) |
| 63    | 2271                   | 7.87  | 8.07      | 23- 83         | 2     | (QT) |
| ----- |                        |       |           |                |       |      |
| 90    | 3,3'-Dichlorobenzidine |       |           | CAS#: 91-94-1  |       |      |
| 252   | 135                    | 12.41 | 12.41     | 80-120         | 100   | ( )  |
| 254   | 248                    | 12.38 | 12.41     | 33- 93         | 184   | (Q)  |
| 126   | 1858                   | 12.48 | 12.41     | 0- 46          | 1373  | (QT) |

-----  
 Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012810a.b/s3a2837.d  
Lab Smp Id: 245114009 Client Smp ID: RE15-10-8417  
Inj Date : 29-JAN-2010 01:44  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |245114009|944874|1|SVMF|1|LANL  
Misc Info : |MSD8270 S|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m  
Meth Date : 29-Jan-2010 10:49 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 12  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1324.sub  
Target Version: 3.50  
Processing Host: hpc1p1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.14000  | weight of sample          |
| M    | 5.33570   | % moisture                |

Cpnd Variable

Local Compound Variable

| ISTD                        | RT     | AREA    | AMOUNT |
|-----------------------------|--------|---------|--------|
| =====                       | =====  | =====   | =====  |
| * 10 1,4-Dichlorobenzene-d4 | 4.723  | 3696353 | 40.000 |
| * 91 Chrysene-d12           | 12.477 | 2263578 | 40.000 |
| * 98 Perylene-d12           | 14.760 | 1215595 | 40.000 |

| CONCENTRATIONS |       |               |              |       | QUANT   |           |        |
|----------------|-------|---------------|--------------|-------|---------|-----------|--------|
| RT             | AREA  | ON-COL(ng/ul) | FINAL(ug/Kg) | QUAL  | LIBRARY | LIB ENTRY | CPND # |
| =====          | ===== | =====         | =====        | ===== | =====   | =====     | =====  |

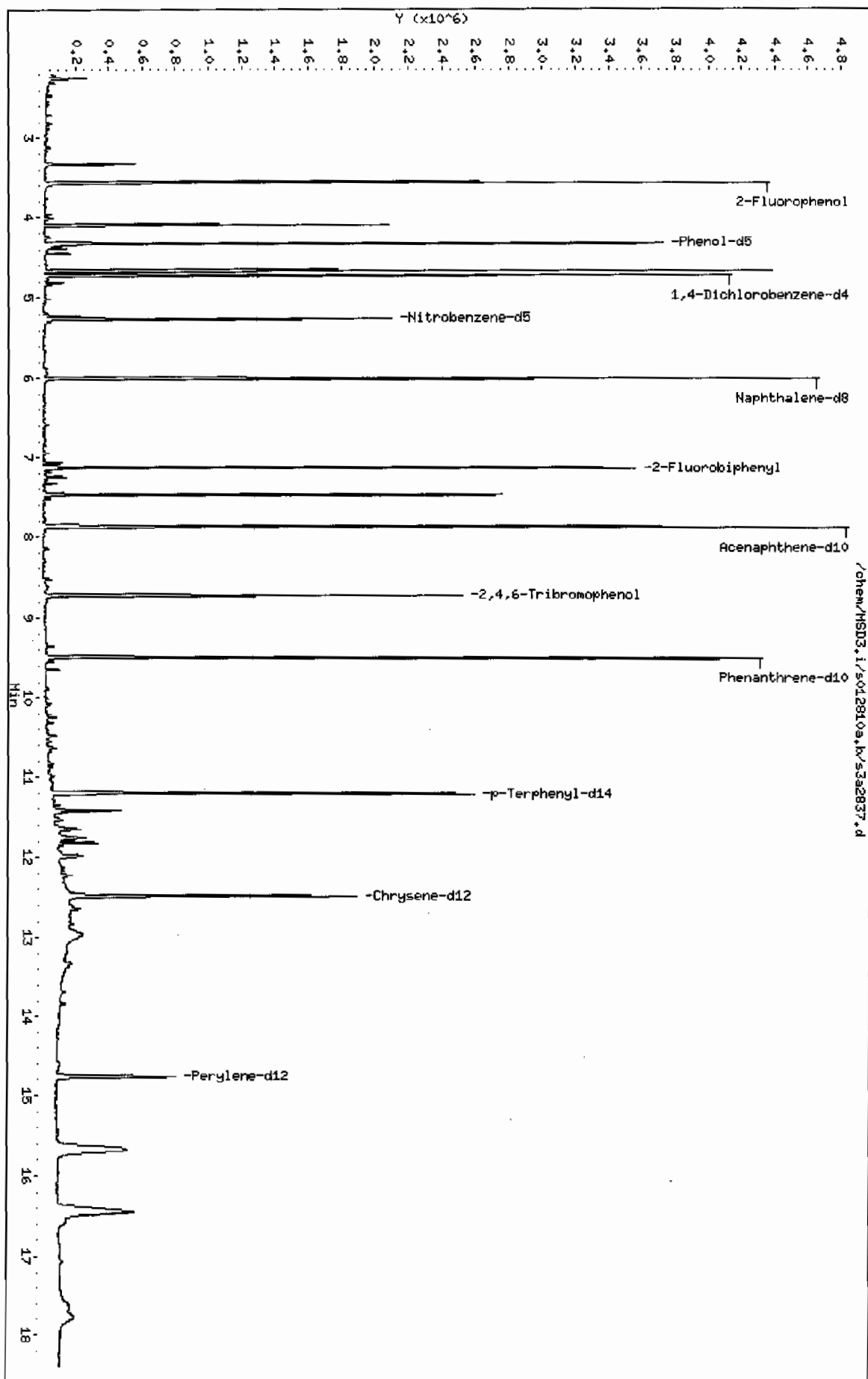
| RT                                       | CONCENTRATIONS |               |              | QUAL | QUANT             |           | CPND # |
|--|----------------|---------------|--------------|------|-------------------|-----------|--------|
|  | AREA           | ON-COL(ng/ul) | FINAL(ug/Kg) |      | LIBRARY           | LIB ENTRY |        |
| Unknown                                  |                |               |              |      | CAS #:            |           |        |
| 2.083                                    | 10630471       | 115.037378    | 4030         | 0    |                   | 0         | 10     |
| Unknown Aldol Condensate                 |                |               |              |      | CAS #:            |           |        |
| 3.326                                    | 527673         | 5.71020036    | 200          | 0    |                   | 0         | 10     |
| 1R-.alpha.-Pinene                        |                |               |              |      | CAS #: 7785-70-8  |           |        |
| 4.095                                    | 1802075        | 19.5011131    | 683          | 98   | NIST05.L          | 15188     | 10     |
| 3-Carene                                 |                |               |              |      | CAS #: 13466-78-9 |           |        |
| 4.664                                    | 3958404        | 42.8357669    | 1500         | 97   | NIST05.L          | 15157     | 10     |
| Unknown                                  |                |               |              |      | CAS #:            |           |        |
| 11.416                                   | 450689         | 7.96419485    | 279          | 0    |                   | 0         | 91     |
| Unknown                                  |                |               |              |      | CAS #:            |           |        |
| 11.650                                   | 290494         | 5.13336442    | 180          | 0    |                   | 0         | 91     |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 |                |               |              |      | CAS #: 1235-74-1  |           |        |
| 11.756                                   | 336530         | 5.94686267    | 208          | 98   | NIST05.L          | 133618    | 91     |
| Unknown                                  |                |               |              |      | CAS #:            |           |        |
| 11.818                                   | 257797         | 4.55556329    | 160          | 0    |                   | 0         | 91     |
| Unknown                                  |                |               |              |      | CAS #:            |           |        |
| 11.977                                   | 314414         | 5.55605196    | 195          | 0    |                   | 0         | 91     |
| Unknown                                  |                |               |              |      | CAS #:            |           |        |
| 12.955                                   | 707479         | 12.5019566    | 438          | 0    |                   | 0         | 91     |
| Unknown                                  |                |               |              |      | CAS #:            |           |        |
| 15.655                                   | 1037365        | 34.1352174    | 1200         | 0    |                   | 0         | 98     |
| Unknown                                  |                |               |              |      | CAS #:            |           |        |
| 15.669                                   | 1265160        | 41.6309621    | 1460         | 0    |                   | 0         | 98     |
| Unknown                                  |                |               |              |      | CAS #:            |           |        |
| 16.443                                   | 2526382        | 83.1323175    | 2910         | 0    |                   | 0         | 98     |
| Unknown                                  |                |               |              |      | CAS #:            |           |        |
| 16.564                                   | 214272         | 7.05076813    | 247          | 0    |                   | 0         | 98     |
| Unknown                                  |                |               |              |      | CAS #:            |           |        |
| 17.649                                   | 172181         | 5.66573127    | 198          | 0    |                   | 0         | 98     |



| RT      | AREA   | CONCENTRATIONS |              | QUAL  | QUANT   |           | CPND # |
|---------|--------|----------------|--------------|-------|---------|-----------|--------|
|         |        | ON-COL(ng/ul)  | FINAL(ug/Kg) |       | LIBRARY | LIB ENTRY |        |
| =====   | =====  | =====          | =====        | ===== | =====   | =====     | =====  |
| Unknown |        |                |              |       | CAS #:  |           |        |
| 17.776  | 538673 | 17.7254105     | 621          | 0     |         | 0         | 98     |

Data File: /chem/HSD3.i/sol2810a,b/s3a2837.d  
Date: 29-JAN-2010 01:14  
Client ID: REIS-10-8417  
Sample Info: 124514009194487411SYNFI11LANL  
Volume Injected (uL): 0.5  
Column phase: 384 DB-SHS

Instrument: HSD3.i  
Operator: JLD1  
Column diameter: 0.20



Date : 29-JAN-2010 01:44

Client ID: RE15-10-8417

Instrument: MSD3.i

Sample Info: 12451140091944874111SVHF111LANL

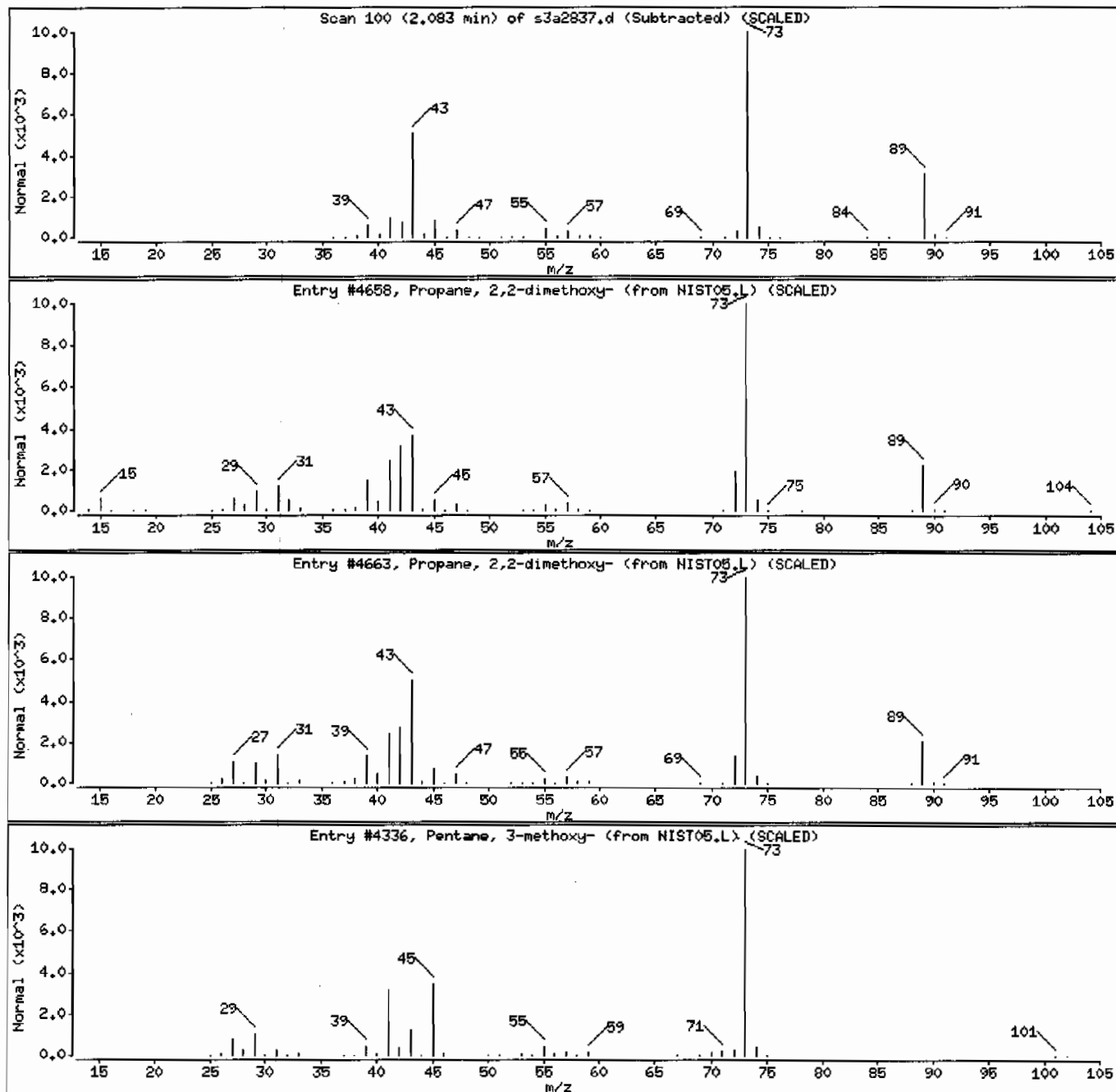
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown                       |            |          |       |         |         |        |
| Propane, 2,2-dimethoxy-       | 77-76-9    | NIST05.L | 4658  | 56      | C5H12O2 | 104    |
| Propane, 2,2-dimethoxy-       | 77-76-9    | NIST05.L | 4663  | 38      | C5H12O2 | 104    |
| Pentane, 3-methoxy-           | 36839-67-5 | NIST05.L | 4336  | 17      | C6H14O  | 102    |



Date : 29-JAN-2010 01:44

Client ID: RE15-10-8417

Instrument: MSD3.i

Sample Info: 1245114009194487411(SVHF11)LANL

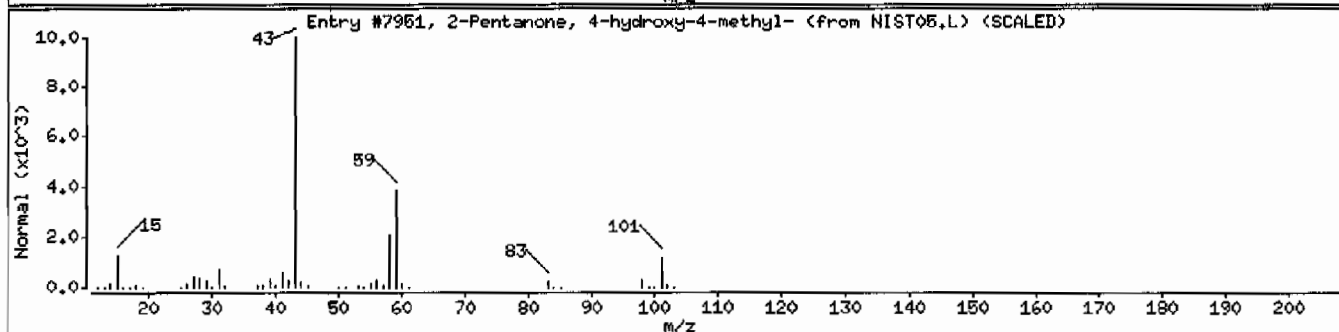
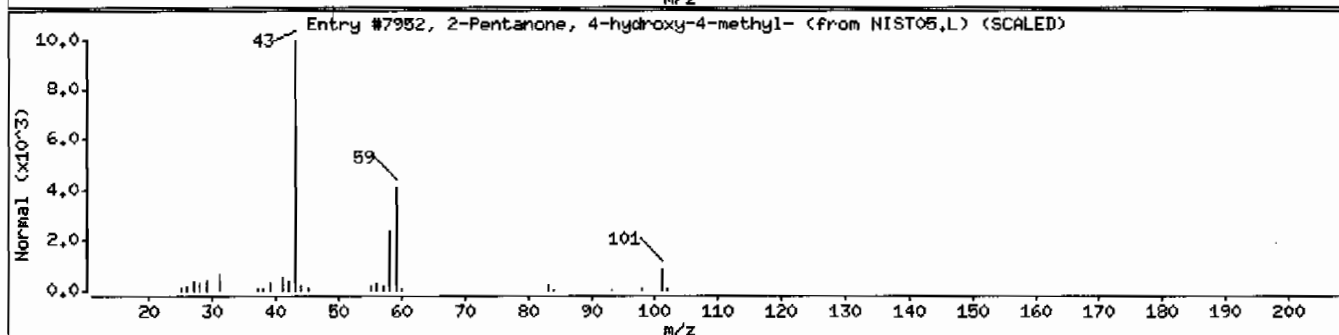
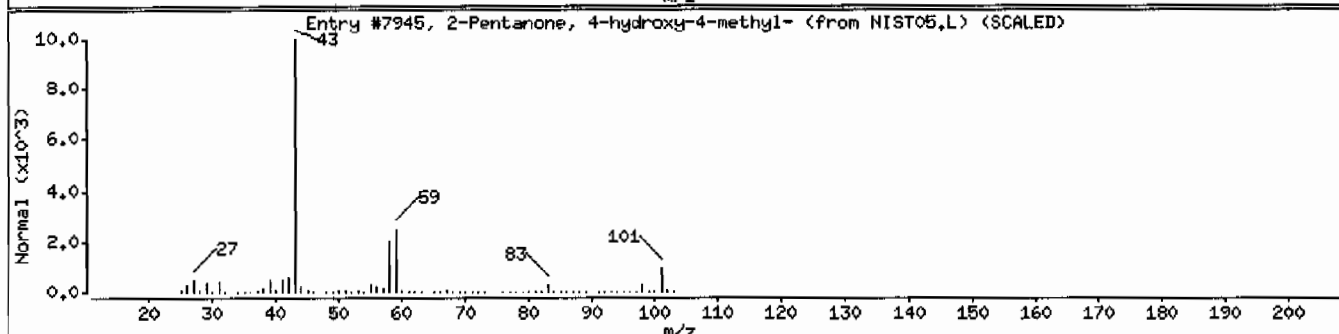
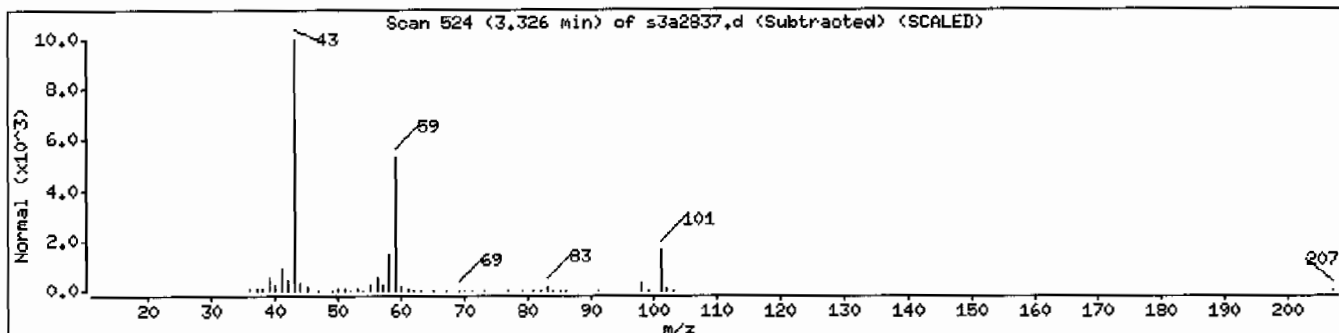
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match    | CAS Number | Library  | Entry | Quality | Formula | Weight |
|----------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown Aldol Condensate         |            |          |       |         |         |        |
| 2-Pentanone, 4-hydroxy-4-methyl- | 123-42-2   | NIST05.L | 7945  | 59      | C6H12O2 | 116    |
| 2-Pentanone, 4-hydroxy-4-methyl- | 123-42-2   | NIST05.L | 7952  | 50      | C6H12O2 | 116    |
| 2-Pentanone, 4-hydroxy-4-methyl- | 123-42-2   | NIST05.L | 7951  | 45      | C6H12O2 | 116    |



Date : 29-JAN-2010 01:44

Client ID: RE15-10-8417

Instrument: MSD3.i

Sample Info: 12451140091944874111SVHF111LANL

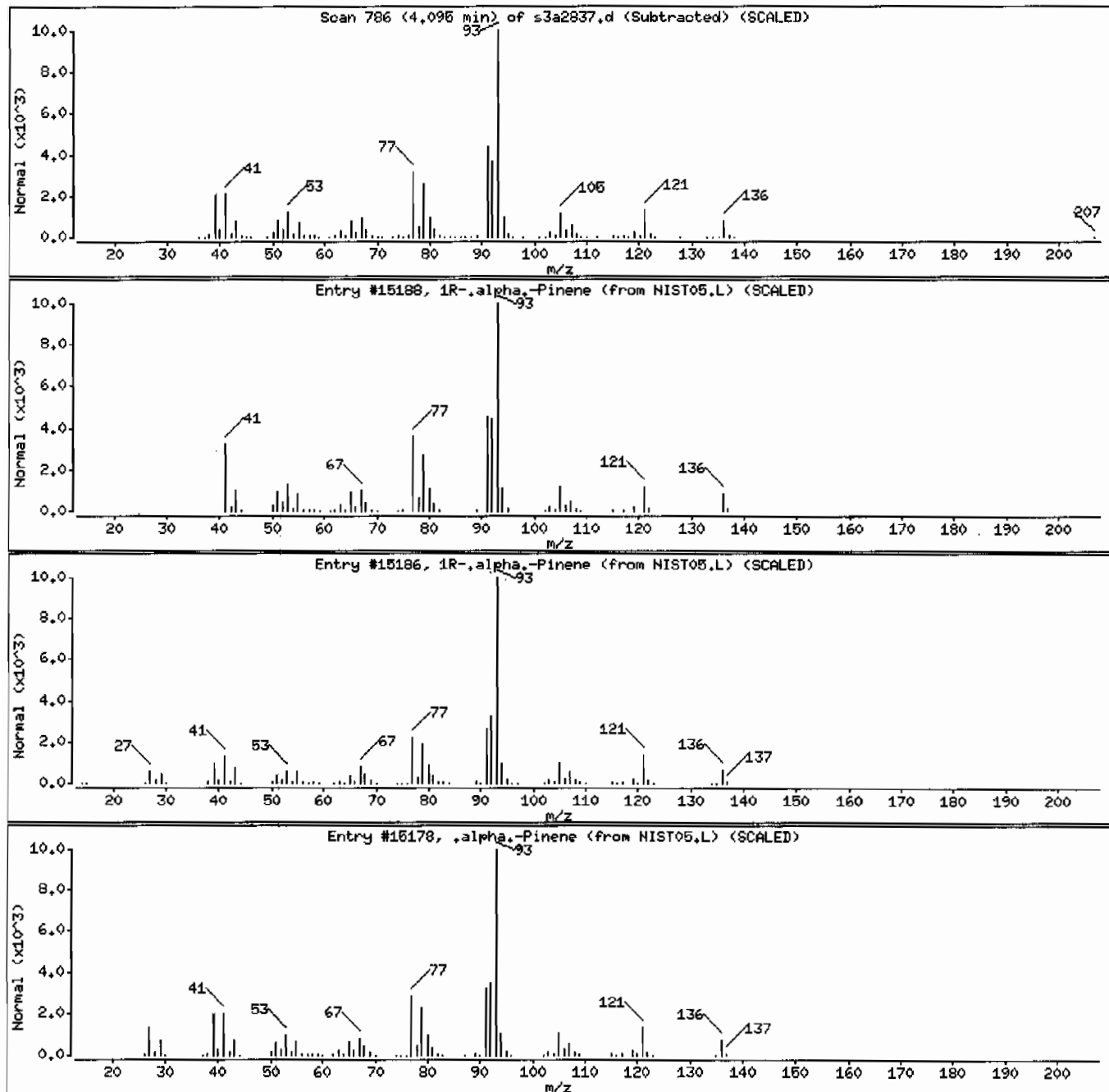
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| 1R-.alpha.-Pinene             | 7785-70-8  | NIST05.L | 15188 | 98      | C10H16  | 136    |
| 1R-.alpha.-Pinene             | 7785-70-8  | NIST05.L | 15186 | 96      | C10H16  | 136    |
| .alpha.-Pinene                | 80-56-8    | NIST05.L | 15178 | 96      | C10H16  | 136    |



Date : 29-JAN-2010 01:44

Client ID: RE15-10-8417

Instrument: MSD3.i

Sample Info: 1245114009194487411SVHF111LANL

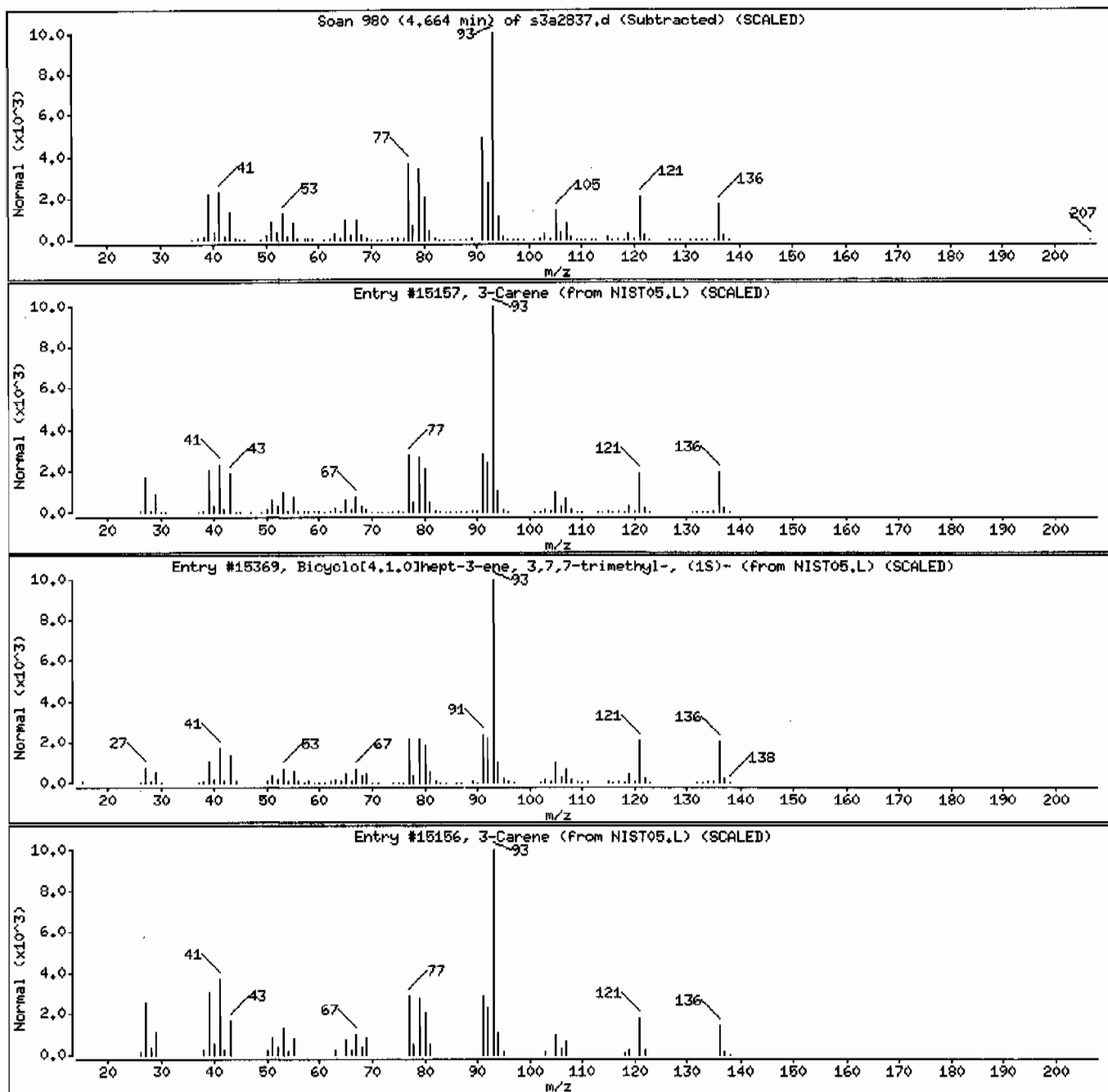
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--|------------|----------|-------|---------|---------|--------|
| 3-Carene                                 | 13466-78-9 | NIST05.L | 15157 | 97      | C10H16  | 136    |
| Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy | 498-15-7   | NIST05.L | 15369 | 96      | C10H16  | 136    |
| 3-Carene                                 | 13466-78-9 | NIST05.L | 15156 | 96      | C10H16  | 136    |



Date : 29-JAN-2010 01:44

Client ID: RE15-10-8417

Instrument: MSD3.i

Sample Info: 1245114009194487411SVHF11ILANL

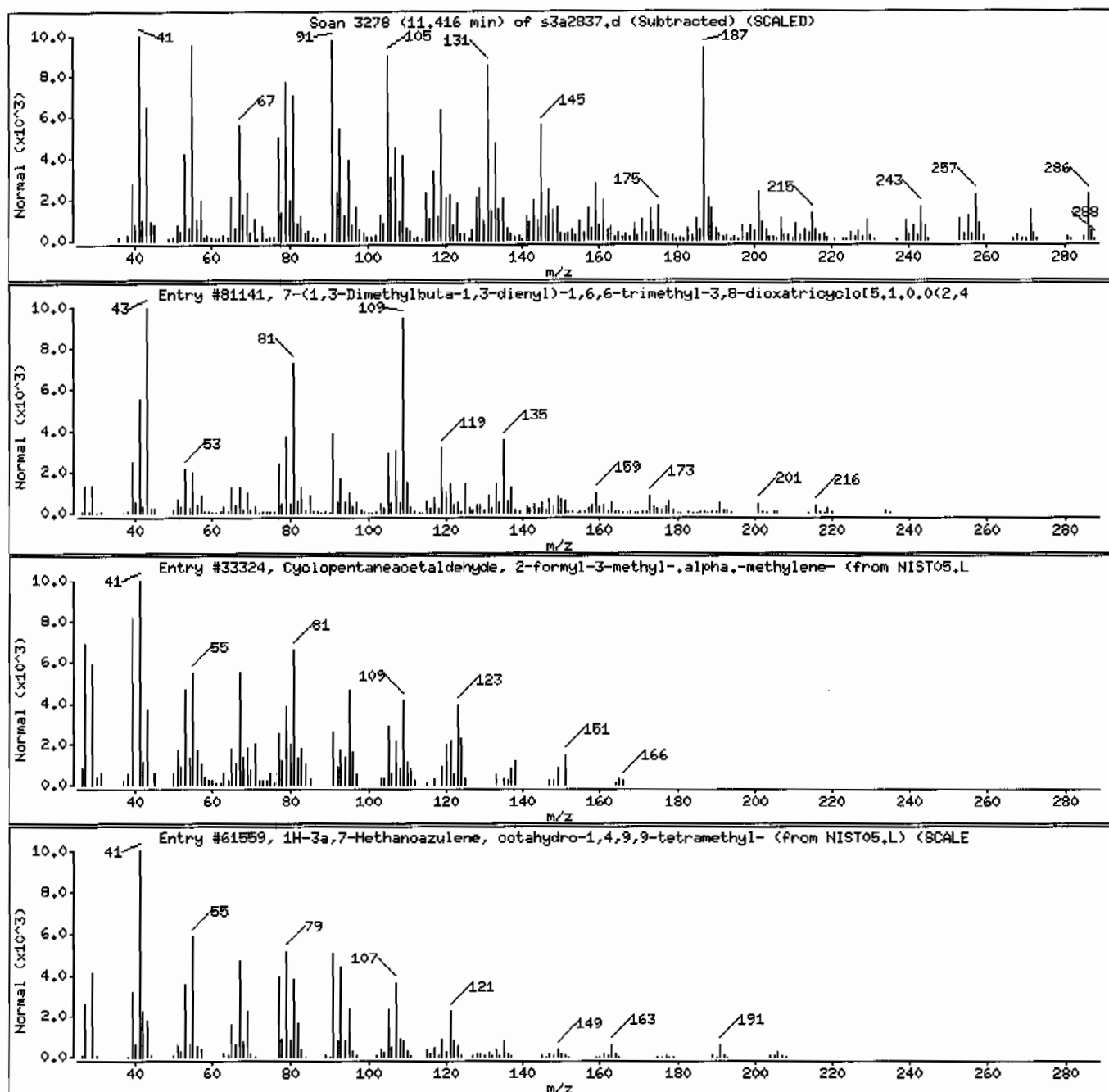
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula  | Weight |
|--|--------------|----------|-------|---------|----------|--------|
| Unknown                                  |              |          |       |         |          |        |
| 7-(1,3-Dimethylbuta-1,3-dienyl)-1,6,6-tr | 1000190-22-7 | NIST05.L | 81141 | 35      | C15H22O2 | 234    |
| Cyclopentaneacetaldehyde, 2-formyl-3-met | 5951-57-5    | NIST05.L | 33324 | 25      | C10H14O2 | 166    |
| 1H-3a,7-Methanoazulene, octahydro-1,4,9, | 19078-35-4   | NIST05.L | 61559 | 22      | C15H26   | 206    |



Date : 29-JAN-2010 01:44

Client ID: RE15-10-8417

Instrument: MSD3.1

Sample Info: 1245114009194487411SVHF111LANL

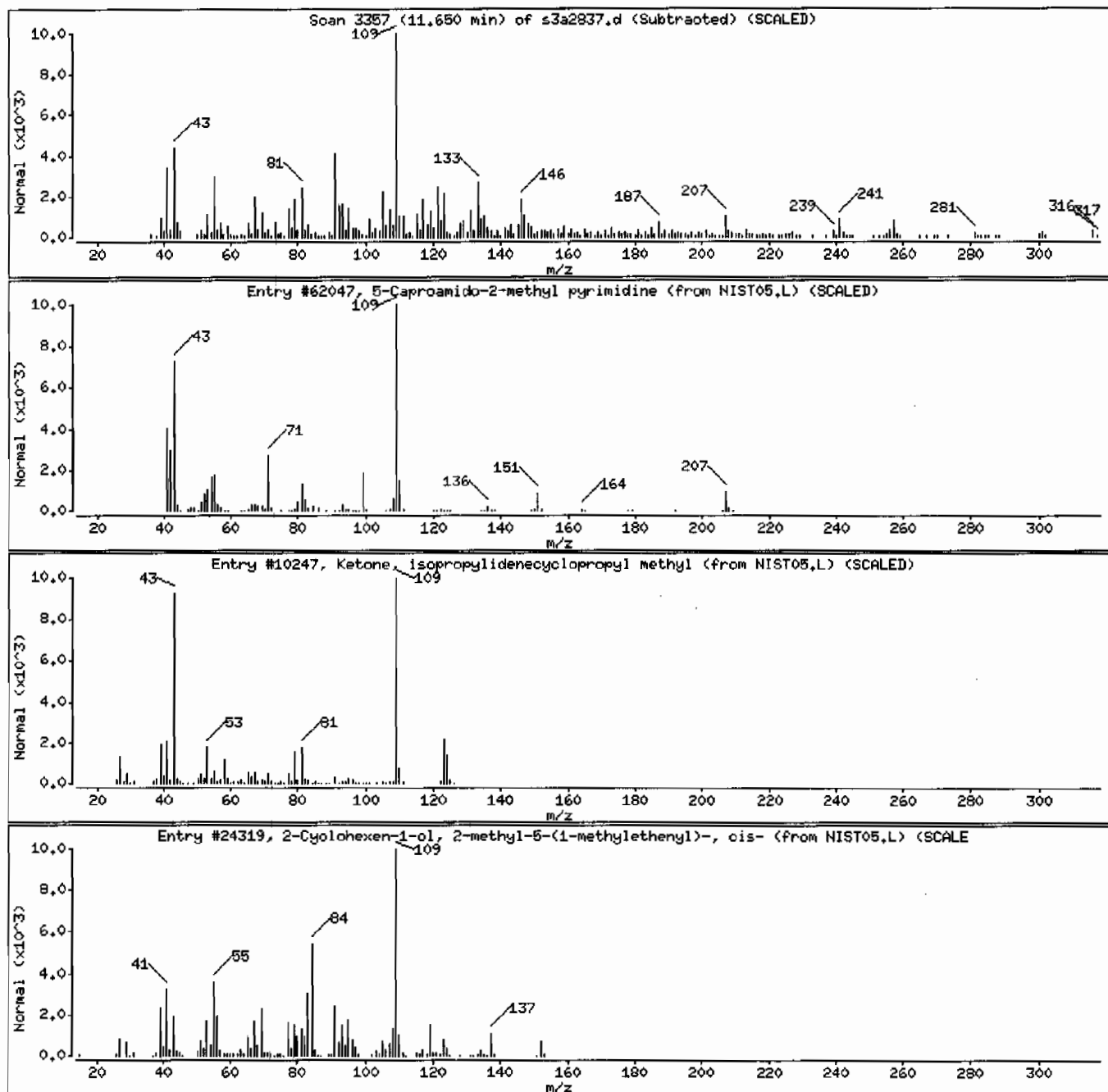
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula   | Weight |
|--|--------------|----------|-------|---------|-----------|--------|
| Unknown                                  |              |          |       |         |           |        |
| 5-Caproamido-2-methyl pyrimidine         | 1000213-95-8 | NIST05.L | 62047 | 38      | C11H17N3O | 207    |
| Ketone, isopropylidenecyclopropyl methyl | 29765-67-1   | NIST05.L | 10247 | 38      | C8H12O    | 124    |
| 2-Cyclohexen-1-ol, 2-methyl-5-(1-methyle | 1197-06-4    | NIST05.L | 24319 | 38      | C10H16O   | 152    |





Date : 29-JAN-2010 01:44

Client ID: RE15-10-8417

Instrument: MSD3.i

Sample Info: 1245114009194487411SVHF111LANL

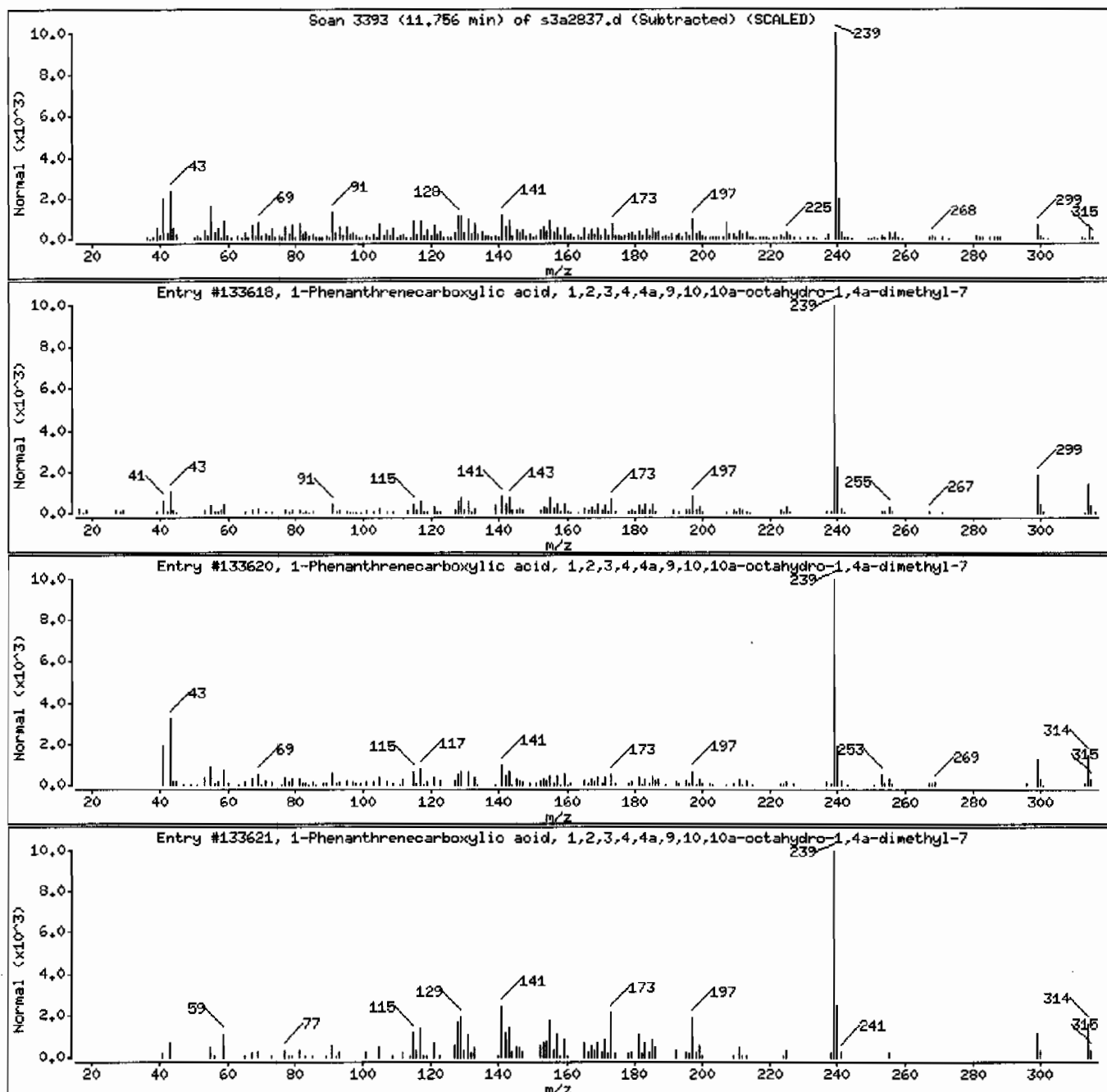
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133618 | 98      | C21H30O2 | 314    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133620 | 94      | C21H30O2 | 314    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133621 | 83      | C21H30O2 | 314    |



Date: 29-JAN-2010 01:44

Client ID: RE15-10-8417

Instrument: MSD3.i

Sample Info: 1245114009194487411SVHF11LANL

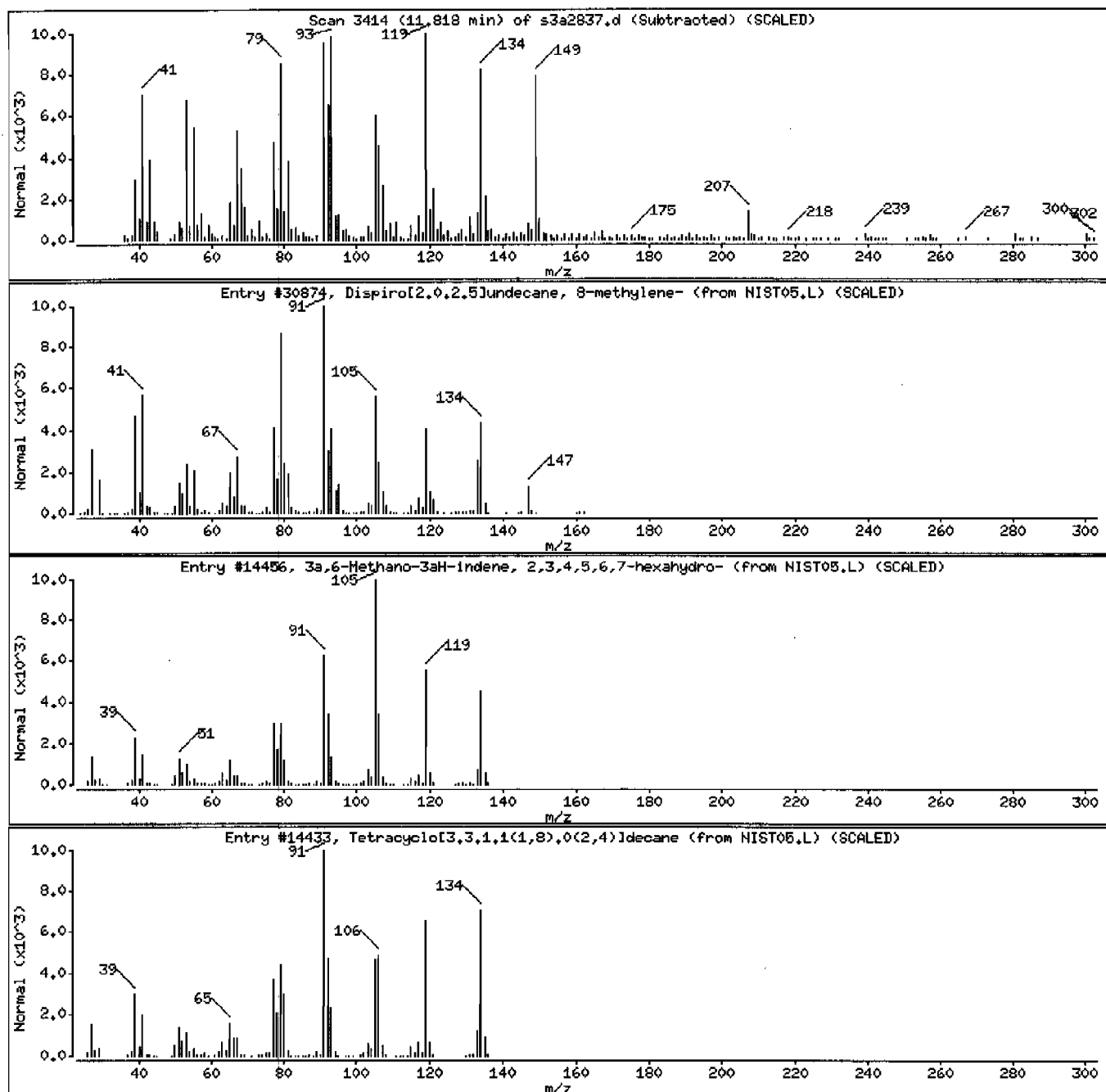
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula | Weight |
|--|--------------|----------|-------|---------|---------|--------|
| Unknown                                  |              |          |       |         |         |        |
| Dispiro[2.0,2.5]undecane, 8-methylene-   | 51567-09-0   | NIST05.L | 30874 | 46      | C12H18  | 162    |
| 3a,6-Hethano-3aH-indene, 2,3,4,5,6,7-hex | 96640-10-9   | NIST05.L | 14456 | 42      | C10H14  | 134    |
| Tetracyclo[3.3.1.1(1,8),0(2,4)]decane    | 1000185-58-7 | NIST05.L | 14433 | 38      | C10H14  | 134    |



Date : 29-JAN-2010 01:44

Client ID: RE15-10-8417

Instrument: MSD3.i

Sample Info: 1245114009194487411SVHF111LANL

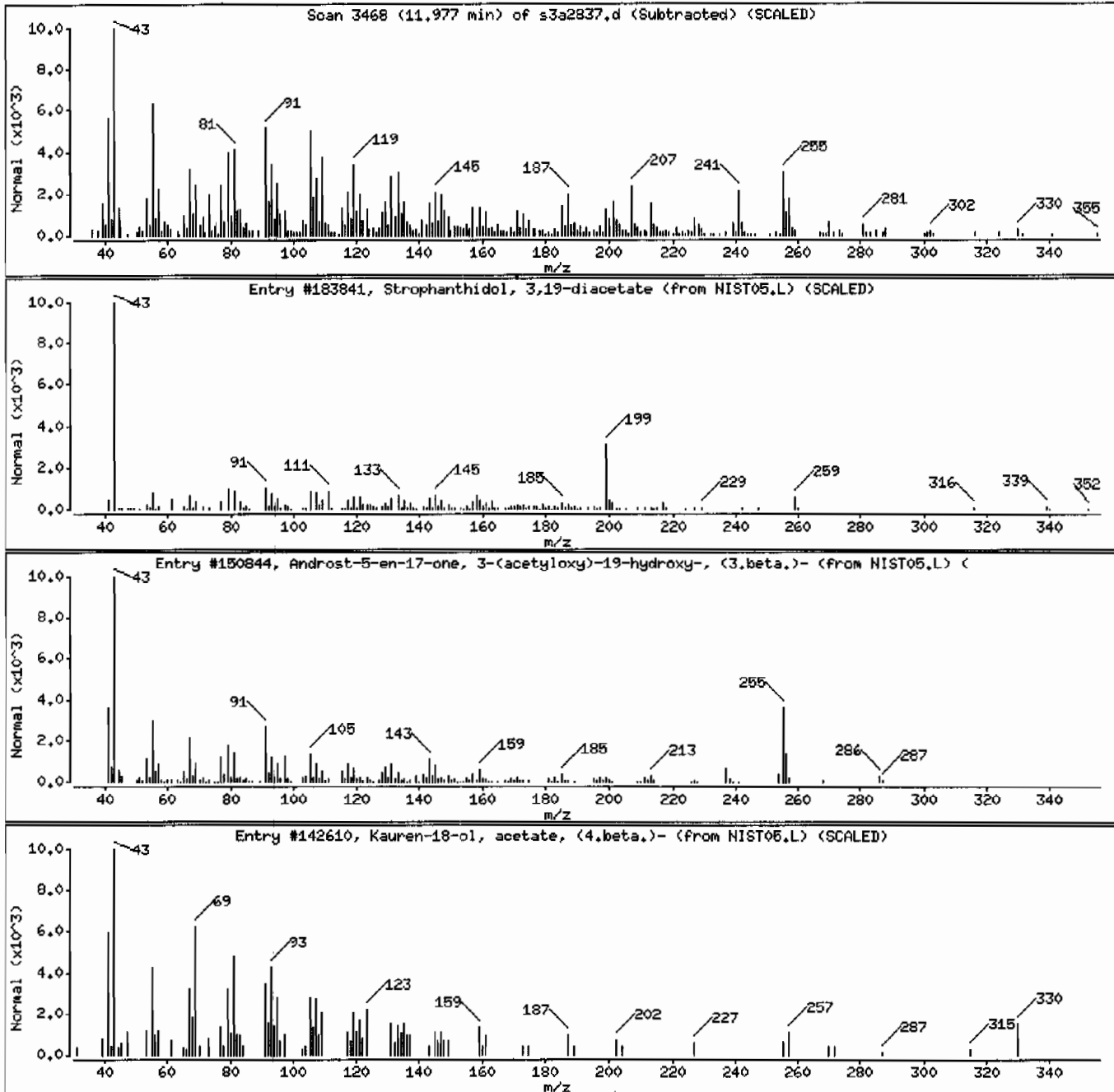
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| Unknown                                  |            |          |        |         |          |        |
| Strophanthidol, 3,19-diacetate           | 83349-11-5 | NIST05.L | 183841 | 35      | C27H38O8 | 490    |
| Androst-5-en-17-one, 3-(acetyloxy)-19-hy | 2857-42-3  | NIST05.L | 150844 | 32      | C21H30O4 | 346    |
| Kauren-18-ol, acetate, (4.beta.)-        | 72150-74-4 | NIST05.L | 142610 | 32      | C22H34O2 | 330    |



Date : 29-JAN-2010 01:44

Client ID: RE15-10-8417

Instrument: MSD3.1

Sample Info: 1245114009194487411SVHF111LANL

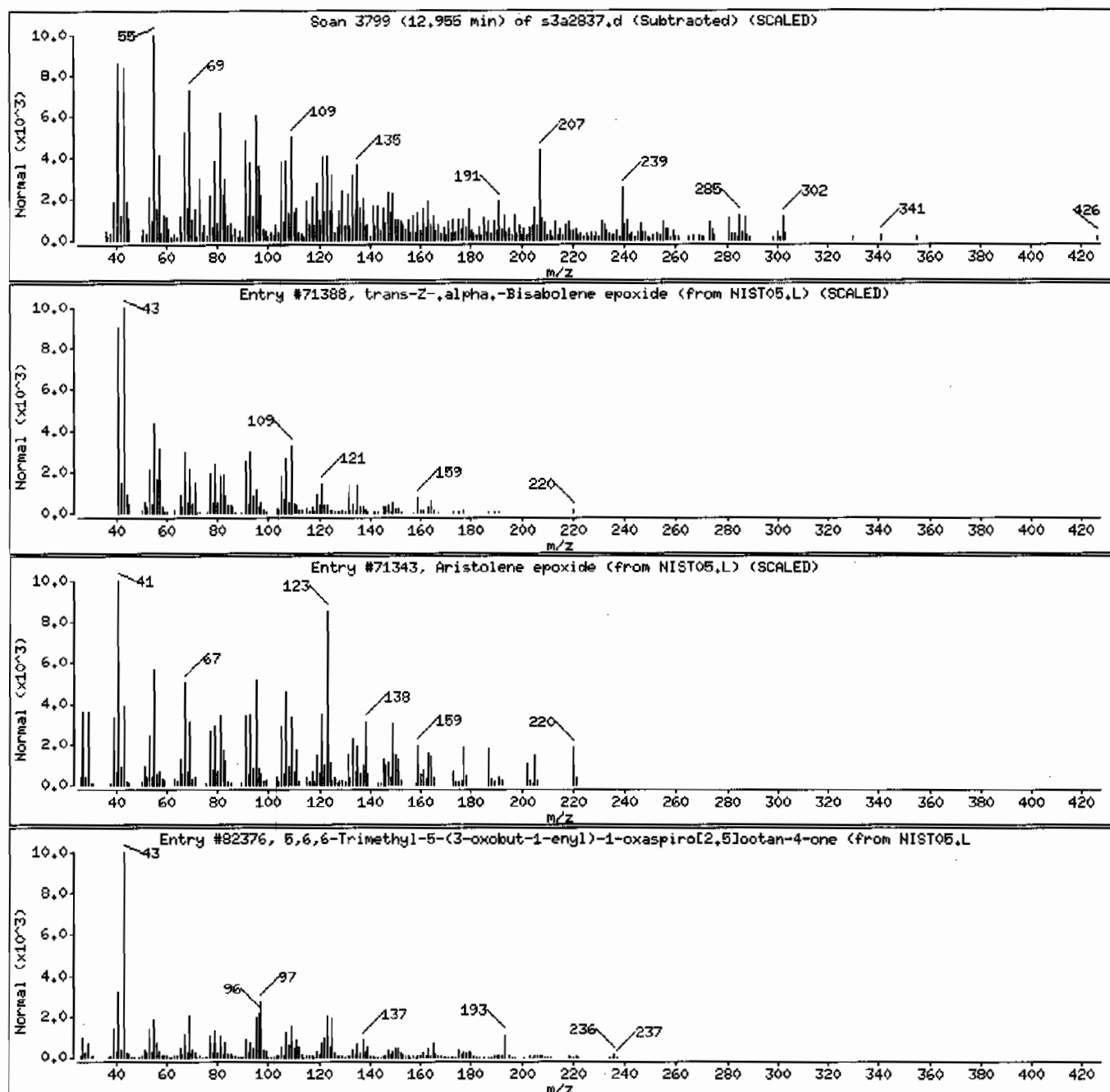
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula  | Weight |
|--|--------------|----------|-------|---------|----------|--------|
| Unknown                                  |              |          |       |         |          |        |
| trans-Z,.alpha.-Bisabolene epoxide       | 1000131-71-1 | NIST05.L | 71388 | 38      | C15H24O  | 220    |
| Aristolene epoxide                       | 1000151-48-9 | NIST05.L | 71343 | 38      | C15H24O  | 220    |
| 5,6,6-Trimethyl-5-(3-oxobut-1-enyl)-1-ox | 1000192-73-9 | NIST05.L | 82376 | 38      | C14H20O3 | 236    |



Date : 29-JAN-2010 01:44

Client ID: RE15-10-8417

Instrument: MSD3.i

Sample Info: 1245114009194487411|SVMF11|LANL

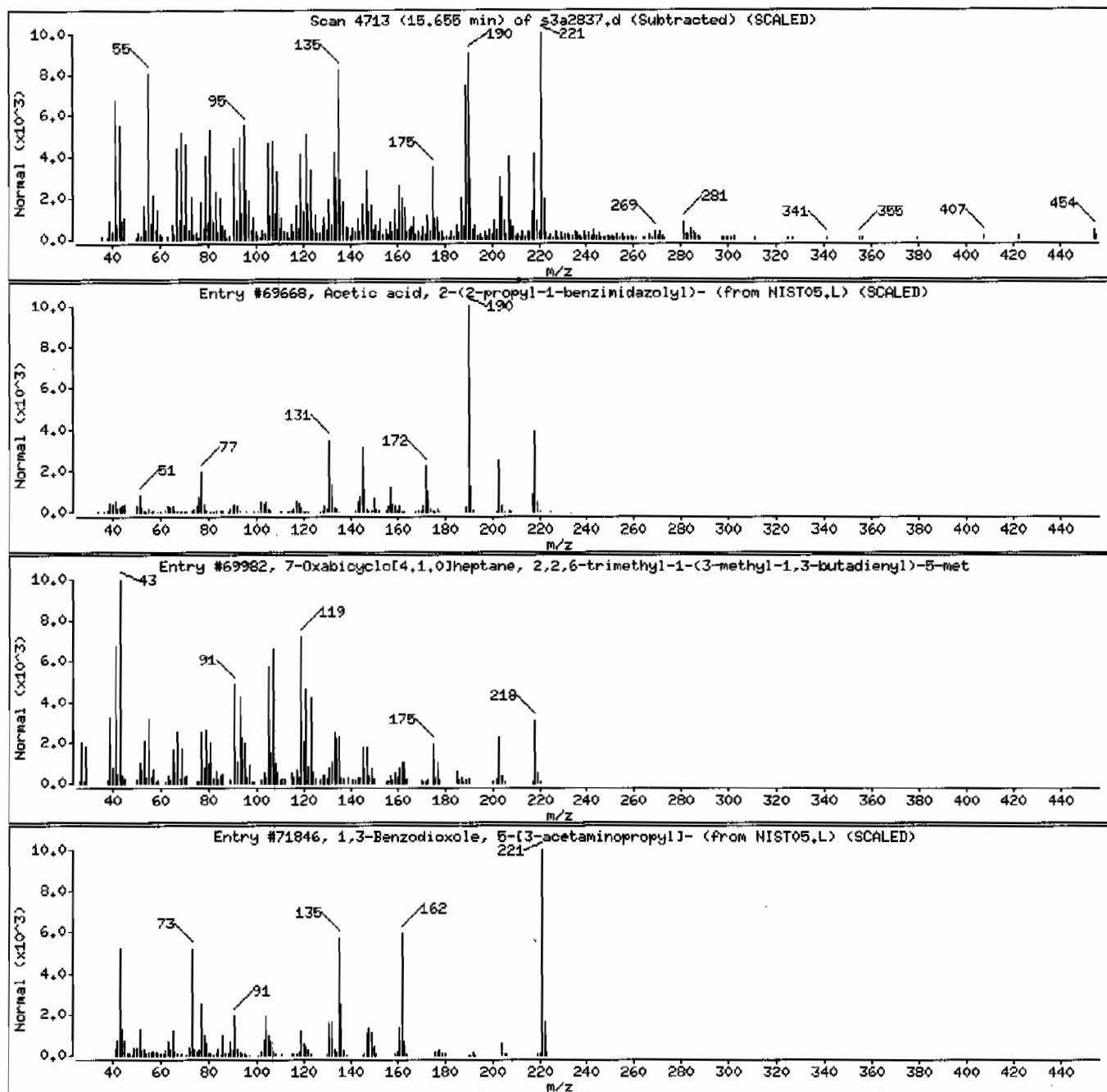
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match               | CAS Number   | Library  | Entry | Quality | Formula    | Height |
|---|--------------|----------|-------|---------|------------|--------|
| Unknown                                     |              |          |       |         |            |        |
| Acetic acid, 2-(2-propyl-1-benzimidazolyl)- | 331736-92-6  | NIST05.L | 69668 | 46      | C12H14N2O2 | 218    |
| 7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet    | 70038-20-9   | NIST05.L | 69982 | 40      | C15H22O    | 218    |
| 1,3-Benzodioxole, 5-[3-acetaminopropyl]-    | 1000124-33-0 | NIST05.L | 71846 | 38      | C12H15NO3  | 221    |



Date : 29-JAN-2010 01:44

Client ID: RE15-10-8417

Instrument: MSD3.i

Sample Info: 1245114009194487411SVHF111LANL

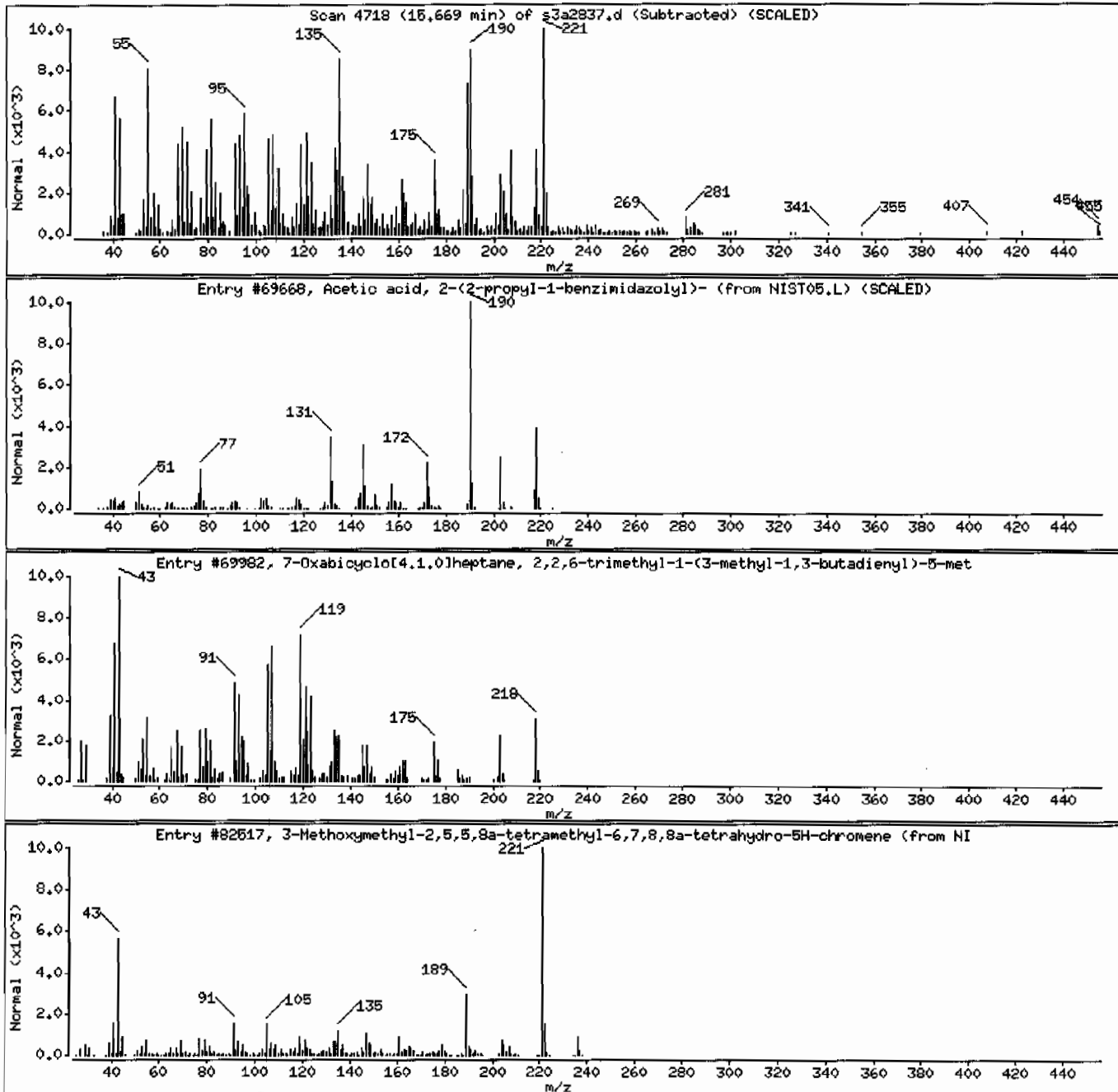
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match              | CAS Number  | Library  | Entry | Quality | Formula    | Weight |
|--|-------------|----------|-------|---------|------------|--------|
| Unknown                                    |             |          |       |         |            |        |
| Acetic acid, 2-(2-propyl-1-benzimidazolyl) | 331736-92-6 | NIST05.L | 69668 | 46      | C12H14N2O2 | 218    |
| 7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet   | 70038-20-9  | NIST05.L | 69982 | 40      | C15H22O    | 218    |
| 3-Methoxymethyl-2,5,6,8a-tetramethyl-6,7   | 64201-73-6  | NIST05.L | 82517 | 38      | C16H24O2   | 236    |



Date : 29-JAN-2010 01:44

Client ID: RE15-10-8417

Instrument: MSD3.i

Sample Info: 1245114009194487411SVHF111LANL

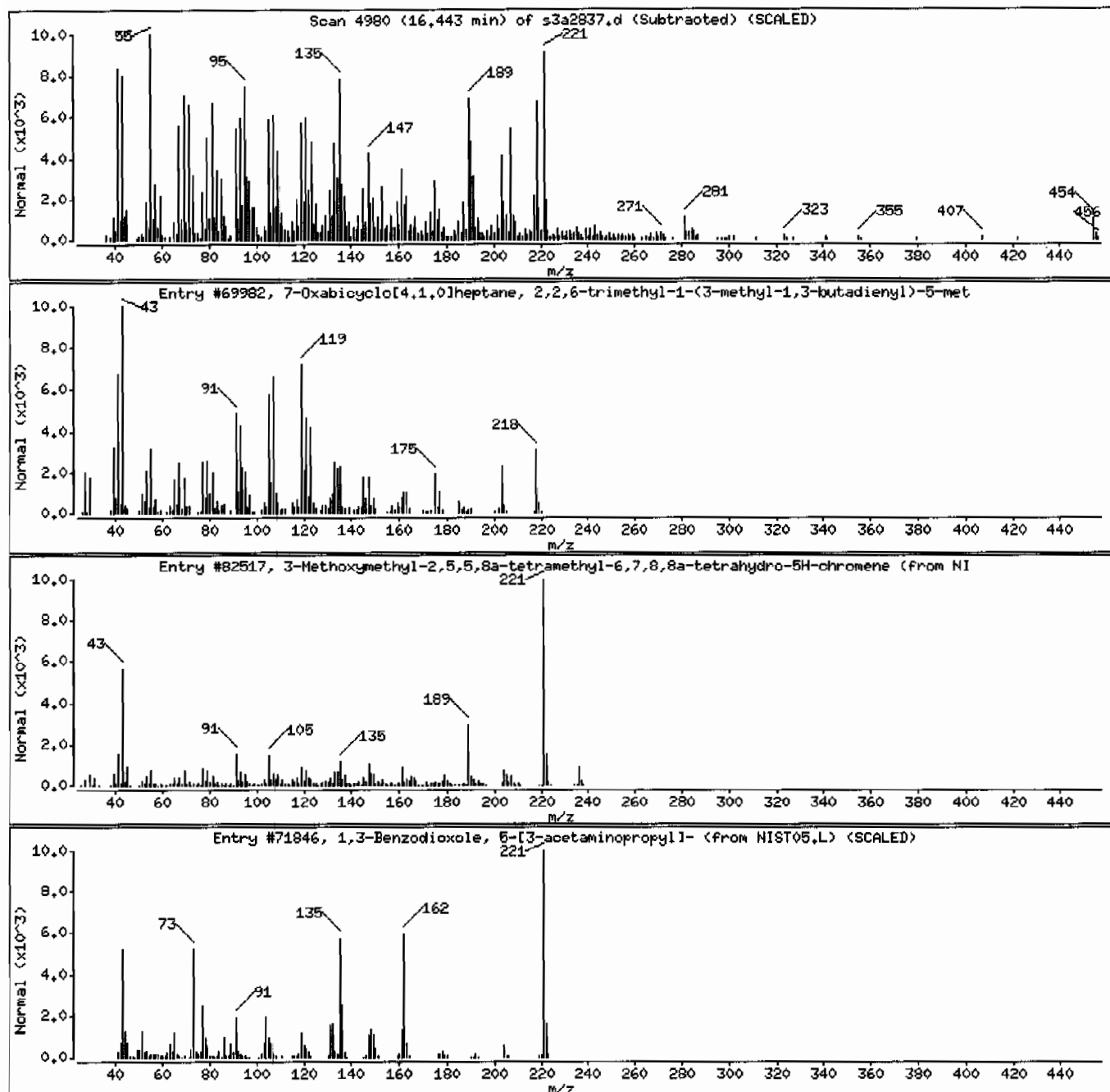
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula   | Weight |
|--|--------------|----------|-------|---------|-----------|--------|
| Unknown                                  |              |          |       |         |           |        |
| 7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet | 70038-20-9   | NIST05.L | 69982 | 59      | C15H22O   | 218    |
| 3-Methoxymethyl-2,5,5,8a-tetramethyl-6,7 | 64201-73-6   | NIST05.L | 82517 | 42      | C15H24O2  | 236    |
| 1,3-Benzodioxole, 5-[3-acetaminopropyl]- | 1000124-33-0 | NIST05.L | 71846 | 30      | C12H15NO3 | 221    |



Date : 29-JAN-2010 01:44

Client ID: RE15-10-8417

Instrument: MSD3.i

Sample Info: 1245114009194487411SVMF111LANL

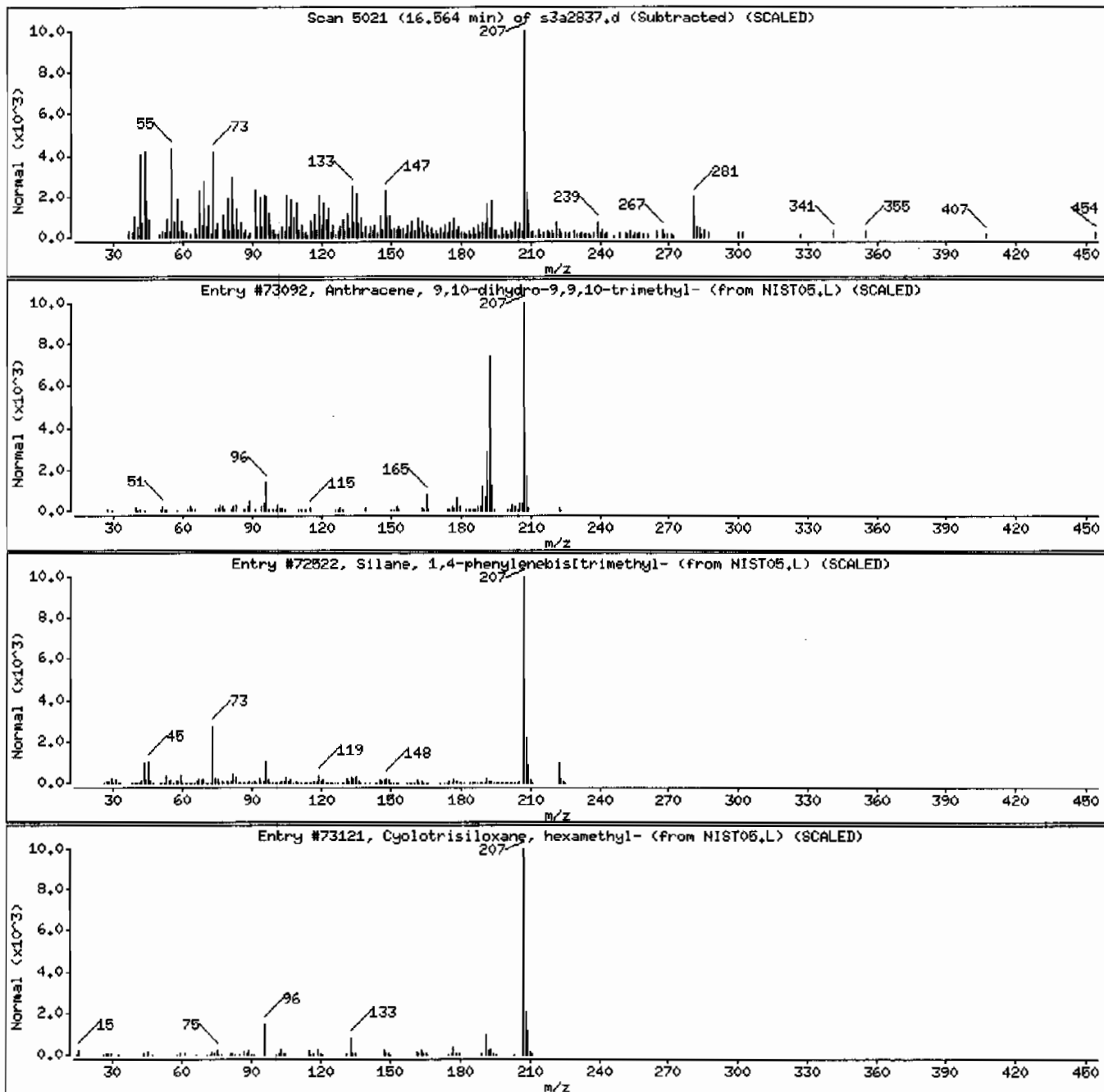
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match              | CAS Number | Library  | Entry | Quality | Formula    | Weight |
|--|------------|----------|-------|---------|------------|--------|
| Unknown                                    |            |          |       |         |            |        |
| Anthracene, 9,10-dihydro-9,9,10-trimethyl- | 14923-29-6 | NIST05.L | 73092 | 45      | C17H18     | 222    |
| Silane, 1,4-phenylenebis(trimethyl-        | 13183-70-5 | NIST05.L | 72522 | 43      | C12H22Si2  | 222    |
| Cyclotrisiloxane, hexamethyl-              | 541-05-9   | NIST05.L | 73121 | 43      | C6H18O3Si3 | 222    |





Date : 29-JAN-2010 01:44

Client ID: RE15-10-8417

Instrument: MSD3.1

Sample Info: 1245114009194487411ISVMF11ILANL

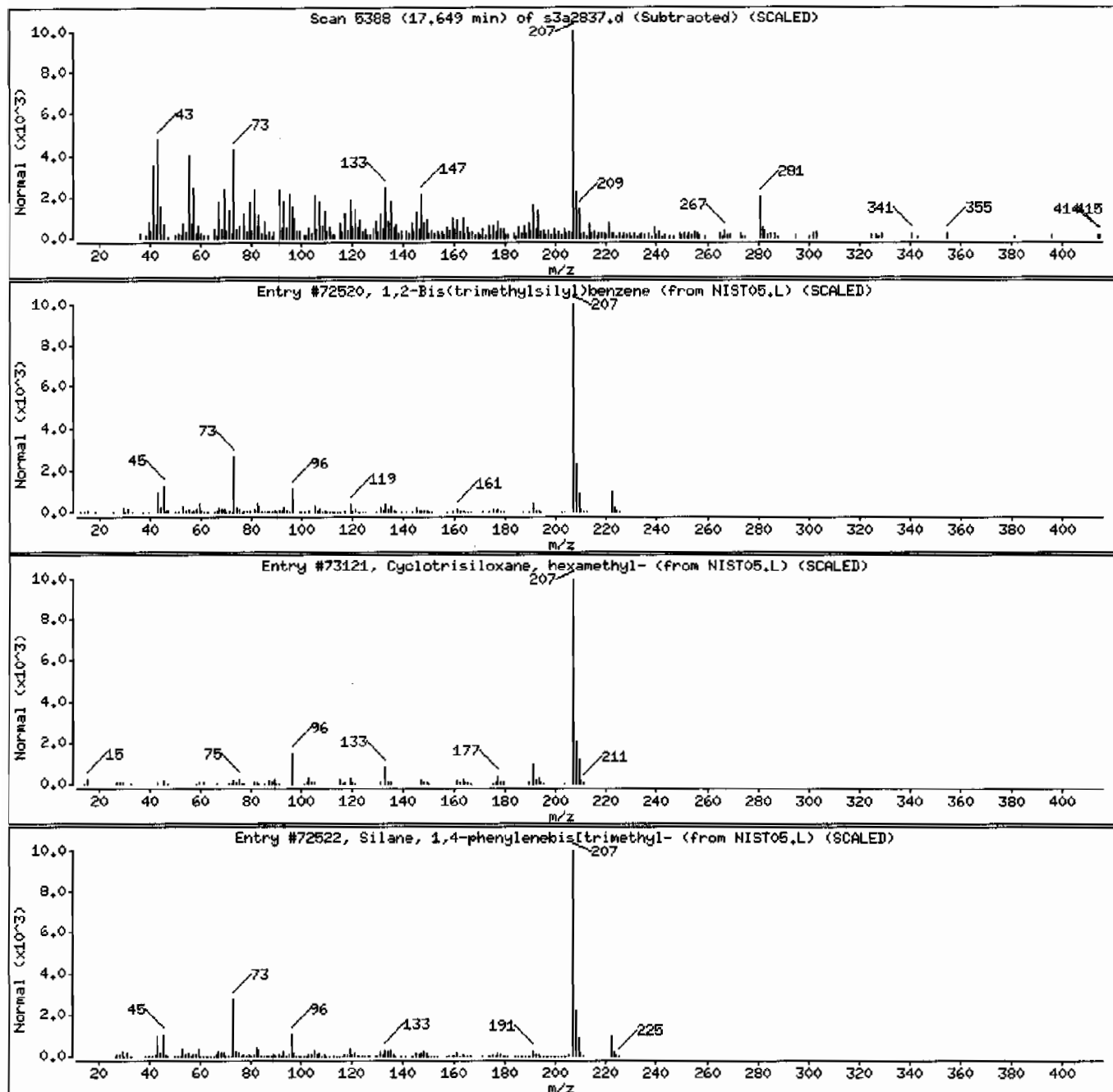
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match       | CAS Number | Library  | Entry | Quality | Formula   | Weight |
|-------------------------------------|------------|----------|-------|---------|---|--------|
| Unknown                             |            |          |       |         |   |        |
| 1,2-Bis(trimethylsilyl)benzene      | 17151-09-6 | NIST05.L | 72520 | 49      | C <sub>12</sub> H <sub>22</sub> Si <sub>2</sub>               | 222    |
| Cyclotrisiloxane, hexamethyl-       | 541-05-9   | NIST05.L | 73121 | 47      | C <sub>6</sub> H <sub>18</sub> O <sub>3</sub> Si <sub>3</sub> | 222    |
| Silane, 1,4-phenylenebis(trimethyl- | 13183-70-5 | NIST05.L | 72522 | 43      | C <sub>12</sub> H <sub>22</sub> Si <sub>2</sub>               | 222    |



Date : 29-JAN-2010 01:44

Client ID: RE15-10-8417

Instrument: MSD3.i

Sample Info: 12451140091944874111SVHF111LANL

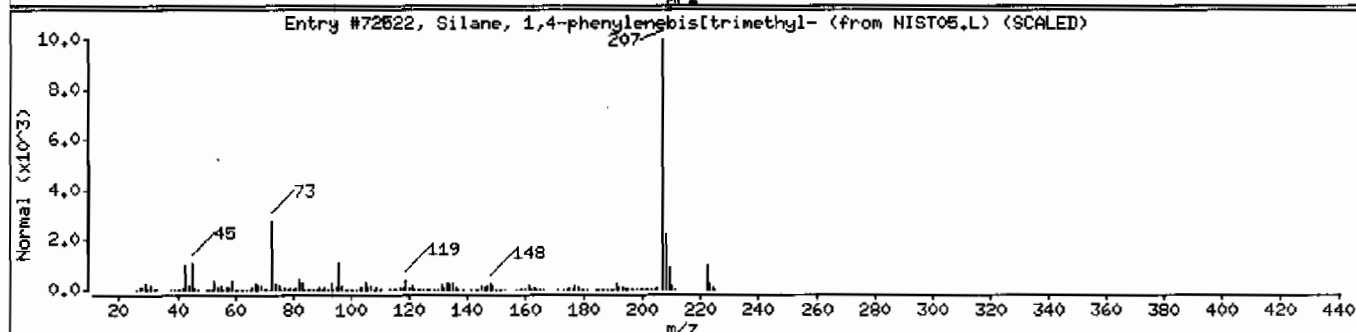
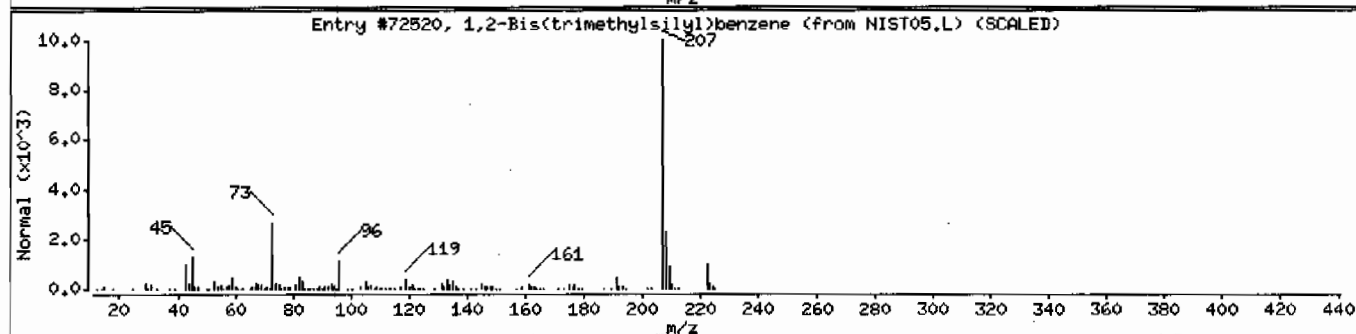
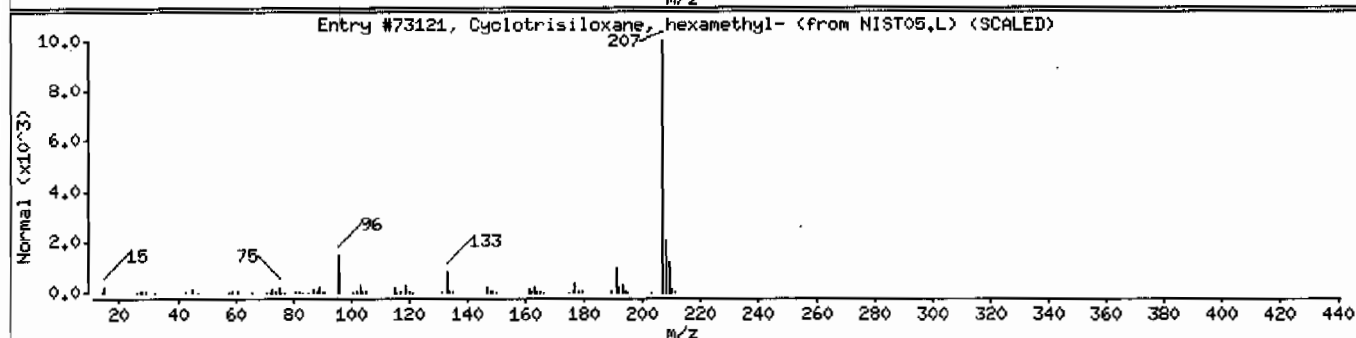
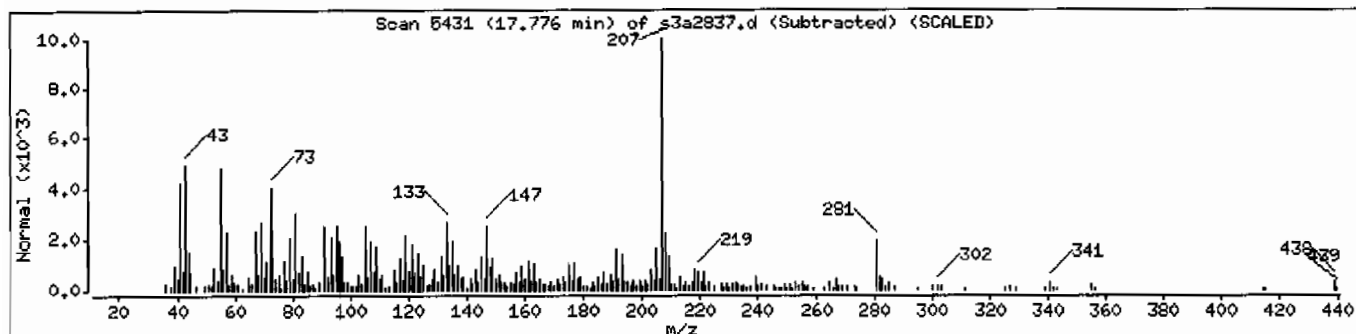
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match       | CAS Number | Library  | Entry | Quality | Formula    | Weight |
|-------------------------------------|------------|----------|-------|---------|------------|--------|
| Unknown                             |            |          |       |         |            |        |
| Cyclotrisiloxane, hexamethyl-       | 541-05-9   | NIST05.L | 73121 | 43      | C6H18O3Si3 | 222    |
| 1,2-Bis(trimethylsilyl)benzene      | 17151-09-6 | NIST05.L | 72520 | 43      | C12H22Si2  | 222    |
| Silane, 1,4-phenylenebis(trimethyl- | 13183-70-5 | NIST05.L | 72522 | 38      | C12H22Si2  | 222    |



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114012

Client ID: RE15-10-8418  
Batch ID: 944874  
Run Date: 01/29/2010 02:59  
Prep Date: 01/25/2010 21:06  
Data File: s3a2840.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.06 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 11.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 375    | ug/kg | 75.0    | 375     |
| 108-95-2   | Phenol                        | U         | 375    | ug/kg | 75.0    | 375     |
| 95-57-8    | 2-Chlorophenol                | U         | 375    | ug/kg | 75.0    | 375     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 375    | ug/kg | 75.0    | 375     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 375    | ug/kg | 75.0    | 375     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 375    | ug/kg | 75.0    | 375     |
| 83-32-9    | Acenaphthene                  | U         | 37.5   | ug/kg | 12.4    | 37.5    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 375    | ug/kg | 37.5    | 375     |
| 100-02-7   | 4-Nitrophenol                 | U         | 375    | ug/kg | 124     | 375     |
| 87-86-5    | Pentachlorophenol             | U         | 375    | ug/kg | 93.7    | 375     |
| 129-00-0   | Pyrene                        | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 110-86-1   | Pyridine                      | U         | 375    | ug/kg | 75.0    | 375     |
| 62-53-3    | Aniline                       | U         | 375    | ug/kg | 112     | 375     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 375    | ug/kg | 75.0    | 375     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 375    | ug/kg | 75.0    | 375     |
| 100-51-6   | Benzyl alcohol                | U         | 375    | ug/kg | 112     | 375     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 375    | ug/kg | 75.0    | 375     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 375    | ug/kg | 75.0    | 375     |
| 95-48-7    | o-Cresol                      | U         | 375    | ug/kg | 75.0    | 375     |
| 65794-96-9 | m,p-Cresols                   | U         | 375    | ug/kg | 112     | 375     |
| 67-72-1    | Hexachloroethane              | U         | 375    | ug/kg | 75.0    | 375     |
| 98-95-3    | Nitrobenzene                  | U         | 375    | ug/kg | 75.0    | 375     |
| 78-59-1    | Isophorone                    | U         | 375    | ug/kg | 75.0    | 375     |
| 88-75-5    | 2-Nitrophenol                 | U         | 375    | ug/kg | 75.0    | 375     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 375    | ug/kg | 131     | 375     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 375    | ug/kg | 75.0    | 375     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 375    | ug/kg | 75.0    | 375     |
| 65-85-0    | Benzoic acid                  | U         | 750    | ug/kg | 187     | 750     |
| 91-20-3    | Naphthalene                   | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 106-47-8   | 4-Chloroaniline               | U         | 375    | ug/kg | 75.0    | 375     |
| 87-68-3    | Hexachlorobutadiene           | U         | 375    | ug/kg | 75.0    | 375     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 37.5   | ug/kg | 7.50    | 37.5    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 375    | ug/kg | 75.0    | 375     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 375    | ug/kg | 75.0    | 375     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 375    | ug/kg | 75.0    | 375     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 37.5   | ug/kg | 12.4    | 37.5    |
| 88-74-4    | 2-Nitroaniline                | U         | 375    | ug/kg | 75.0    | 375     |
| 99-09-2    | <i>o</i> -Nitroaniline        | U         | 375    | ug/kg | 75.0    | 375     |
|            | 3-Nitroaniline                |           |        |       |         |         |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114012

Client ID: RE15-10-8418  
Batch ID: 944874  
Run Date: 01/29/2010 02:59  
Prep Date: 01/25/2010 21:06  
Data File: s3a2840.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3J  
Analyst: JLD1  
Aliquot: 30.06 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 11.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname  | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|---|-----------|--------|-------|---------|---------|
| 131-11-3  | <i>m</i> -Nitroaniline<br>Dimethylphthalate               | U         | 375    | ug/kg | 75.0    | 375     |
| 606-20-2  | 2,6-Dinitrotoluene  | U         | 375    | ug/kg | 37.5    | 375     |
| 208-96-8  | Acenaphthylene  | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 51-28-5   | 2,4-Dinitrophenol   | U         | 750    | ug/kg | 142     | 750     |
| 132-64-9  | Dibenzofuran  | U         | 375    | ug/kg | 75.0    | 375     |
| 84-66-2   | Diethylphthalate  | U         | 375    | ug/kg | 75.0    | 375     |
| 86-73-7   | Fluorene  | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 7005-72-3 | 4-Chlorophenylphenylether                                 | U         | 375    | ug/kg | 75.0    | 375     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol                                | U         | 375    | ug/kg | 75.0    | 375     |
| 100-01-6  | 4-Nitroaniline  | U         | 375    | ug/kg | 112     | 375     |
| 122-39-4  | <i>p</i> -Nitroaniline<br>Diphenylamine                   | U         | 375    | ug/kg | 75.0    | 375     |
| 122-66-7  | Azobenzene  | U         | 375    | ug/kg | 75.0    | 375     |
| 101-55-3  | <i>1,2</i> -Diphenylhydrazine<br>4-Bromophenylphenylether | U         | 375    | ug/kg | 75.0    | 375     |
| 118-74-1  | Hexachlorobenzene   | U         | 375    | ug/kg | 75.0    | 375     |
| 85-01-8   | Phenanthrene  | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 120-12-7  | Anthracene  | U         | 37.5   | ug/kg | 7.50    | 37.5    |
| 84-74-2   | Di-n-butylphthalate                                       | U         | 375    | ug/kg | 75.0    | 375     |
| 206-44-0  | Fluoranthene  | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 85-68-7   | Butylbenzylphthalate                                      | U         | 375    | ug/kg | 75.0    | 375     |
| 56-55-3   | Benzo(a)anthracene  | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 91-94-1   | 3,3'-Dichlorobenzidine                                    | U         | 375    | ug/kg | 112     | 375     |
| 218-01-9  | Chrysene  | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate                                | U         | 375    | ug/kg | 75.0    | 375     |
| 117-84-0  | Di-n-octylphthalate                                       | U         | 375    | ug/kg | 75.0    | 375     |
| 205-99-2  | Benzo(b)fluoranthene                                      | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 207-08-9  | Benzo(k)fluoranthene                                      | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 50-32-8   | Benzo(a)pyrene  | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene                                    | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 53-70-3   | Dibenzo(a,h)anthracene                                    | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 191-24-2  | Benzo(ghi)perylene  | U         | 37.5   | ug/kg | 11.2    | 37.5    |
| 120-82-1  | 1,2,4-Trichlorobenzene                                    | U         | 375    | ug/kg | 75.0    | 375     |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.08 | 1390      | ug/kg |     | J    |
|         | Unknown                               | 2.25 | 204       | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114012    | Date Received: 01/20/2010 08:45  | %Moisture: 11.3      |
|                             | Client: LANL010                  | Project: LANL01004   |
| Client ID: RE15-10-8418     | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Batch ID: 944874            | Inst: MSD3.I                     | Dilution: 1          |
| Run Date: 01/29/2010 02:59  | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Prep Date: 01/25/2010 21:06 | Aliquot: 30.06 g                 | Final Volume: 1 mL   |
| Data File: s3a2840.d        | Column: J&W DB-5MS               | Level: LOW           |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |                                       |       |           |       |     |      |
|---|---------------------------------------|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|   | Unknown Aldol Condensate              | 3.33  | 232       | ug/kg |     | JA   |
|   | Unknown                               | 15.65 | 1050      | ug/kg |     | J    |
|   | Unknown                               | 16.43 | 1640      | ug/kg |     | J    |
|   | Unknown                               | 17.59 | 235       | ug/kg |     | J    |
|   | Unknown                               | 17.6  | 310       | ug/kg |     | J    |

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012810a.b/s3a2840.d  
Lab Smp Id: 245114012 Client Smp ID: RE15-10-8418  
Inj Date : 29-JAN-2010 02:59  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |245114012|944874|1|SVMF|1|LANL  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m  
Meth Date : 29-Jan-2010 10:49 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 15  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1324.sub  
Target Version: 3.50  
Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.06000  | weight of sample          |
| M    | 11.27820  | % moisture                |

Cpnd Variable Local Compound Variable

| Compounds                   | QUANT SIG |        |        |         | RESPONSE | CONCENTRATIONS       |                  |
|-----------------------------|-----------|--------|--------|---------|----------|----------------------|------------------|
|                             | MASS      | RT     | EXP RT | REL RT  |          | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/Kg) |
| * 10 1,4-Dichlorobenzene-d4 | 152       | 4.723  | 4.722  | (1.000) | 631078   | 40.0000              |                  |
| * 29 Naphthalene-d8         | 136       | 6.000  | 6.003  | (1.000) | 2389127  | 40.0000              |                  |
| * 46 Acenaphthene-d10       | 164       | 7.873  | 7.875  | (1.000) | 1302544  | 40.0000              |                  |
| * 67 Phenanthrene-d10       | 188       | 9.489  | 9.486  | (1.000) | 2065315  | 40.0000              |                  |
| * 91 Chrysene-d12           | 240       | 12.480 | 12.478 | (1.000) | 1138163  | 40.0000              |                  |
| * 98 Perylene-d12           | 264       | 14.765 | 14.762 | (1.000) | 513449   | 40.0000              |                  |
| \$ 3 2-Fluorophenol         | 112       | 3.561  | 3.549  | (0.754) | 1220712  | 74.3364              | 2790             |
| \$ 5 Phenol-d5              | 99        | 4.333  | 4.331  | (0.917) | 1456191  | 70.5579              | 2640             |
| \$ 20 Nitrobenzene-d5       | 82        | 5.258  | 5.262  | (0.876) | 682759   | 38.6872              | 1450             |
| \$ 39 2-Fluorobiphenyl      | 172       | 7.130  | 7.128  | (0.906) | 1322441  | 39.2788              | 1470             |
| \$ 60 2,4,6-Tribromophenol  | 329       | 8.725  | 8.724  | (1.108) | 282093   | 75.5464              | 2830             |
| \$ 81 p-Terphenyl-d14       | 244       | 11.202 | 11.196 | (0.898) | 1108365  | 56.6565              | 2120             |

## ION RATIO REPORT

## SV REPORT

Data file: s3a2840.d

Report Date: 01/29/2010 11:49

Lab. ID: 245114012

SampleType: SAMPLE

Injection Date: 29-JAN-2010 02:59

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245114012|944874|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1324

Sample Matrix: SOIL

| MASS                      | RESPONSE | RT             | EXPECT RT | TARGET RANGE | RATIO | QUAL |
|---------------------------|----------|----------------|-----------|--------------|-------|------|
| =====                     |          |                |           |              |       |      |
| 4 Aniline                 |          | CAS#: 62-53-3  |           |              |       |      |
| 66                        | 84363    | 4.33           | 4.41      | 80-120       | 100   | (T)  |
| 93                        | 8792     | 4.39           | 4.41      | 201-261      | 10    | (Q)  |
| -----                     |          |                |           |              |       |      |
| 17 N-Nitrosodipropylamine |          | CAS#: 621-64-7 |           |              |       |      |
| 70                        | 100010   | 5.26           | 5.10      | 80-120       | 100   | (T)  |
| 42                        | 65759    | 5.26           | 5.10      | 45-105       | 66    | (T)  |
| -----                     |          |                |           |              |       |      |
| 40 2-Chloronaphthalene    |          | CAS#: 91-58-7  |           |              |       |      |
| 162                       | 13339    | 7.47           | 7.27      | 80-120       | 100   | (T)  |
| 164                       | 785      | 7.47           | 7.27      | 3- 63        | 6     | (T)  |
| 127                       | 1067     | 7.47           | 7.27      | 10- 70       | 8     | (QT) |
| -----                     |          |                |           |              |       |      |
| 41 m-Nitroaniline         |          | CAS#: 99-09-2  |           |              |       |      |
| 138                       | 233      | 7.87           | 7.82      | 80-120       | 100   | ( )  |
| 92                        | 7875     | 7.87           | 7.82      | 80-140       | 3378  | (Q)  |
| 108                       | 28362    | 7.87           | 7.82      | 0- 40        | 12164 | (Q)  |
| -----                     |          |                |           |              |       |      |
| 44 2,6-Dinitrotoluene     |          | CAS#: 606-20-2 |           |              |       |      |
| 165                       | 170166   | 7.87           | 7.63      | 80-120       | 100   | (T)  |
| 63                        | 2398     | 7.87           | 7.63      | 35- 95       | 1     | (QT) |
| -----                     |          |                |           |              |       |      |
| 50 2,4-Dinitrotoluene     |          | CAS#: 121-14-2 |           |              |       |      |
| 165                       | 170166   | 7.87           | 8.07      | 80-120       | 100   | (T)  |
| 89                        | 2541     | 7.87           | 8.07      | 43-103       | 1     | (QT) |
| 63                        | 2398     | 7.87           | 8.07      | 23- 83       | 1     | (QT) |
| -----                     |          |                |           |              |       |      |

| MASS | RESPONSE               | RT    | EXPECT RT | TARGET RANGE  | RATIO | QUAL |
|------|------------------------|-------|-----------|---------------|-------|------|
| 90   | 3,3'-Dichlorobenzidine |       |           | CAS#: 91-94-1 |       |      |
| 252  | 246                    | 12.47 | 12.41     | 80-120        | 100   | ( )  |
| 254  | 3162                   | 12.49 | 12.41     | 33- 93        | 1285  | (QT) |
| 126  | 2703                   | 12.48 | 12.41     | 0- 46         | 1098  | (QT) |

Q qualifier indicates ion failed ratio requirement



GEL Laboratories LLC

Data file : /chem/MSD3.i/s012810a.b/s3a2840.d  
Lab Smp Id: 245114012 Client Smp ID: RE15-10-8418  
Inj Date : 29-JAN-2010 02:59  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |245114012|944874|1|SVMF|1|LANL  
Misc Info : |MSD8270 S|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m  
Meth Date : 29-Jan-2010 10:49 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 15  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1324.sub  
Target Version: 3.50  
Processing Host: hpc1p1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.06000  | weight of sample          |
| M    | 11.27820  | % moisture                |

Cpnd Variable

Local Compound Variable

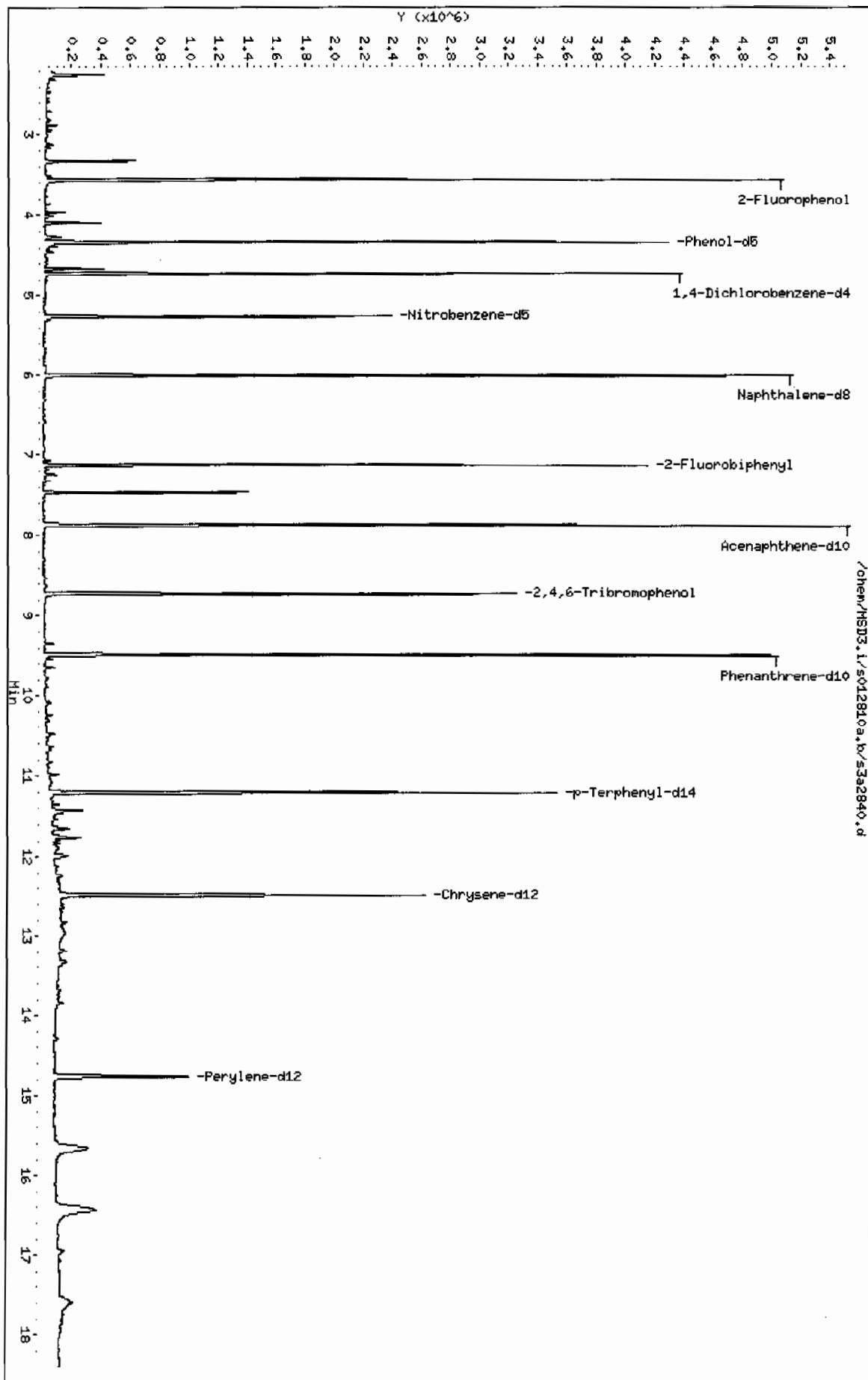
| ISTD                        | RT     | AREA    | AMOUNT |
|-----------------------------|--------|---------|--------|
| =====                       | =====  | =====   | =====  |
| * 10 1,4-Dichlorobenzene-d4 | 4.723  | 4016256 | 40.000 |
| * 98 Perylene-d12           | 14.765 | 1560467 | 40.000 |

| CONCENTRATIONS |         |               |              | QUANT  |         |           |
|----------------|---------|---------------|--------------|--------|---------|-----------|
| RT             | AREA    | ON-COL(ng/ul) | FINAL(ug/Kg) | QUAL   | LIBRARY | LIB ENTRY |
| =====          | =====   | =====         | =====        | =====  | =====   | =====     |
| Unknown        |         |               |              | CAS #: |         |           |
| 2.080          | 3729545 | 37.1444898    | 1390         | 0      |         | 0 10      |

| RT                       | CONCENTRATIONS |               |              | QUAL | QUANT   |           |        |
|--------------------------|----------------|---------------|--------------|------|---------|-----------|--------|
|                          | AREA           | ON-COL(ng/ul) | FINAL(ug/Kg) |      | LIBRARY | LIB ENTRY | CPND # |
| Unknown                  |                |               |              |      | CAS #:  |           |        |
| 2.250                    | 546514         | 5.44301448    | 204          | 0    |         | 0         | 10     |
| Unknown Aldol Condensate |                |               |              |      | CAS #:  |           |        |
| 3.329                    | 620682         | 6.18169562    | 232          | 0    |         | 0         | 10     |
| Unknown                  |                |               |              |      | CAS #:  |           |        |
| 15.651                   | 1088159        | 27.8931669    | 1040         | 0    |         | 0         | 98     |
| Unknown                  |                |               |              |      | CAS #:  |           |        |
| 16.431                   | 1710041        | 43.8340867    | 1640         | 0    |         | 0         | 98     |
| Unknown                  |                |               |              |      | CAS #:  |           |        |
| 17.589                   | 244209         | 6.25989120    | 235          | 0    |         | 0         | 98     |
| Unknown                  |                |               |              |      | CAS #:  |           |        |
| 17.601                   | 322419         | 8.26468777    | 310          | 0    |         | 0         | 98     |

Data File: /chem/HSD3.i/s012810a.b/s3a2840.d  
Date : 29-JUN-2010 02:59  
Client ID: RELS-10-8418  
Sample Info: 124514012|94487411|SYMF11|LNL  
Volume Injected (uL): 0.5  
Column phase: J&W DB-SHS

Instrument: HSD3.i  
Operator: JLDI  
Column diameter: 0.20



Date : 29-JAN-2010 02:59

Client ID: RE15-10-8418

Instrument: MSD3.i

Sample Info: 12451140121944874111SVHF111LANL

Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

## Library Search Compound Match

Unknown

Propane, 2,2-dimethoxy-

Propane, 2,2-dimethoxy-

Propanoic acid, 2-methyl-, propyl ester

CAS Number

Library

Entry

Quality

Formula

Weight

77-76-9

NIST05.L

4662

50

C5H12O2

104

77-76-9

NIST05.L

4663

38

C5H12O2

104

644-49-5

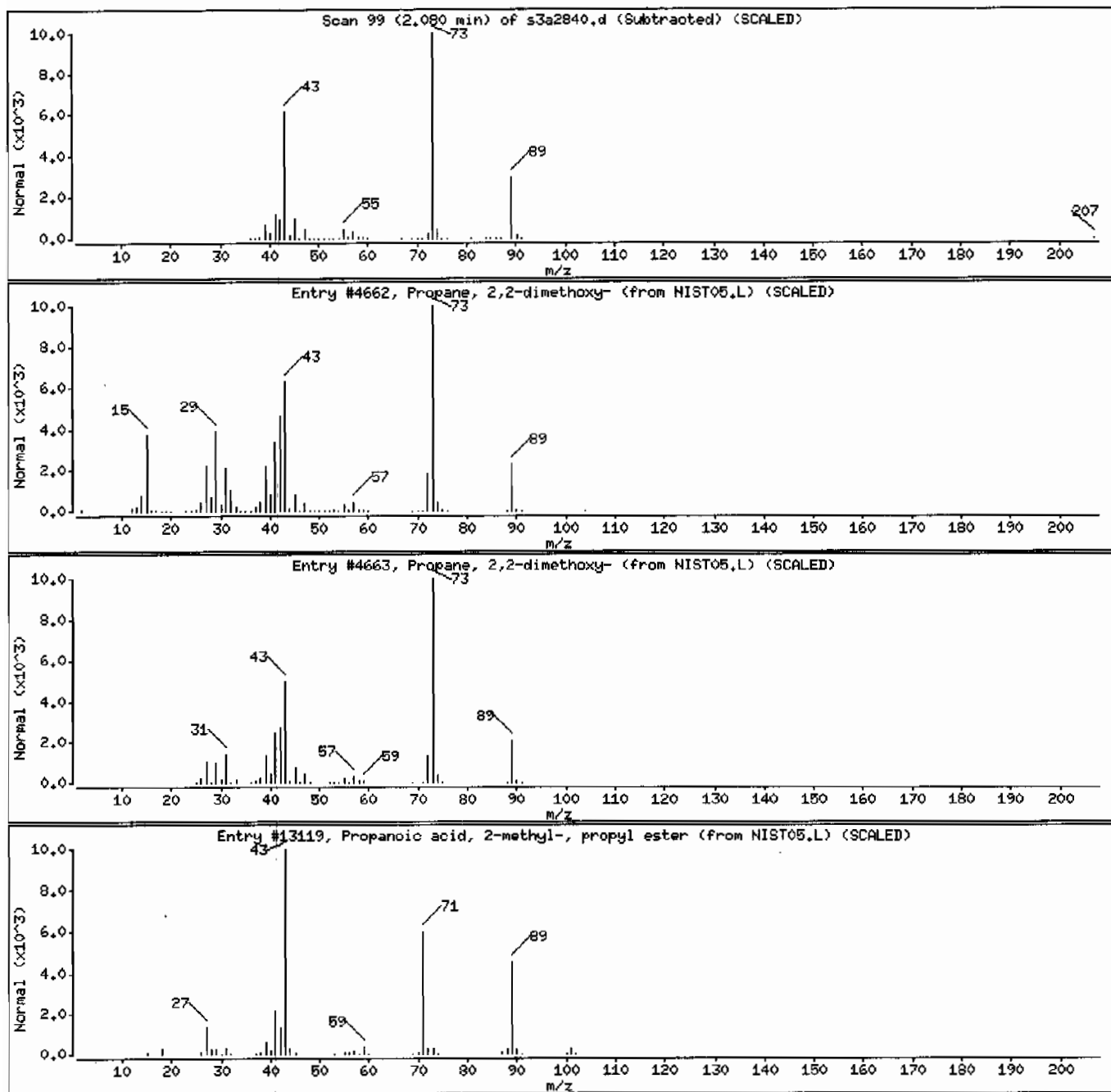
NIST05.L

13119

23

C7H14O2

130



Date : 29-JAN-2010 02:59

Client ID: RE15-10-8418

Instrument: MSD3.i

Sample Info: 12451140121944874111SVHF111LANL

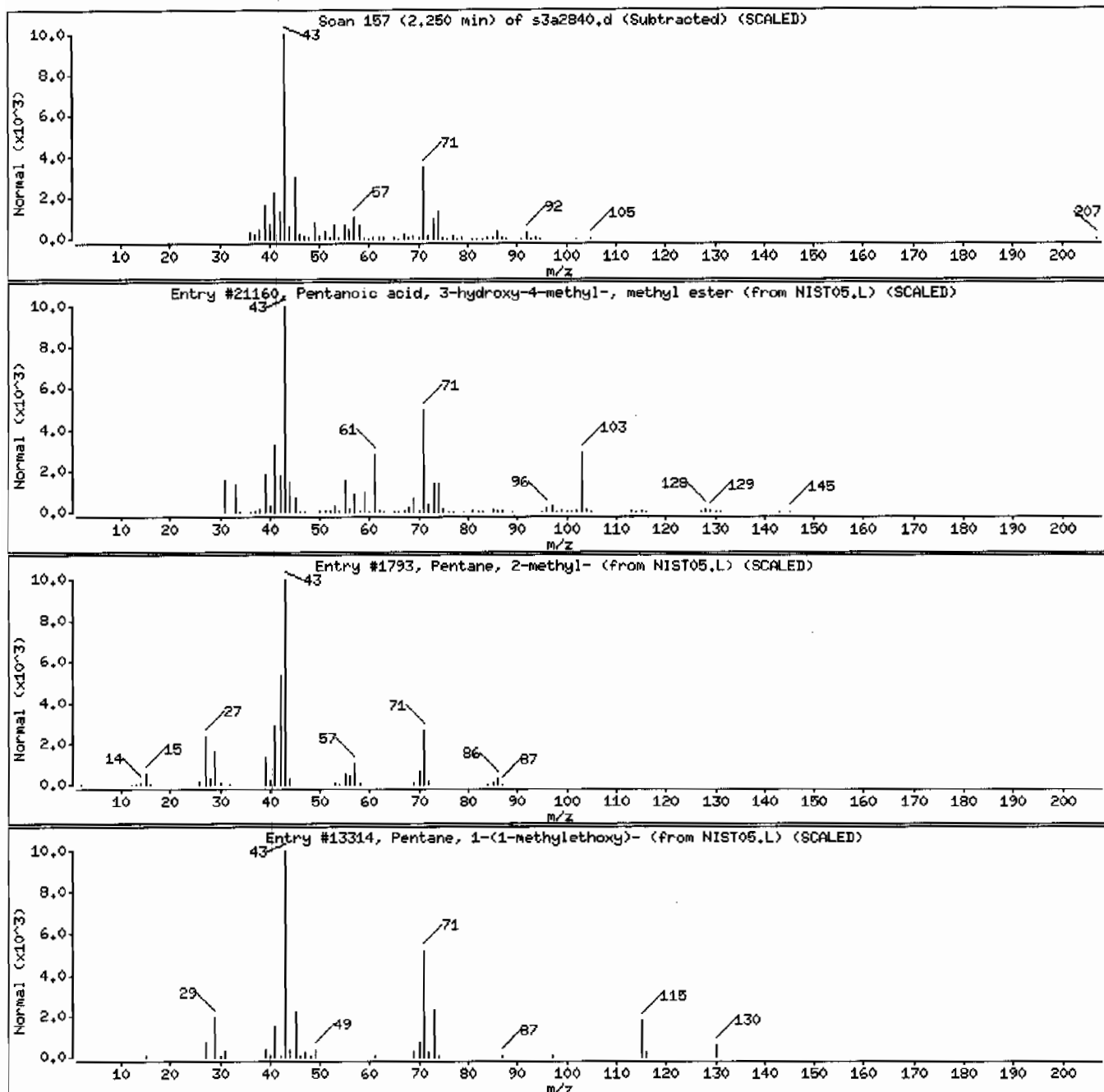
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--|------------|----------|-------|---------|---------|--------|
| Unknown                                  |            |          |       |         |         |        |
| Pentanoic acid, 3-hydroxy-4-methyl-, met | 65596-31-8 | NIST05.L | 21160 | 37      | C7H14O3 | 146    |
| Pentane, 2-methyl-                       | 107-83-5   | NIST05.L | 1793  | 30      | C6H14   | 86     |
| Pentane, 1-(1-methylethoxy)-             | 5756-37-6  | NIST05.L | 13314 | 28      | C8H18O  | 130    |



Date : 29-JAN-2010 02:59

Client ID: RE15-10-8418

Instrument: MSD3.i

Sample Info: 12451140121944874111SVHF111LANL

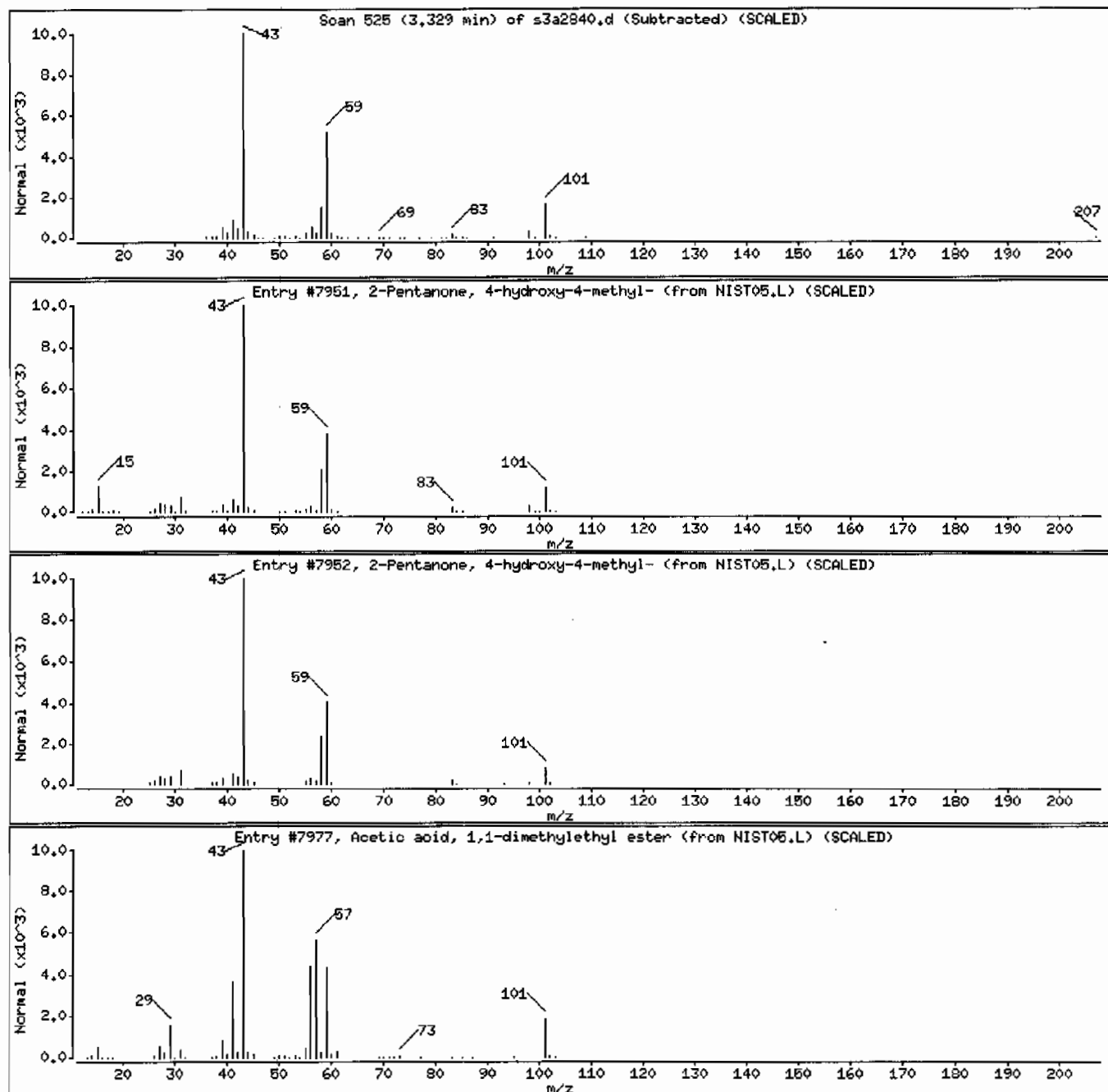
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match        | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--------------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown Aldol Condensate             |            |          |       |         |         |        |
| 2-Pentanone, 4-hydroxy-4-methyl-     | 123-42-2   | NIST05.L | 7951  | 59      | C6H12O2 | 116    |
| 2-Pentanone, 4-hydroxy-4-methyl-     | 123-42-2   | NIST05.L | 7952  | 50      | C6H12O2 | 116    |
| Acetic acid, 1,1-dimethylethyl ester | 540-88-5   | NIST05.L | 7977  | 38      | C6H12O2 | 116    |



Date : 29-JAN-2010 02:59

Client ID: RE15-10-8418

Instrument: MSD3.1

Sample Info: 1245114012194487411|SVHF11|LANL

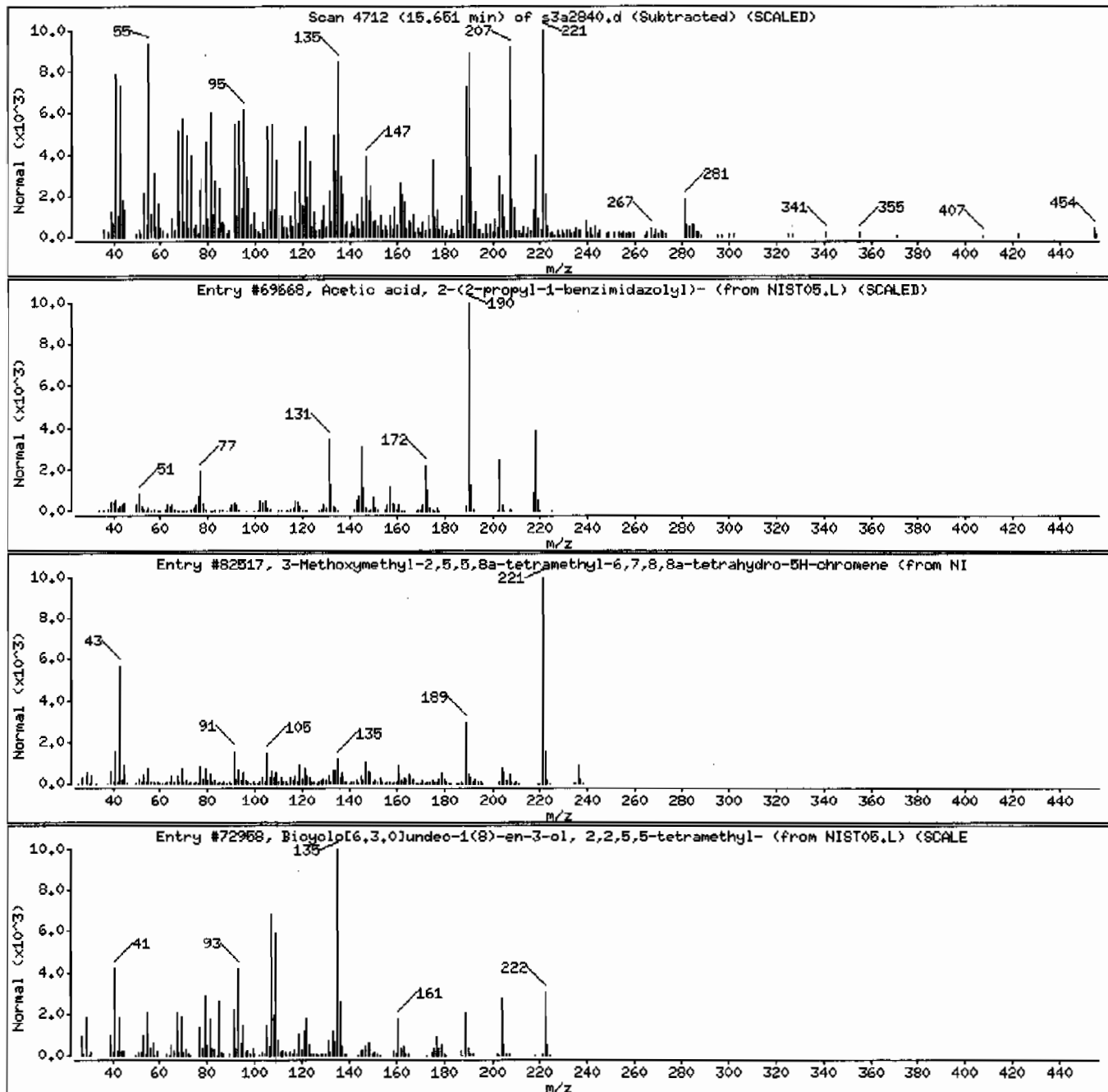
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match             | CAS Number   | Library  | Entry | Quality | Formula    | Weight |
|---|--------------|----------|-------|---------|------------|--------|
| Unknown                                   |              |          |       |         |            |        |
| Acetic acid, 2-(2-propyl-1-benzimidazolyl | 331736-92-6  | NIST05.L | 69668 | 44      | C12H14N2O2 | 218    |
| 3-Methoxymethyl-2,5,8a-tetramethyl-6,7    | 64201-73-6   | NIST05.L | 82517 | 38      | C15H24O2   | 236    |
| Bicyclo[6.3.0]undec-1(8)-en-3-ol, 2,2,5,  | 1000164-02-6 | NIST05.L | 72968 | 25      | C15H26O    | 222    |



Date : 29-JAN-2010 02:59

Client ID: RE15-10-8418

Instrument: MSD3.i

Sample Info: 12451140121944874111SVHF111LANL

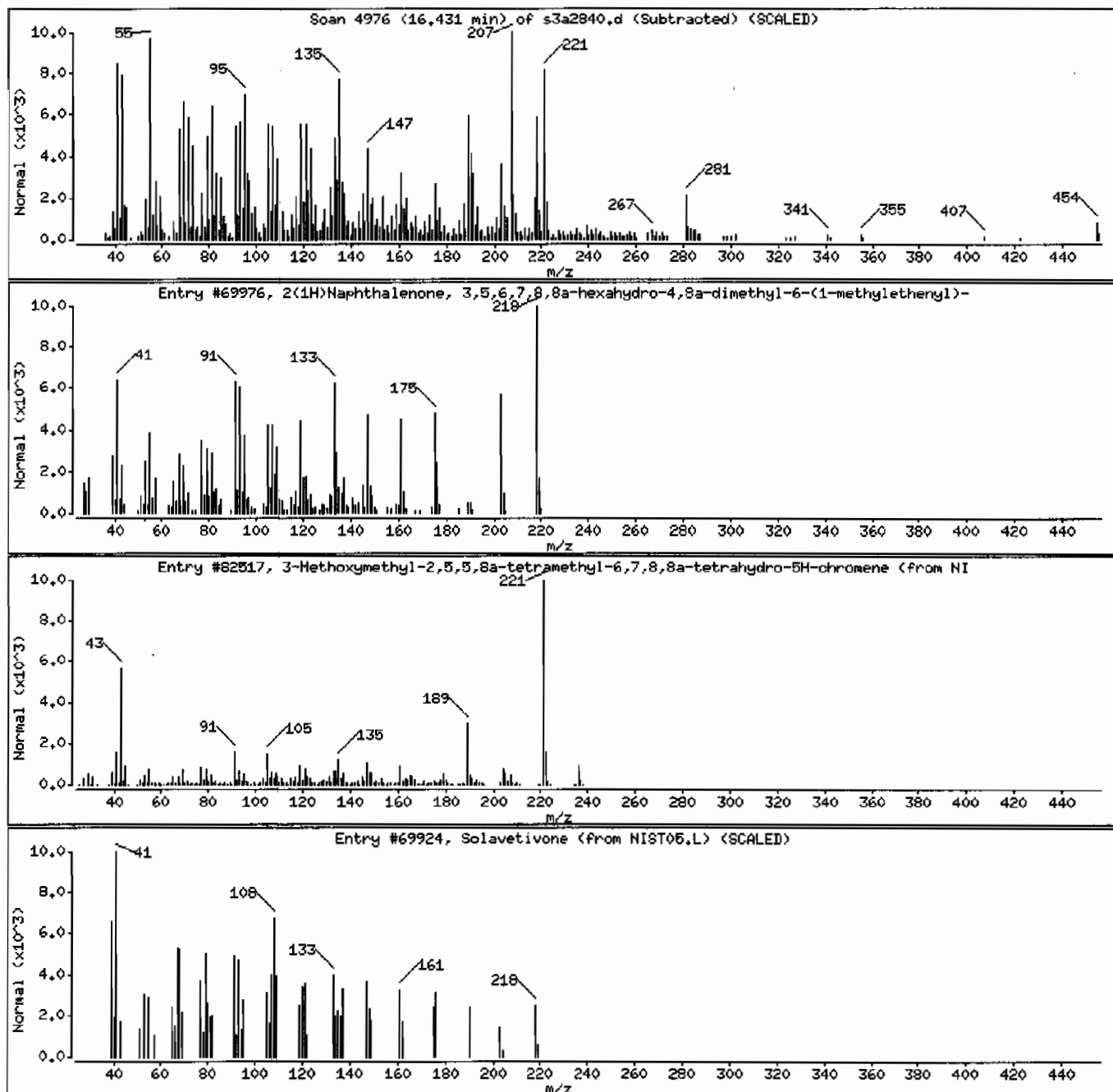
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula  | Weight |
|--|--------------|----------|-------|---------|----------|--------|
| Unknown                                  |              |          |       |         |          |        |
| 2(1H)Naphthalenone, 3,5,6,7,8,8a-hexahyd | 1000188-66-5 | NIST05.L | 69976 | 44      | C15H22O  | 218    |
| 3-Methoxymethyl-2,5,5,8a-tetramethyl-6,7 | 64201-73-6   | NIST05.L | 82517 | 43      | C15H24O2 | 236    |
| Solavetivone                             | 54878-25-0   | NIST05.L | 69924 | 38      | C15H22O  | 218    |





Date : 29-JAN-2010 02:59

Client ID: RE15-10-8418

Instrument: MSD3.1

Sample Info: 1245114012194487411SVHF111LANL

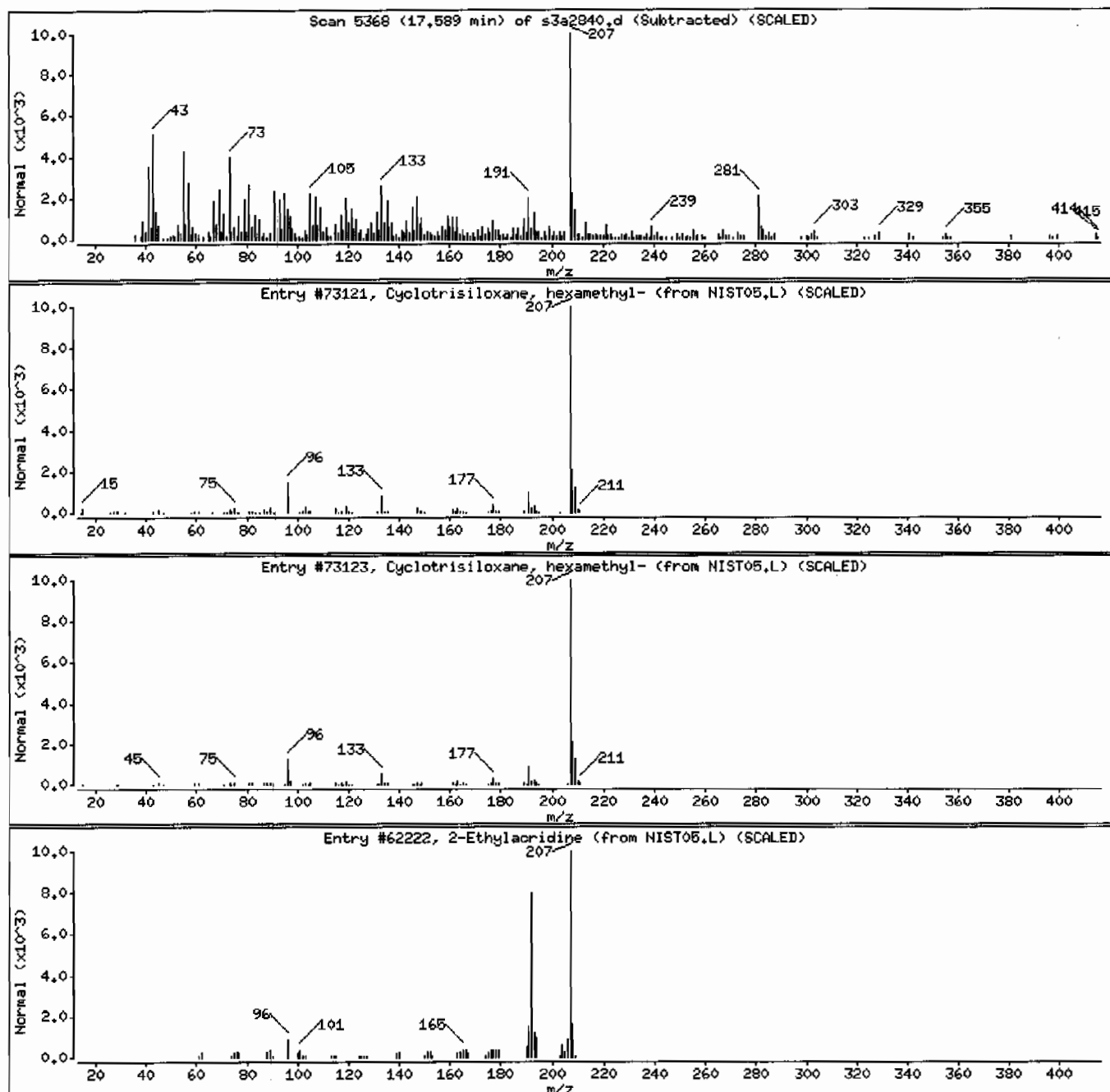
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula   | Weight |
|-------------------------------|------------|----------|-------|---------|---|--------|
| Unknown                       |            |          |       |         |   |        |
| Cyclotrisiloxane, hexamethyl- | 541-05-9   | NIST05.L | 73121 | 47      | C <sub>6</sub> H <sub>18</sub> O <sub>3</sub> Si <sub>3</sub> | 222    |
| Cyclotrisiloxane, hexamethyl- | 541-05-9   | NIST05.L | 73123 | 46      | C <sub>6</sub> H <sub>18</sub> O <sub>3</sub> Si <sub>3</sub> | 222    |
| 2-Ethylacridine               | 66751-83-2 | NIST05.L | 62222 | 43      | C <sub>15</sub> H <sub>13</sub> N                             | 207    |



Date : 29-JAN-2010 02:59

Client ID: RE15-10-8418

Instrument: MSD3.i

Sample Info: 12451140121944874111SVMF111LANL

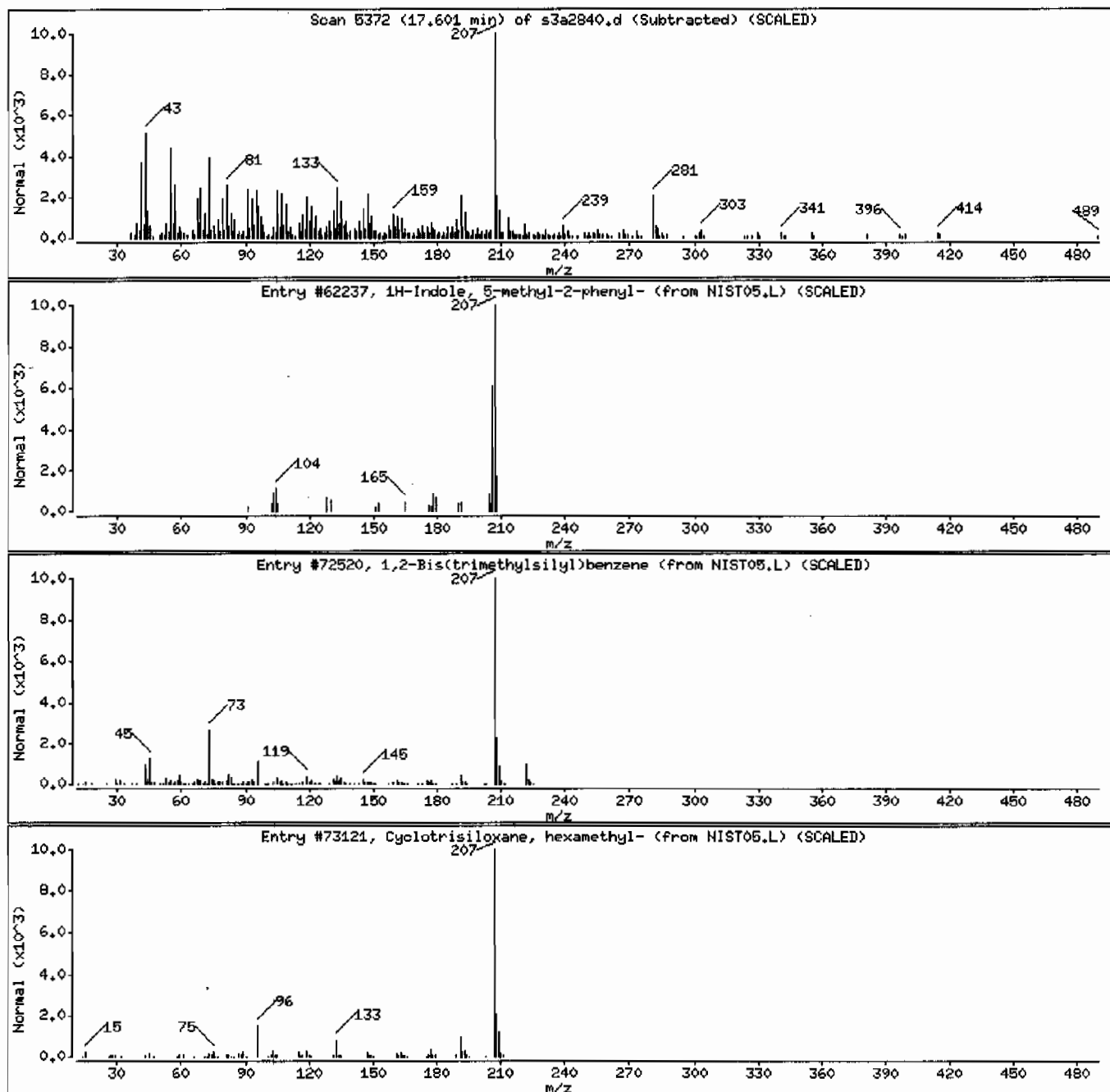
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match  | CAS Number | Library  | Entry | Quality | Formula    | Weight |
|--------------------------------|------------|----------|-------|---------|------------|--------|
| Unknown                        |            |          |       |         |            |        |
| 1H-Indole, 5-methyl-2-phenyl-  | 13228-36-9 | NIST05.L | 62237 | 46      | C15H13N    | 207    |
| 1,2-Bis(trimethylsilyl)benzene | 17151-09-6 | NIST05.L | 72520 | 38      | C12H22Si2  | 222    |
| Cyclotrisiloxane, hexamethyl-  | 541-06-9   | NIST05.L | 73121 | 38      | C6H18O3Si3 | 222    |



Semi-Volatile  
Certificate of Analysis  
Sample Summary

Page 1 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114015

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.18 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 30.1  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8420  
Batch ID: 944874  
Run Date: 01/29/2010 04:14  
Prep Date: 01/25/2010 21:06  
Data File: s3a2843.d

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 474    | ug/kg | 94.9    | 474     |
| 108-95-2   | Phenol                        | U         | 474    | ug/kg | 94.9    | 474     |
| 95-57-8    | 2-Chlorophenol                | U         | 474    | ug/kg | 94.9    | 474     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 474    | ug/kg | 94.9    | 474     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 474    | ug/kg | 94.9    | 474     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 474    | ug/kg | 94.9    | 474     |
| 83-32-9    | Acenaphthene                  | U         | 47.4   | ug/kg | 15.7    | 47.4    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 474    | ug/kg | 47.4    | 474     |
| 100-02-7   | 4-Nitrophenol                 | U         | 474    | ug/kg | 157     | 474     |
| 87-86-5    | Pentachlorophenol             | U         | 474    | ug/kg | 119     | 474     |
| 129-00-0   | Pyrene                        | J         | 16.5   | ug/kg | 14.2    | 47.4    |
| 110-86-1   | Pyridine                      | U         | 474    | ug/kg | 94.9    | 474     |
| 62-53-3    | Aniline                       | U         | 474    | ug/kg | 142     | 474     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 474    | ug/kg | 94.9    | 474     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 474    | ug/kg | 94.9    | 474     |
| 100-51-6   | Benzyl alcohol                | U         | 474    | ug/kg | 142     | 474     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 474    | ug/kg | 94.9    | 474     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 474    | ug/kg | 94.9    | 474     |
| 95-48-7    | o-Cresol                      | U         | 474    | ug/kg | 94.9    | 474     |
| 65794-96-9 | m,p-Cresols                   | U         | 474    | ug/kg | 142     | 474     |
| 67-72-1    | Hexachloroethane              | U         | 474    | ug/kg | 94.9    | 474     |
| 98-95-3    | Nitrobenzene                  | U         | 474    | ug/kg | 94.9    | 474     |
| 78-59-1    | Isophorone                    | U         | 474    | ug/kg | 94.9    | 474     |
| 88-75-5    | 2-Nitrophenol                 | U         | 474    | ug/kg | 94.9    | 474     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 474    | ug/kg | 166     | 474     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 474    | ug/kg | 94.9    | 474     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 474    | ug/kg | 94.9    | 474     |
| 65-85-0    | Benzoic acid                  | U         | 949    | ug/kg | 237     | 949     |
| 91-20-3    | Naphthalene                   | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 106-47-8   | 4-Chloroaniline               | U         | 474    | ug/kg | 94.9    | 474     |
| 87-68-3    | Hexachlorobutadiene           | U         | 474    | ug/kg | 94.9    | 474     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 47.4   | ug/kg | 9.49    | 47.4    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 474    | ug/kg | 94.9    | 474     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 474    | ug/kg | 94.9    | 474     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 474    | ug/kg | 94.9    | 474     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 47.4   | ug/kg | 15.7    | 47.4    |
| 88-74-4    | 2-Nitroaniline                | U         | 474    | ug/kg | 94.9    | 474     |
|            | o-Nitroaniline                |           |        |       |         |         |
| 99-09-2    | 3-Nitroaniline                | U         | 474    | ug/kg | 94.9    | 474     |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1324  
Lab Sample ID: 245114015

Client ID: RE15-10-8420  
Batch ID: 944874  
Run Date: 01/29/2010 04:14  
Prep Date: 01/25/2010 21:06  
Data File: s3a2843.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.18 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 30.1  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|-------------------------------|-----------|--------|-------|---------|---------|
|           | <i>m</i> -Nitroaniline        |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate             | U         | 474    | ug/kg | 94.9    | 474     |
| 606-20-2  | 2,6-Dinitrotoluene            | U         | 474    | ug/kg | 47.4    | 474     |
| 208-96-8  | Acenaphthylene                | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 51-28-5   | 2,4-Dinitrophenol             | U         | 949    | ug/kg | 180     | 949     |
| 132-64-9  | Dibenzofuran                  | U         | 474    | ug/kg | 94.9    | 474     |
| 84-66-2   | Diethylphthalate              | U         | 474    | ug/kg | 94.9    | 474     |
| 86-73-7   | Fluorene                      | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 7005-72-3 | 4-Chlorophenylphenylether     | U         | 474    | ug/kg | 94.9    | 474     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol    | U         | 474    | ug/kg | 94.9    | 474     |
| 100-01-6  | 4-Nitroaniline                | U         | 474    | ug/kg | 142     | 474     |
|           | <i>p</i> -Nitroaniline        |           |        |       |         |         |
| 122-39-4  | Diphenylamine                 | U         | 474    | ug/kg | 94.9    | 474     |
| 122-66-7  | Azobenzene                    | U         | 474    | ug/kg | 94.9    | 474     |
|           | <i>1,2</i> -Diphenylhydrazine |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether      | U         | 474    | ug/kg | 94.9    | 474     |
| 118-74-1  | Hexachlorobenzene             | U         | 474    | ug/kg | 94.9    | 474     |
| 85-01-8   | Phenanthrene                  | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 120-12-7  | Anthracene                    | U         | 47.4   | ug/kg | 9.49    | 47.4    |
| 84-74-2   | Di-n-butylphthalate           | U         | 474    | ug/kg | 94.9    | 474     |
| 206-44-0  | Fluoranthene                  | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 85-68-7   | Butylbenzylphthalate          | U         | 474    | ug/kg | 94.9    | 474     |
| 56-55-3   | Benzo(a)anthracene            | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 91-94-1   | 3,3'-Dichlorobenzidine        | U         | 474    | ug/kg | 142     | 474     |
| 218-01-9  | Chrysene                      | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate    | U         | 474    | ug/kg | 94.9    | 474     |
| 117-84-0  | Di-n-octylphthalate           | U         | 474    | ug/kg | 94.9    | 474     |
| 205-99-2  | Benzo(b)fluoranthene          | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 207-08-9  | Benzo(k)fluoranthene          | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 50-32-8   | Benzo(a)pyrene                | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene        | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 53-70-3   | Dibenzo(a,h)anthracene        | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 191-24-2  | Benzo(ghi)perylene            | U         | 47.4   | ug/kg | 14.2    | 47.4    |
| 120-82-1  | 1,2,4-Trichlorobenzene        | U         | 474    | ug/kg | 94.9    | 474     |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.07 | 694       | ug/kg |     | J    |
|         | Unknown                               | 2.24 | 343       | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114015

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.18 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 30.1  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8420  
Batch ID: 944874  
Run Date: 01/29/2010 04:14  
Prep Date: 01/25/2010 21:06  
Data File: s3a2843.d

| CAS No.  | Parname                                  | Qualifier | Result    | Units | MDL/LOD | PQL/LOQ |
|--|--|-----------|-----------|-------|---------|---------|
| <b>Tentatively Identified Compound Summary</b> |  |           |           |       |         |         |
| CAS No.  | Tentatively Identified Compound (TIC)    | RT        | Estimated | Units | Fit     | Qual    |
|  | Unknown Aldol Condensate                 | 3.33      | 257       | ug/kg |         | JA      |
| 7785-70-8                                      | 1R-.alpha.-Pinene                        | 4.1       | 629       | ug/kg | 98      | NJ      |
| 79-92-5  | Camphene                                 | 4.24      | 280       | ug/kg | 97      | NJ      |
|  | Unknown                                  | 5.69      | 198       | ug/kg |         | J       |
| 5655-61-8                                      | Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimeth | 6.58      | 285       | ug/kg | 98      | NJ      |
| 475-20-7                                       | 1,4-Methanoazulene, decahydro-4,8,8-trim | 7.47      | 193       | ug/kg | 98      | NJ      |
| 87-44-5  | Caryophyllene                            | 7.49      | 275       | ug/kg | 96      | NJ      |
| 23986-74-5                                     | 1,6-Cyclodecadiene, 1-methyl-5-methylene | 7.83      | 346       | ug/kg | 96      | NJ      |
| 483-76-1                                       | Naphthalene, 1,2,3,5,6,8a-hexahydro-4,7- | 7.99      | 341       | ug/kg | 98      | NJ      |
| 1000156-12-8                                   | Alloaromadendrene oxide-(1)              | 11.3      | 292       | ug/kg | 84      | NJ      |
| 24174-25-2                                     | 5.alpha.,14.beta.-Androstane, 16.alpha., | 11.65     | 247       | ug/kg | 93      | NJ      |
| 1235-74-1                                      | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.76     | 597       | ug/kg | 95      | NJ      |
|  | Unknown                                  | 11.79     | 372       | ug/kg |         | J       |
|  | Unknown                                  | 11.98     | 222       | ug/kg |         | J       |
|  | Unknown                                  | 12.32     | 207       | ug/kg |         | J       |
|  | Unknown                                  | 12.64     | 233       | ug/kg |         | J       |
| 559-74-0                                       | Friedelan-3-one                          | 13.01     | 3230      | ug/kg | 91      | NJ      |
| 62016-76-6                                     | Nonadecane, 1-chloro-                    | 13.19     | 227       | ug/kg | 95      | NJ      |
|  | Unknown                                  | 13.23     | 247       | ug/kg |         | J       |
| 309735-29-3                                    | 1,2-Benzisothiazole, 3-(hexahydro-1H-aze | 13.31     | 312       | ug/kg | 91      | NJ      |
| 62600-05-9                                     | Cedran-diol, 8S,14-                      | 13.37     | 248       | ug/kg | 83      | NJ      |
| 504-57-4                                       | 10-Nonadecanone                          | 15.5      | 441       | ug/kg | 81      | NJ      |
|  | Unknown                                  | 15.7      | 3460      | ug/kg |         | J       |
|  | Unknown                                  | 16.44     | 1530      | ug/kg |         | J       |
| 83-47-6  | .gamma.-Sitosterol                       | 17.54     | 2310      | ug/kg | 93      | NJ      |

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012810a.b/s3a2843.d  
 Lab Smp Id: 245114015 Client Smp ID: RE15-10-8420  
 Inj Date : 29-JAN-2010 04:14  
 Operator : JLD1 Inst ID: MSD3.i  
 Smp Info : |245114015|944874|1|SVMF|1|LANL  
 Misc Info : |MSD8270\_S|WBN100107-02|  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m  
 Meth Date : 29-Jan-2010 10:49 jen00986 Quant Type: ISTD  
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
 Als bottle: 18  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1324.sub  
 Target Version: 3.50  
 Processing Host: hpclp1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.18000  | weight of sample          |
| M    | 30.13580  | % moisture                |

Cpnd Variable Local Compound Variable

| Compounds                   | QUANT SIG |        |        |         | RESPONSE | CONCENTRATIONS       |                  |
|-----------------------------|-----------|--------|--------|---------|----------|----------------------|------------------|
|                             | MASS      | RT     | EXP RT | REL RT  |          | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/Kg) |
| * 10 1,4-Dichlorobenzene-d4 | 152       | 4.724  | 4.722  | (1.000) | 600182   | 40.0000              |                  |
| * 29 Naphthalene-d8         | 136       | 5.999  | 6.003  | (1.000) | 2241939  | 40.0000              |                  |
| * 46 Acenaphthene-d10       | 164       | 7.871  | 7.875  | (1.000) | 1222050  | 40.0000              |                  |
| * 67 Phenanthrene-d10       | 188       | 9.487  | 9.486  | (1.000) | 1823318  | 40.0000              |                  |
| * 91 Chrysene-d12           | 240       | 12.481 | 12.478 | (1.000) | 839225   | 40.0000              |                  |
| * 98 Perylene-d12           | 264       | 14.767 | 14.762 | (1.000) | 431406   | 40.0000              |                  |
| \$ 3 2-Fluorophenol         | 112       | 3.561  | 3.549  | (0.754) | 1080348  | 69.1755              | 3280             |
| \$ 5 Phenol-d5              | 99        | 4.333  | 4.331  | (0.917) | 1297276  | 66.0936              | 3130             |
| \$ 20 Nitrobenzene-d5       | 82        | 5.258  | 5.262  | (0.877) | 603327   | 36.4307              | 1730             |
| \$ 39 2-Fluorobiphenyl      | 172       | 7.127  | 7.128  | (0.905) | 1213779  | 38.4260              | 1820             |
| \$ 60 2,4,6-Tribromophenol  | 329       | 8.724  | 8.724  | (1.108) | 252602   | 72.1044              | 3420             |
| \$ 81 p-Terphenyl-d14       | 244       | 11.201 | 11.196 | (0.897) | 877897   | 60.8607              | 2890             |

| Compounds | QUANT SIG |        |        |         |  |          | CONCENTRATIONS       |                  |
|-----------|-----------|--------|--------|---------|--|----------|----------------------|------------------|
|           | MASS      | RT     | EXP RT | RFL RT  |  | RESPONSE | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/Kg) |
| 79 Pyrene | 202       | 11.050 | 11.052 | (0.885) |  | 8386     | 0.34881              | 16.5 (a)         |

QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation (BLOQ).

## ION RATIO REPORT

## SV REPORT

Data file: s3a2843.d

Report Date: 01/29/2010 11:50

Lab. ID: 245114015

SampleType: SAMPLE

Injection Date: 29-JAN-2010 04:14

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245114015|944874|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1324

Sample Matrix: SOIL

| MASS                      | RESPONSE | RT             | EXPECT RT | TARGET RANGE | RATIO | QUAL |
|---------------------------|----------|----------------|-----------|--------------|-------|------|
| =====                     |          |                |           |              |       |      |
| 4 Aniline                 |          | CAS#: 62-53-3  |           |              |       |      |
| 66                        | 75021    | 4.33           | 4.41      | 80-120       | 100   | (T)  |
| 93                        | 23350    | 4.39           | 4.41      | 201-261      | 31    | (Q)  |
| -----                     |          |                |           |              |       |      |
| 17 N-Nitrosodipropylamine |          | CAS#: 621-64-7 |           |              |       |      |
| 70                        | 87039    | 5.26           | 5.10      | 80-120       | 100   | (T)  |
| 42                        | 56757    | 5.26           | 5.10      | 45-105       | 65    | (T)  |
| -----                     |          |                |           |              |       |      |
| 41 m-Nitroaniline         |          | CAS#: 99-09-2  |           |              |       |      |
| 138                       | 272      | 7.87           | 7.82      | 80-120       | 100   | ( )  |
| 92                        | 12233    | 7.87           | 7.82      | 80-140       | 4489  | (Q)  |
| 108                       | 28632    | 7.87           | 7.82      | 0- 40        | 10507 | (Q)  |
| -----                     |          |                |           |              |       |      |
| 44 2,6-Dinitrotoluene     |          | CAS#: 606-20-2 |           |              |       |      |
| 165                       | 159973   | 7.87           | 7.63      | 80-120       | 100   | (T)  |
| 63                        | 3562     | 7.87           | 7.63      | 35- 95       | 2     | (QT) |
| -----                     |          |                |           |              |       |      |
| 50 2,4-Dinitrotoluene     |          | CAS#: 121-14-2 |           |              |       |      |
| 165                       | 159973   | 7.87           | 8.07      | 80-120       | 100   | (T)  |
| 89                        | 2791     | 7.87           | 8.07      | 43-103       | 2     | (QT) |
| 63                        | 3562     | 7.87           | 8.07      | 23- 83       | 2     | (QT) |
| -----                     |          |                |           |              |       |      |
| 56 p-Nitroaniline         |          | CAS#: 100-01-6 |           |              |       |      |
| 138                       | 217      | 8.46           | 8.48      | 80-120       | 100   | ( )  |
| 108                       | 422      | 8.42           | 8.48      | 42-102       | 194   | (QT) |
| 92                        | 555      | 8.42           | 8.48      | 17- 77       | 255   | (Q)  |
| -----                     |          |                |           |              |       |      |



| MASS                      | RESPONSE | RT             | EXPECT RT | TARGET RANGE | RATIO | QUAL |
|---------------------------|----------|----------------|-----------|--------------|-------|------|
| =====                     |          |                |           |              |       |      |
| 79 Pyrene                 |          | CAS#: 129-00-0 |           |              |       |      |
| 202                       | 8386     | 11.05          | 11.05     | 80-120       | 100   | ( )  |
| 200                       | 1633     | 11.05          | 11.05     | 0- 51        | 19    | ( )  |
| 101                       | 1437     | 11.05          | 11.05     | 0- 47        | 17    | ( )  |
| -----                     |          |                |           |              |       |      |
| 90 3,3'-Dichlorobenzidine |          | CAS#: 91-94-1  |           |              |       |      |
| 252                       | 126      | 12.27          | 12.41     | 80-120       | 100   | (T)  |
| 254                       | 421      | 12.24          | 12.41     | 33- 93       | 334   | (QT) |
| 126                       | 378      | 12.24          | 12.41     | 0- 46        | 300   | (QT) |

-----  
 Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012810a.b/s3a2843.d  
 Lab Smp Id: 245114015 Client Smp ID: RE15-10-8420  
 Inj Date : 29-JAN-2010 04:14  
 Operator : JLD1 Inst ID: MSD3.i  
 Smp Info : |245114015|944874|1|SVMF|1|LANL  
 Misc Info : |MSD8270 S|WBN100107-02|  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m  
 Meth Date : 29-Jan-2010 10:49 jen00986 Quant Type: ISTD  
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
 Als bottle: 18  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1324.sub  
 Target Version: 3.50  
 Processing Host: hpc1p1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.18000  | weight of sample          |
| M    | 30.13580  | % moisture                |

Cpnd Variable

Local Compound Variable

| ISTD                        | RT     | AREA    | AMOUNT |
|-----------------------------|--------|---------|--------|
| =====                       | =====  | =====   | =====  |
| * 10 1,4-Dichlorobenzene-d4 | 4.724  | 3850534 | 40.000 |
| * 29 Naphthalene-d8         | 5.999  | 4868429 | 40.000 |
| * 46 Acenaphthene-d10       | 7.871  | 5679775 | 40.000 |
| * 91 Chrysene-d12           | 12.481 | 2692262 | 40.000 |
| * 98 Perylene-d12           | 14.767 | 1293738 | 40.000 |

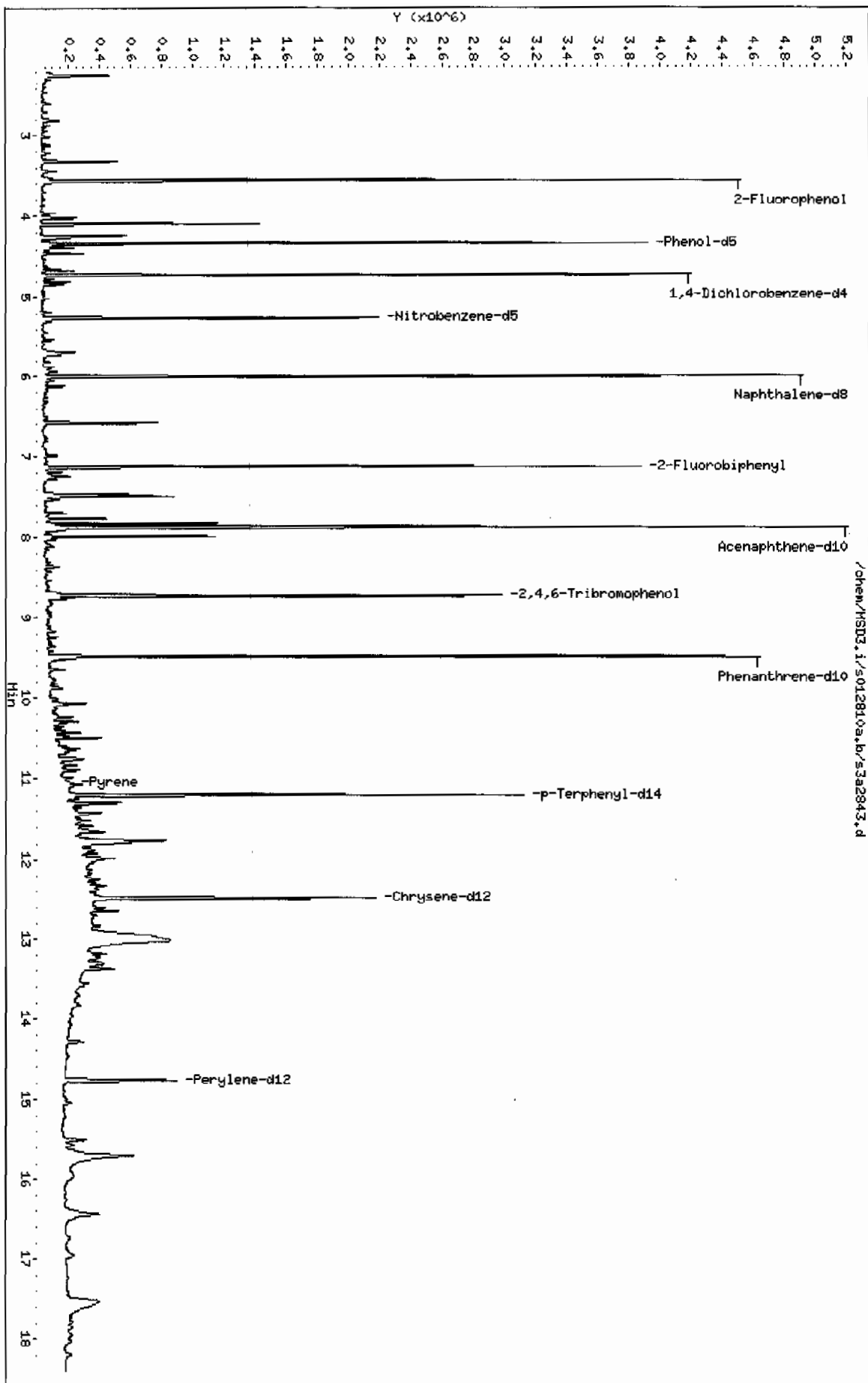
| CONCENTRATIONS |       |               |              | QUANT |         |           |        |
|----------------|-------|---------------|--------------|-------|---------|-----------|--------|
| RT             | AREA  | ON-COL(ng/ul) | FINAL(ug/Kg) | QUAL  | LIBRARY | LIB ENTRY | CPND # |
| =====          | ===== | =====         | =====        | ===== | =====   | =====     | =====  |

| CONCENTRATIONS                           |         |               |              | QUANT |                     |           |        |
|--|---------|---------------|--------------|-------|---------------------|-----------|--------|
| RT                                       | AREA    | ON-COL(ng/ul) | FTNAL(ug/Kg) | QUAL  | LIBRARY             | LIB ENTRY | CPND # |
| Unknown                                  |         |               |              |       | CAS #:              |           |        |
| 2.068                                    | 1409128 | 14.6382616    | 694          | 0     |                     | 0         | 10     |
| Unknown                                  |         |               |              |       | CAS #:              |           |        |
| 2.244                                    | 695613  | 7.22614199    | 343          | 0     |                     | 0         | 10     |
| Unknown Aldol Condensate                 |         |               |              |       | CAS #:              |           |        |
| 3.327                                    | 521958  | 5.42218848    | 257          | 0     |                     | 0         | 10     |
| 1R-.alpha.-Pinene                        |         |               |              |       | CAS #: 7785-70-8    |           |        |
| 4.096                                    | 1275799 | 13.2532174    | 628          | 98    | NIST05.L            | 15188     | 10     |
| Camphene                                 |         |               |              |       | CAS #: 79-92-5      |           |        |
| 4.242                                    | 568605  | 5.90676720    | 280          | 97    | NIST05.L            | 15161     | 10     |
| Unknown                                  |         |               |              |       | CAS #:              |           |        |
| 5.687                                    | 508152  | 4.17508239    | 198          | 0     |                     | 0         | 29     |
| Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimeth |         |               |              |       | CAS #: 5655-61-8    |           |        |
| 6.583                                    | 732368  | 6.01728443    | 285          | 98    | NIST05.L            | 54340     | 29     |
| 1,4-Methanoazulene, decahydro-4,8,8-trim |         |               |              |       | CAS #: 475-20-7     |           |        |
| 7.468                                    | 578812  | 4.07630105    | 193          | 98    | NIST05.L            | 60020     | 46     |
| Caryophyllene                            |         |               |              |       | CAS #: 87-44-5      |           |        |
| 7.489                                    | 823494  | 5.79947915    | 275          | 96    | NIST05.L            | 59801     | 46     |
| 1,6-Cyclodecadiene, 1-methyl-5-methylene |         |               |              |       | CAS #: 23986-74-5   |           |        |
| 7.830                                    | 1037314 | 7.30531974    | 346          | 96    | NIST05.L            | 59960     | 46     |
| Naphthalene, 1,2,3,5,6,8a-hexahydro-4,7- |         |               |              |       | CAS #: 483-76-1     |           |        |
| 7.986                                    | 1019575 | 7.18039007    | 340          | 98    | NIST05.L            | 59978     | 46     |
| Alloaromadendrene oxide-(1)              |         |               |              |       | CAS #: 1000156-12-8 |           |        |
| 11.296                                   | 413899  | 6.14945672    | 292          | 84    | NIST05.L            | 71377     | 91     |
| 5.alpha.,14.beta.-Androstane, 16.alpha., |         |               |              |       | CAS #: 24174-25-2   |           |        |
| 11.653                                   | 350902  | 5.21349244    | 247          | 93    | NIST05.L            | 108339    | 91     |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 |         |               |              |       | CAS #: 1235-74-1    |           |        |
| 11.760                                   | 847838  | 12.5966592    | 597          | 95    | NIST05.L            | 133618    | 91     |
| Unknown                                  |         |               |              |       | CAS #:              |           |        |
| 11.786                                   | 527911  | 7.84337764    | 372          | 0     |                     | 0         | 91     |

| RT                                       | CONCENTRATIONS |               |              | QUAL | QUANT              |           | CPND # |
|--|----------------|---------------|--------------|------|--------------------|-----------|--------|
|  | AREA           | ON-COL(ng/ul) | FINAL(ug/Kg) |      | LIBRARY            | LIB ENTRY |        |
| Unknown                                  |                |               |              |      | CAS #:             |           |        |
| 11.978                                   | 314908         | 4.67871850    | 222          | 0    |                    | 0         | 91     |
| Unknown                                  |                |               |              |      | CAS #:             |           |        |
| 12.324                                   | 294372         | 4.37360315    | 207          | 0    |                    | 0         | 91     |
| Unknown                                  |                |               |              |      | CAS #:             |           |        |
| 12.641                                   | 331026         | 4.91817788    | 233          | 0    |                    | 0         | 91     |
| Friedelan-3-one                          |                |               |              |      | CAS #: 559-74-0    |           |        |
| 13.014                                   | 4577153        | 68.0045547    | 3220         | 91   | NIST05.L           | 176566    | 91     |
| Nonadecane, 1-chloro-                    |                |               |              |      | CAS #: 62016-76-6  |           |        |
| 13.185                                   | 322018         | 4.78434237    | 227          | 95   | NIST05.L           | 126107    | 91     |
| Unknown                                  |                |               |              |      | CAS #:             |           |        |
| 13.227                                   | 350509         | 5.20765575    | 247          | 0    |                    | 0         | 91     |
| 1,2-Benzisothiazole, 3-(hexahydro-1H-aze |                |               |              |      | CAS #: 309735-29-3 |           |        |
| 13.306                                   | 442846         | 6.57953635    | 312          | 91   | NIST05.L           | 101019    | 91     |
| Cedran-diol, 8S,14-                      |                |               |              |      | CAS #: 62600-05-9  |           |        |
| 13.372                                   | 352091         | 5.23115620    | 248          | 83   | NIST05.L           | 83830     | 91     |
| 10-Nonadecanone                          |                |               |              |      | CAS #: 504-57-4    |           |        |
| 15.500                                   | 300415         | 9.28828567    | 440          | 81   | NIST05.L           | 113462    | 98     |
| Unknown                                  |                |               |              |      | CAS #:             |           |        |
| 15.695                                   | 2357383        | 72.8859048    | 3460         | 0    |                    | 0         | 98     |
| Unknown                                  |                |               |              |      | CAS #:             |           |        |
| 16.440                                   | 1041624        | 32.2050848    | 1530         | 0    |                    | 0         | 98     |
| .gamma.-Sitosterol                       |                |               |              |      | CAS #: 83-47-6     |           |        |
| 17.538                                   | 1573002        | 48.6343233    | 2310         | 93   | NIST05.L           | 174402    | 98     |

Data File: /chem/HSD3.i/s012810a.b/s3a2843.d  
Date: 29-JAN-2010 04:14  
Client ID: REL5-10-8420  
Sample Info: 1245114015194487411SVNF11LNL  
Volume Injected (uL): 0.5  
Column phase: J&W DB-SHS

Instrument: HSD3.i  
Operator: JLD1  
Column diameter: 0.20



Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.i

Sample Info: 1245114015194487411SVMF111LANL

Volume Injected (uL): 0.5

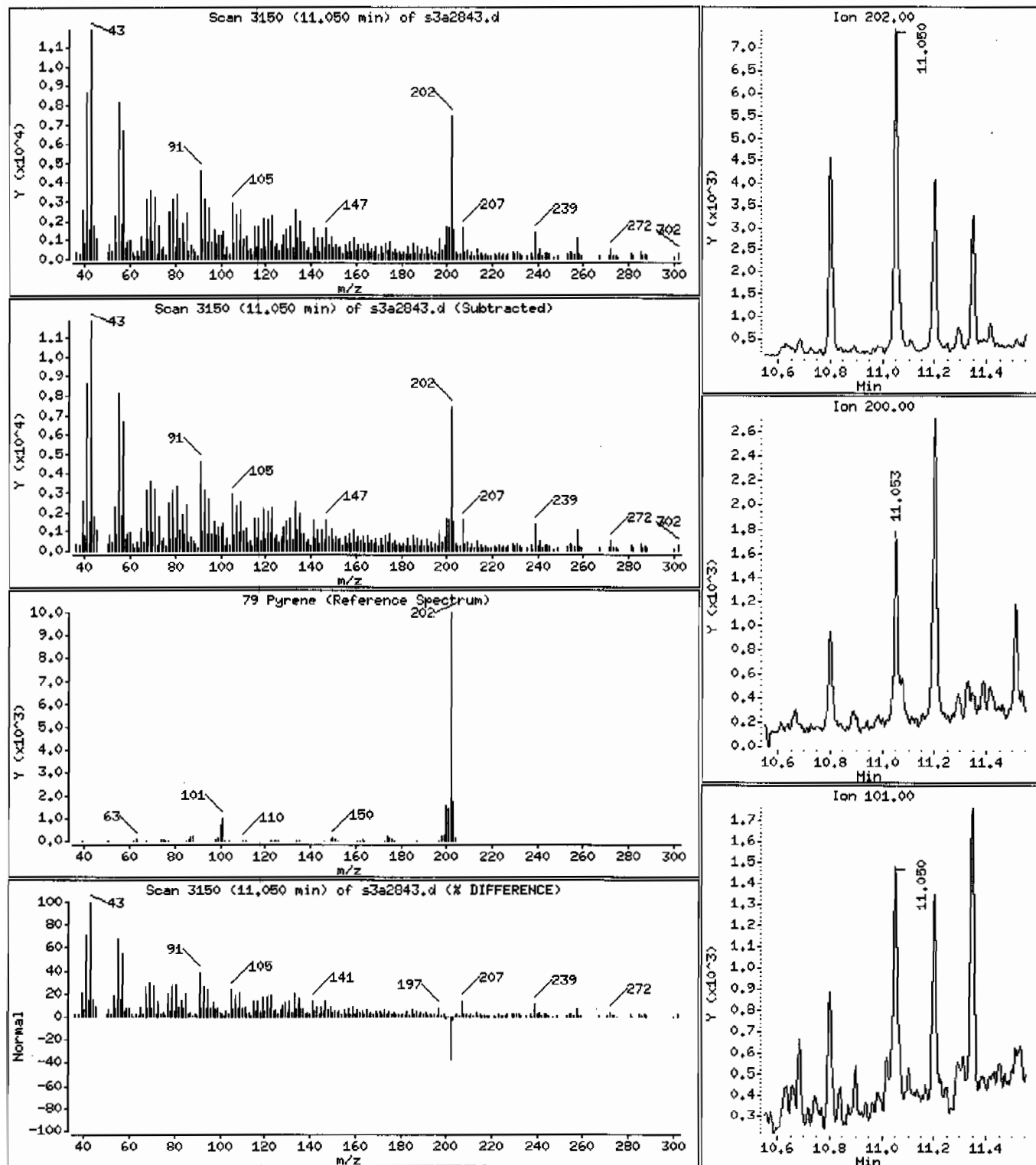
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 16.5 ug/Kg



Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.i

Sample Info: 1245114015194487411SVHF11ILANL

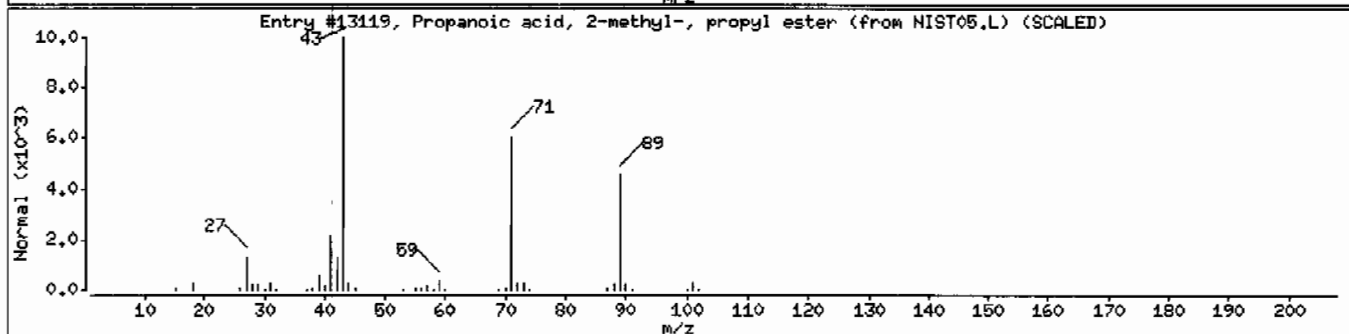
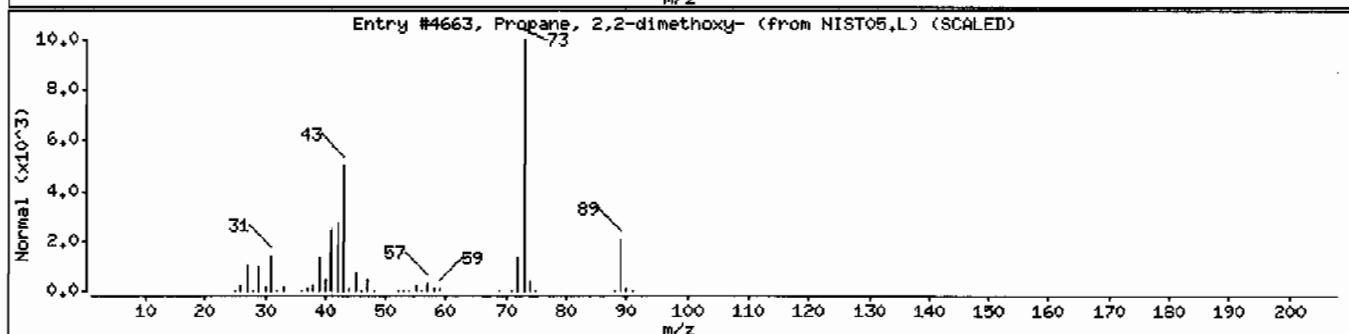
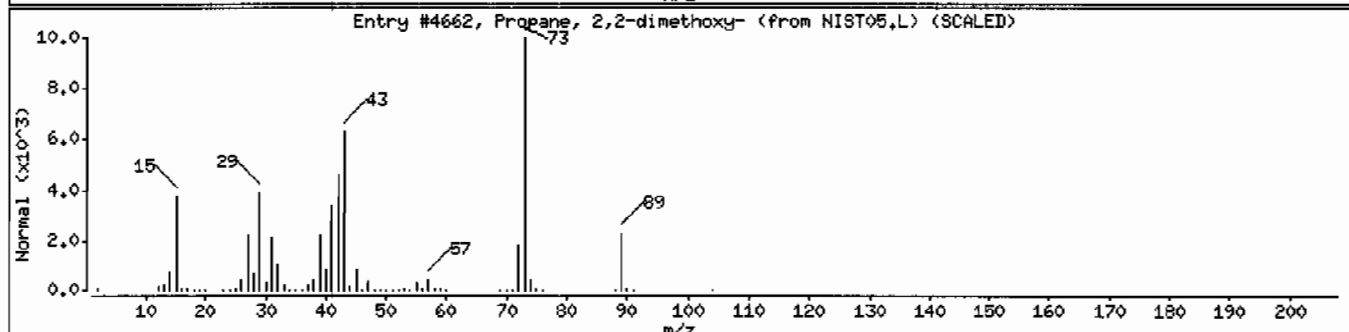
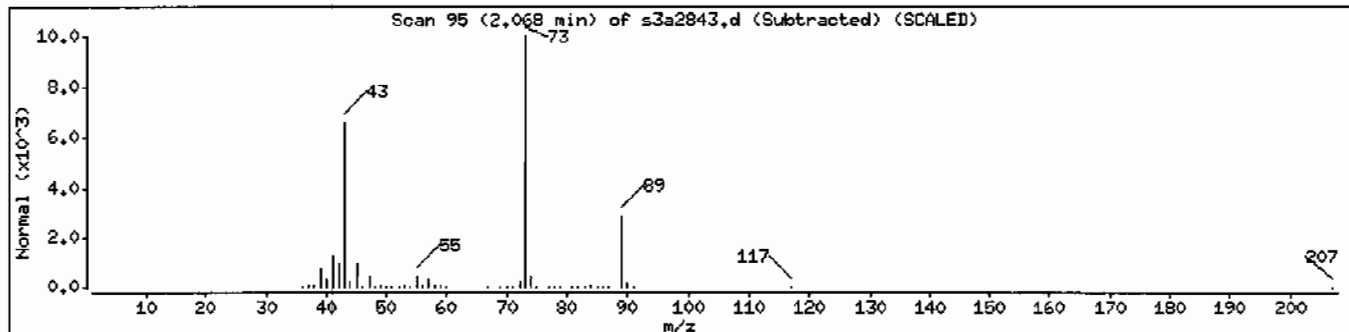
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match           | CAS Number | Library  | Entry | Quality | Formula | Weight |
|---|------------|----------|-------|---------|---------|--------|
| Unknown                                 |            |          |       |         |         |        |
| Propane, 2,2-dimethoxy-                 | 77-76-9    | NIST05,L | 4662  | 42      | C5H12O2 | 104    |
| Propane, 2,2-dimethoxy-                 | 77-76-9    | NIST05,L | 4663  | 33      | C5H12O2 | 104    |
| Propanoic acid, 2-methyl-, propyl ester | 644-49-5   | NIST05,L | 13119 | 17      | C7H14O2 | 130    |



Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.i

Sample Info: 12451140151944874111SVHF111LANL

Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Unknown

Pentane, 2-methyl-

Pentane, 2-bromo-

Butanal, 2,2-dimethyl-

CAS Number

Library

Entry

Quality

Formula

Weight

107-83-5

NIST05.L

1795

43

C6H14

86

107-81-3

NIST05.L

23090

25

C5H11Br

150

2094-75-9

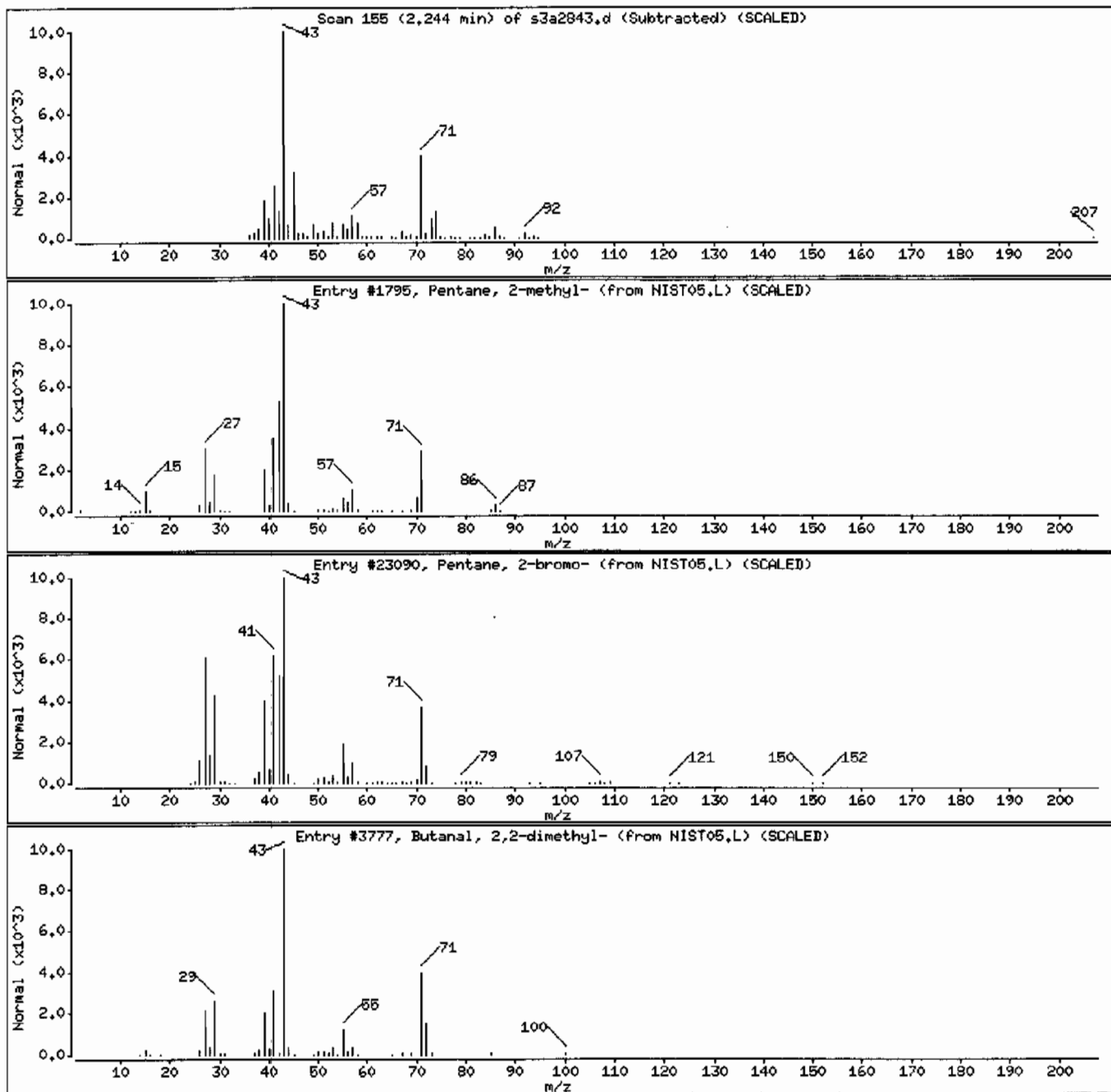
NIST05.L

3777

16

C6H12O

100





Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.1

Sample Info: 1245114015194487411SVMF111LANL

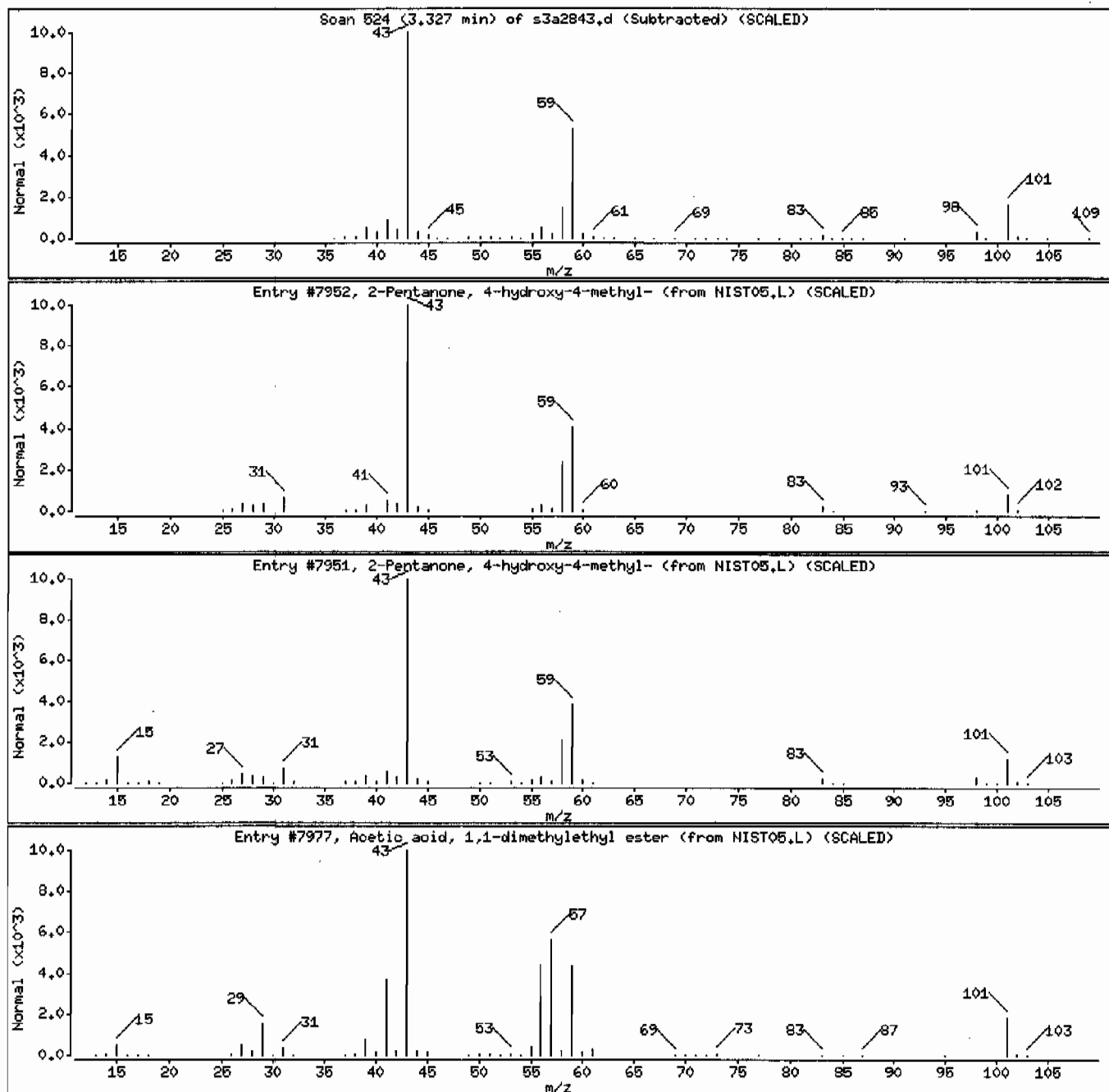
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match        | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--------------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown Aldol Condensate             |            |          |       |         |         |        |
| 2-Pentanone, 4-hydroxy-4-methyl-     | 123-42-2   | NIST05.L | 7952  | 50      | C6H12O2 | 116    |
| 2-Pentanone, 4-hydroxy-4-methyl-     | 123-42-2   | NIST05.L | 7951  | 50      | C6H12O2 | 116    |
| Acetic acid, 1,1-dimethylethyl ester | 540-88-5   | NIST05.L | 7977  | 38      | C6H12O2 | 116    |



Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.i

Sample Info: 1245114015194487411SVHF111LANL

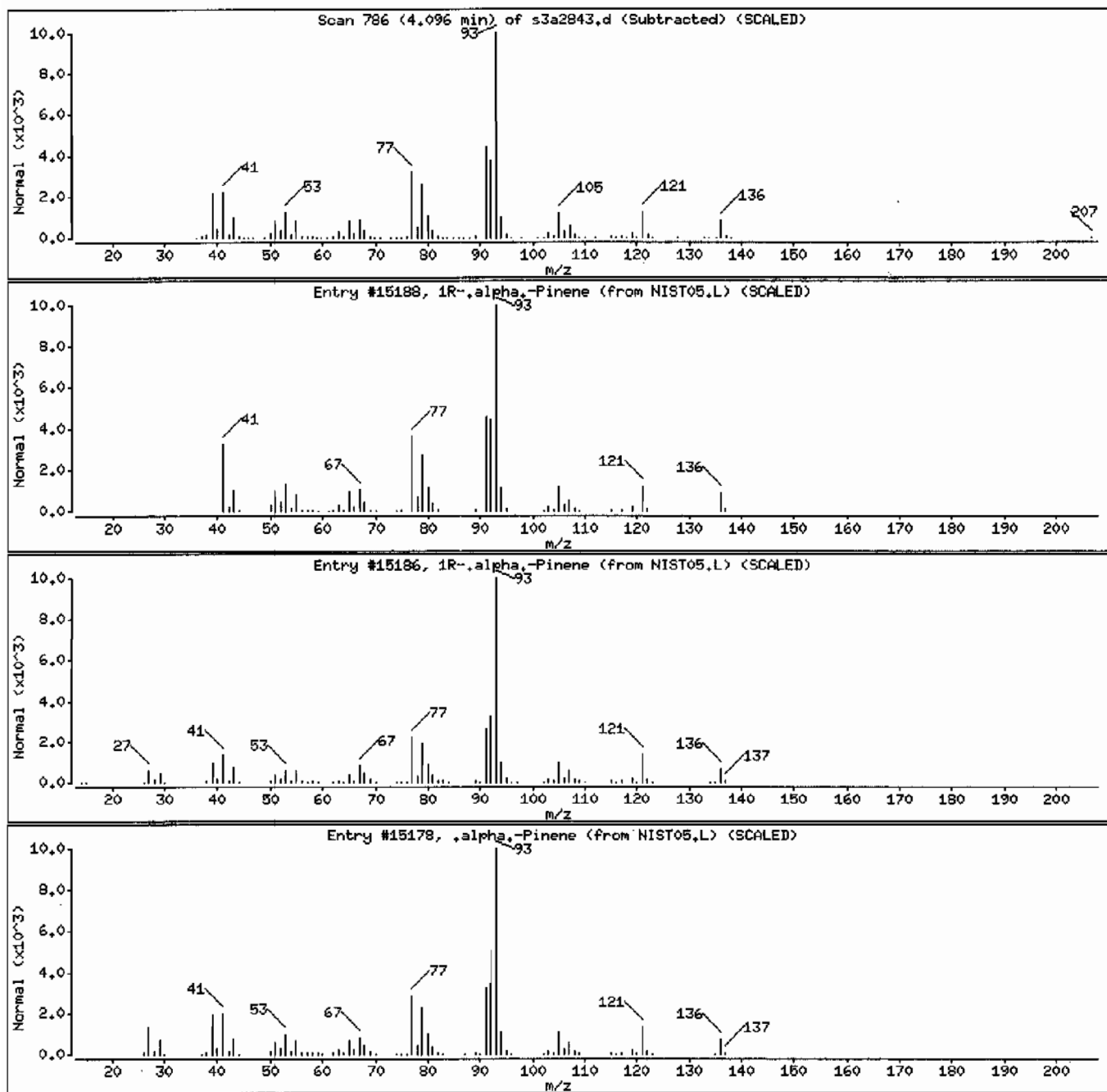
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| 1R-.alpha.-Pinene             | 7785-70-8  | NIST05.L | 15188 | 98      | C10H16  | 136    |
| 1R-.alpha.-Pinene             | 7785-70-8  | NIST05.L | 15186 | 96      | C10H16  | 136    |
| .alpha.-Pinene                | 80-56-8    | NIST05.L | 15178 | 96      | C10H16  | 136    |



Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.i

Sample Info: 1245114015194487411SVMF111LANL

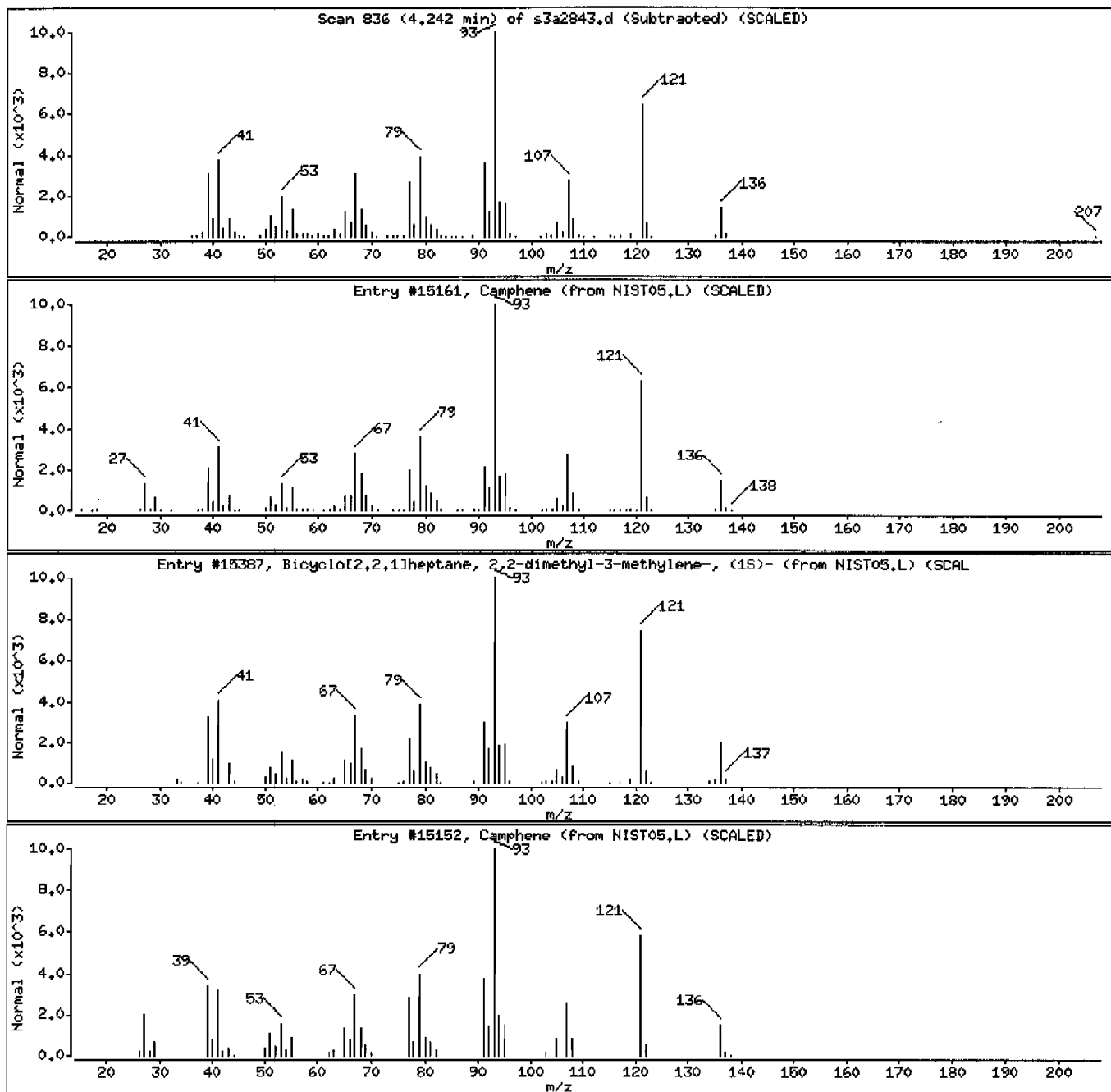
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--|------------|----------|-------|---------|---------|--------|
| Camphene                                 | 79-92-5    | NIST05.L | 15161 | 97      | C10H16  | 136    |
| Bicyclo[2.2.1]heptane, 2,2-dimethyl-3-me | 5794-04-7  | NIST05.L | 15387 | 97      | C10H16  | 136    |
| Camphene                                 | 79-92-5    | NIST05.L | 15152 | 97      | C10H16  | 136    |



Date: 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.1

Sample Info: 12451140151944874111SVHF111LANL

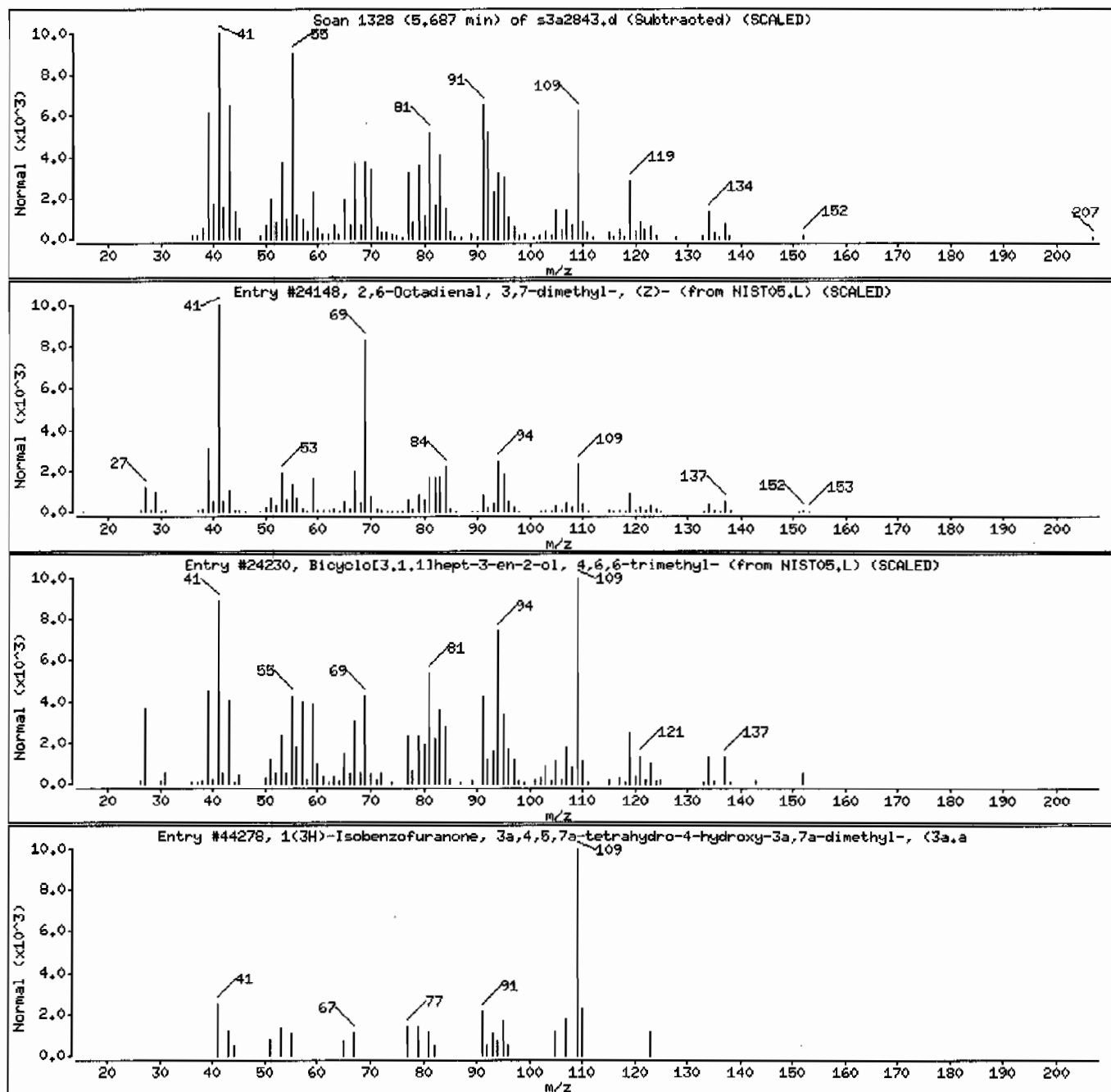
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match                  | CAS Number | Library  | Entry | Quality | Formula  | Weight |
|--|------------|----------|-------|---------|----------|--------|
| Unknown  |            |          |       |         |          |        |
| 2,6-Octadienal, 3,7-dimethyl-, (Z)-            | 106-26-3   | NIST05.L | 24148 | 46      | C10H16O  | 152    |
| Bicyclo[3.1.1]hept-3-en-2-ol, 4,6,6-trimethyl- | 473-67-6   | NIST05.L | 24230 | 43      | C10H16O  | 152    |
| 1(3H)-Isobenzofuranone, 3a,4,5,7a-tetra        | 54346-06-4 | NIST05.L | 44278 | 30      | C10H14O3 | 182    |



Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.i

Sample Info: 1245114015194487411SVHF111LANL

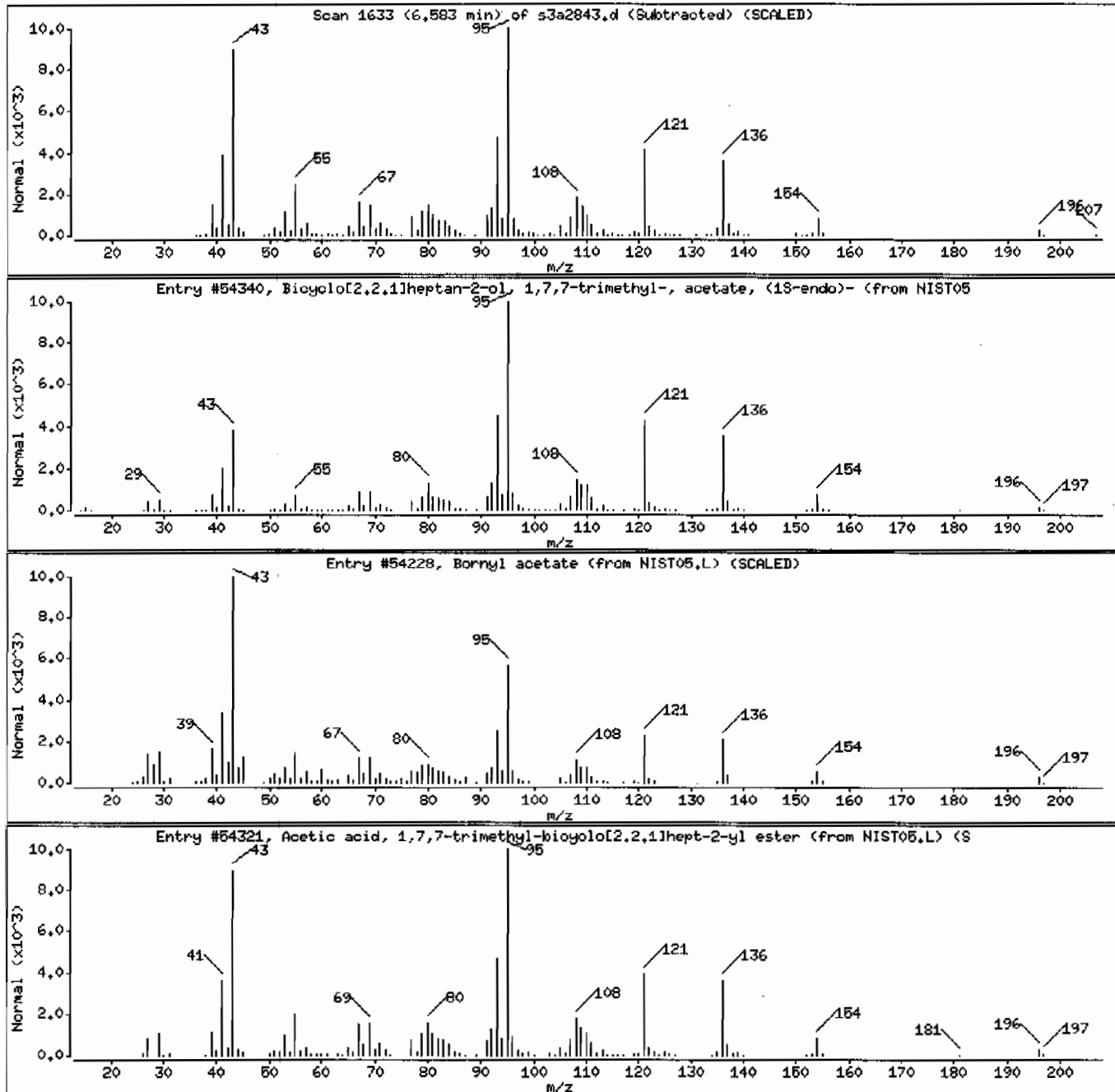
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula  | Weight |
|--|------------|----------|-------|---------|----------|--------|
| Bicyclo[2,2,1]heptan-2-ol, 1,7,7-trimeth | 5655-61-8  | NIST05.L | 54340 | 98      | C12H20O2 | 196    |
| Bornyl acetate                           | 76-49-3    | NIST05.L | 54228 | 98      | C12H20O2 | 196    |
| Acetic acid, 1,7,7-trimethyl-bicyclo[2,2 | 92618-89-8 | NIST05.L | 54321 | 98      | C12H20O2 | 196    |



Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.i

Sample Info: 1245114015194487411ISVHF11ILANL

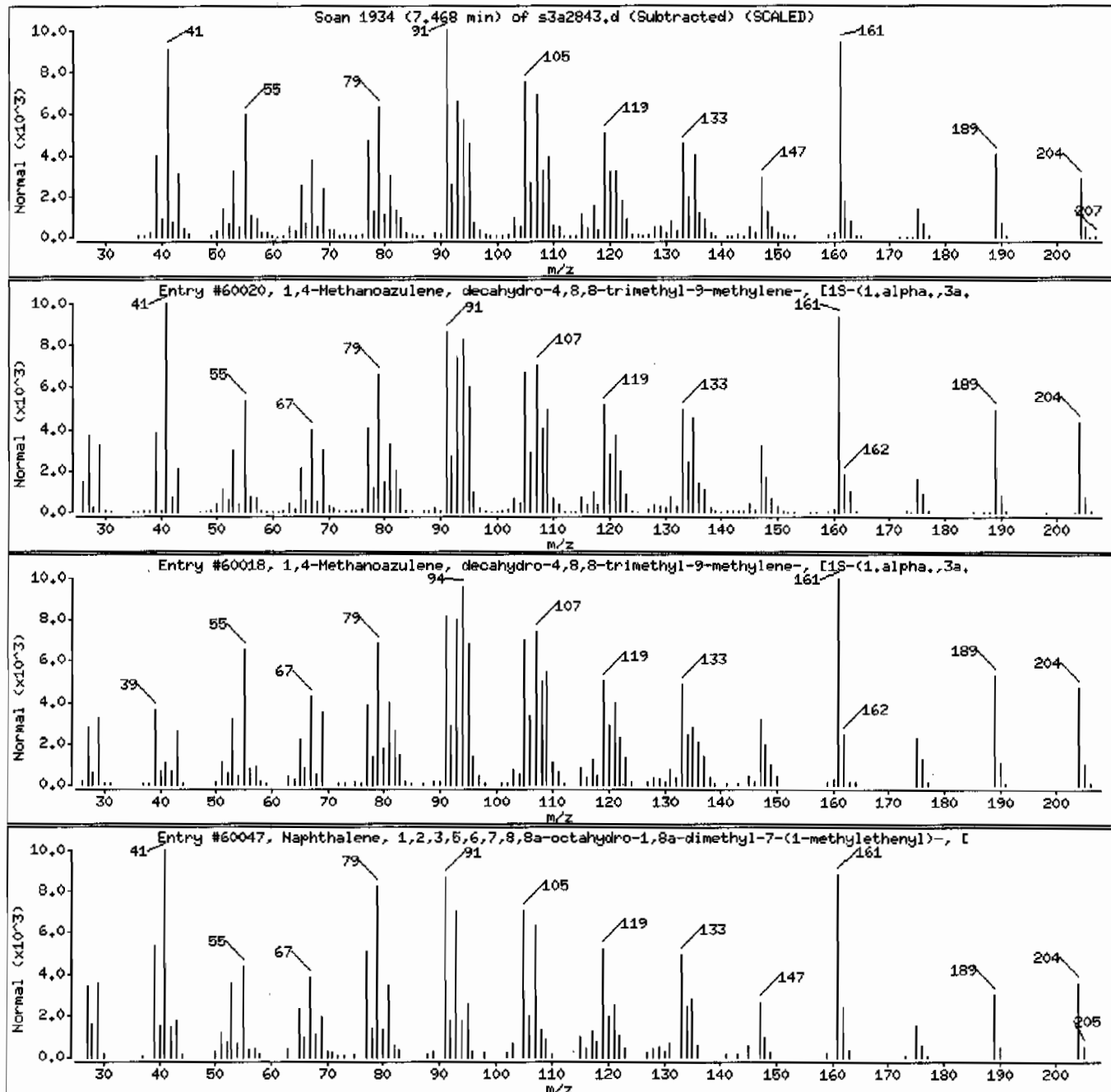
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--|------------|----------|-------|---------|---------|--------|
| 1,4-Methanoazulene, decahydro-4,8,8-trim | 475-20-7   | NIST05.L | 60020 | 98      | C15H24  | 204    |
| 1,4-Methanoazulene, decahydro-4,8,8-trim | 475-20-7   | NIST05.L | 60018 | 98      | C15H24  | 204    |
| Naphthalene, 1,2,3,5,6,7,8,8a-octahydro- | 4630-07-3  | NIST05.L | 60047 | 97      | C15H24  | 204    |



Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.i

Sample Info: 1245114015194487411SVHF11/LANL

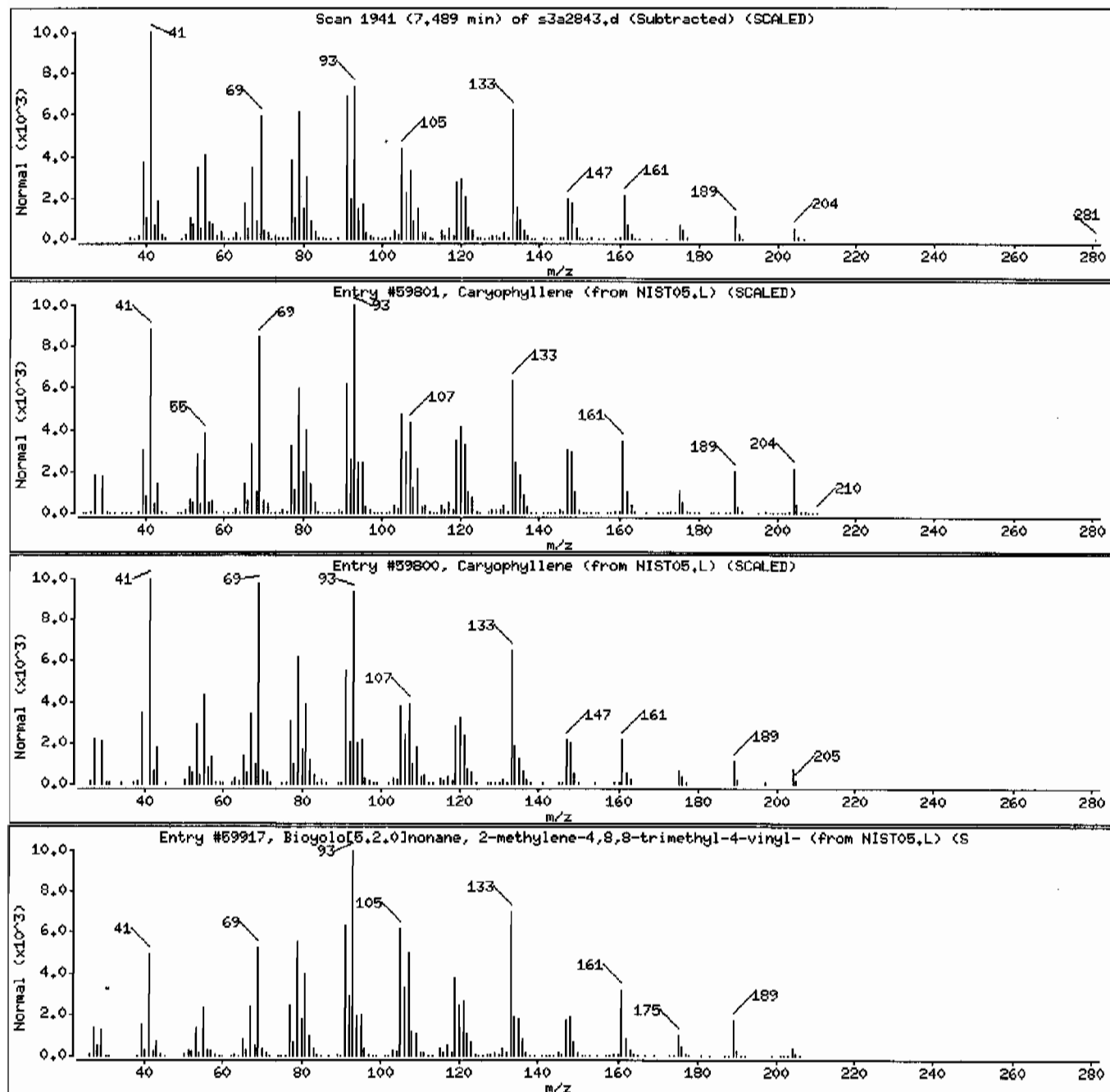
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number  | Library  | Entry | Quality | Formula | Weight |
|--|-------------|----------|-------|---------|---------|--------|
| Caryophyllene                            | 87-44-5     | NIST05.L | 59801 | 96      | C15H24  | 204    |
| Caryophyllene                            | 87-44-5     | NIST05.L | 59800 | 94      | C15H24  | 204    |
| Bicyclo[5.2.0]nonane, 2-methylene-4,8,8- | 242794-76-9 | NIST05.L | 59917 | 93      | C15H24  | 204    |



Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.i

Sample Info: 1245114015194487411SVMF11ILANL

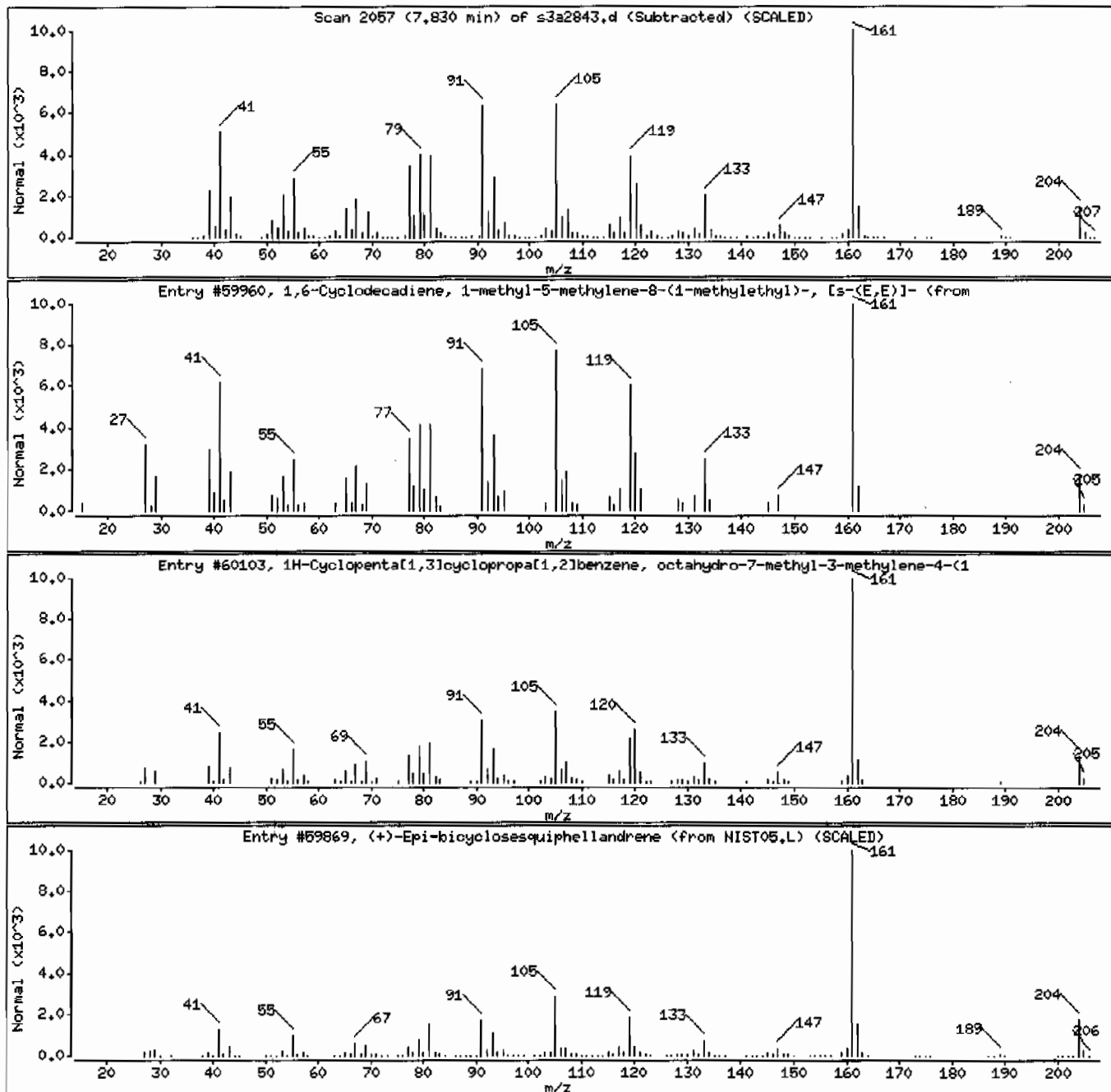
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--|------------|----------|-------|---------|---------|--------|
| 1,6-Cyclodecadiene, 1-methyl-5-methylene | 23986-74-5 | NIST05.L | 59960 | 96      | C15H24  | 204    |
| 1H-Cyclopenta[1,3]cyclopropa[1,2]benzene | 13744-15-5 | NIST05.L | 60103 | 94      | C15H24  | 204    |
| (+)-Epi-bicyclosquisphellandrene         | 54324-03-7 | NIST05.L | 59869 | 93      | C15H24  | 204    |





Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: HSD3.i

Sample Info: 1245114015194487411SVHF11ILANL

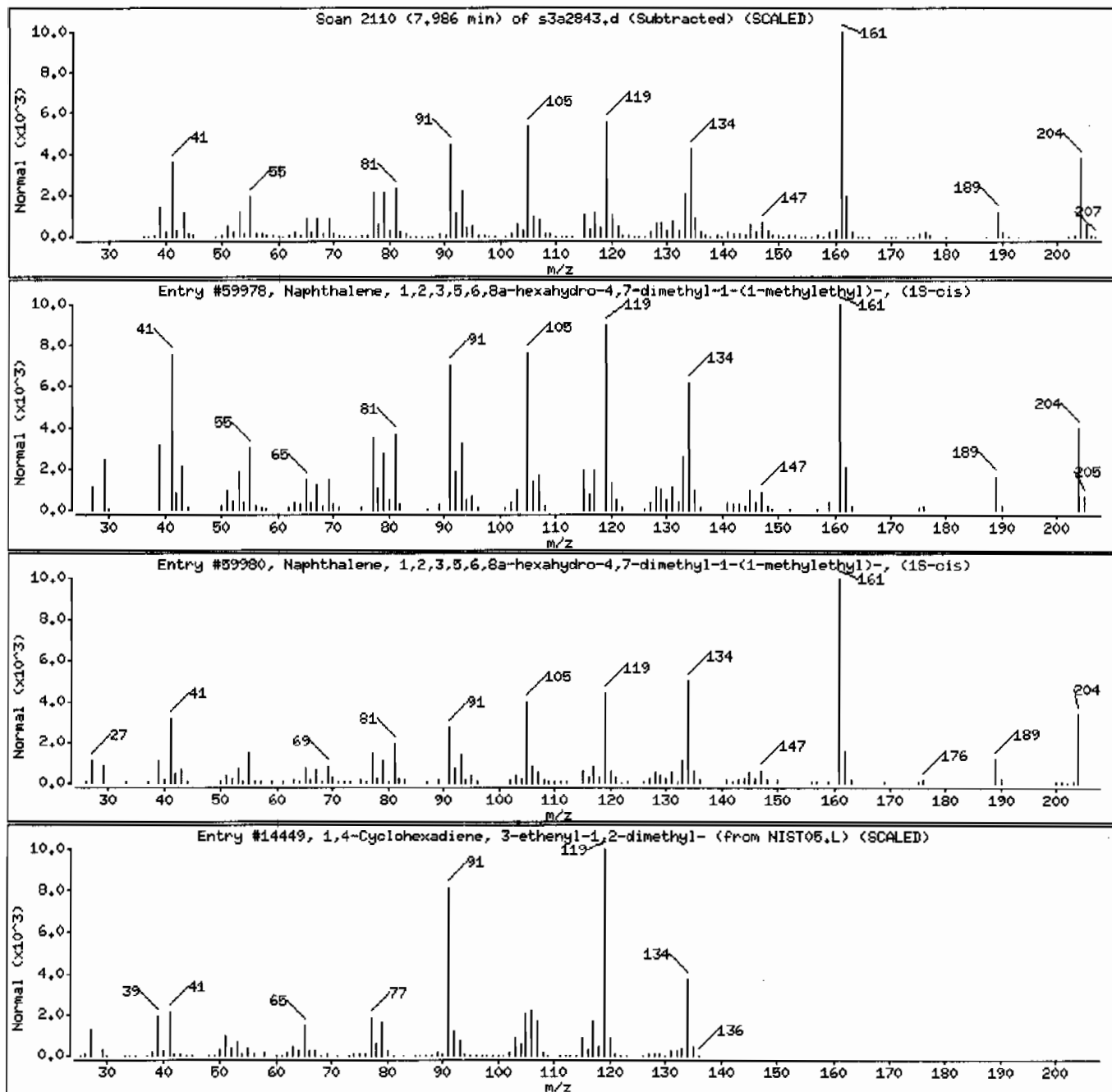
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--|------------|----------|-------|---------|---------|--------|
| Naphthalene, 1,2,3,5,6,8a-hexahydro-4,7- | 483-76-1   | NIST05.L | 59978 | 98      | C15H24  | 204    |
| Naphthalene, 1,2,3,5,6,8a-hexahydro-4,7- | 483-76-1   | NIST05.L | 59980 | 97      | C15H24  | 204    |
| 1,4-Cyclohexadiene, 3-ethenyl-1,2-dimeth | 62338-57-2 | NIST05.L | 14449 | 89      | C10H14  | 134    |



Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.i

Sample Info: 12451140151944874111SVHF111LANL

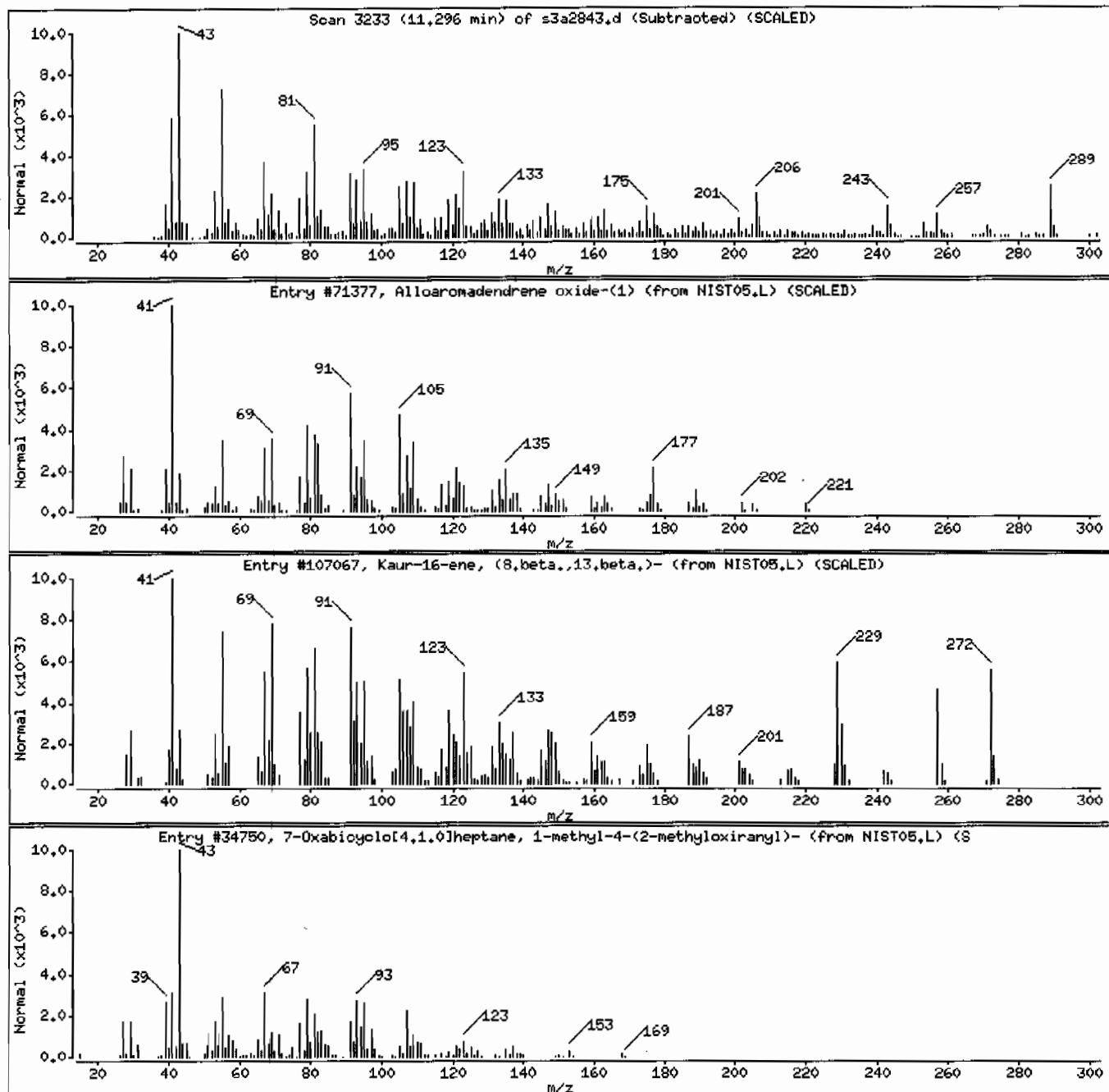
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|--|--------------|----------|--------|---------|----------|--------|
| Alloaromadendrene oxide-(1)              | 1000156-12-8 | NIST05.L | 71377  | 84      | C15H24O  | 220    |
| Kaur-16-ene, (8.beta.,13.beta.)-         | 20070-61-5   | NIST05.L | 107067 | 38      | C20H32   | 272    |
| 7-Oxabicyclo[4.1.0]heptane, 1-methyl-4-( | 96-08-2      | NIST05.L | 34750  | 35      | C10H16O2 | 168    |



Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.i

Sample Info: 12451140151944874111SVMF111LANL

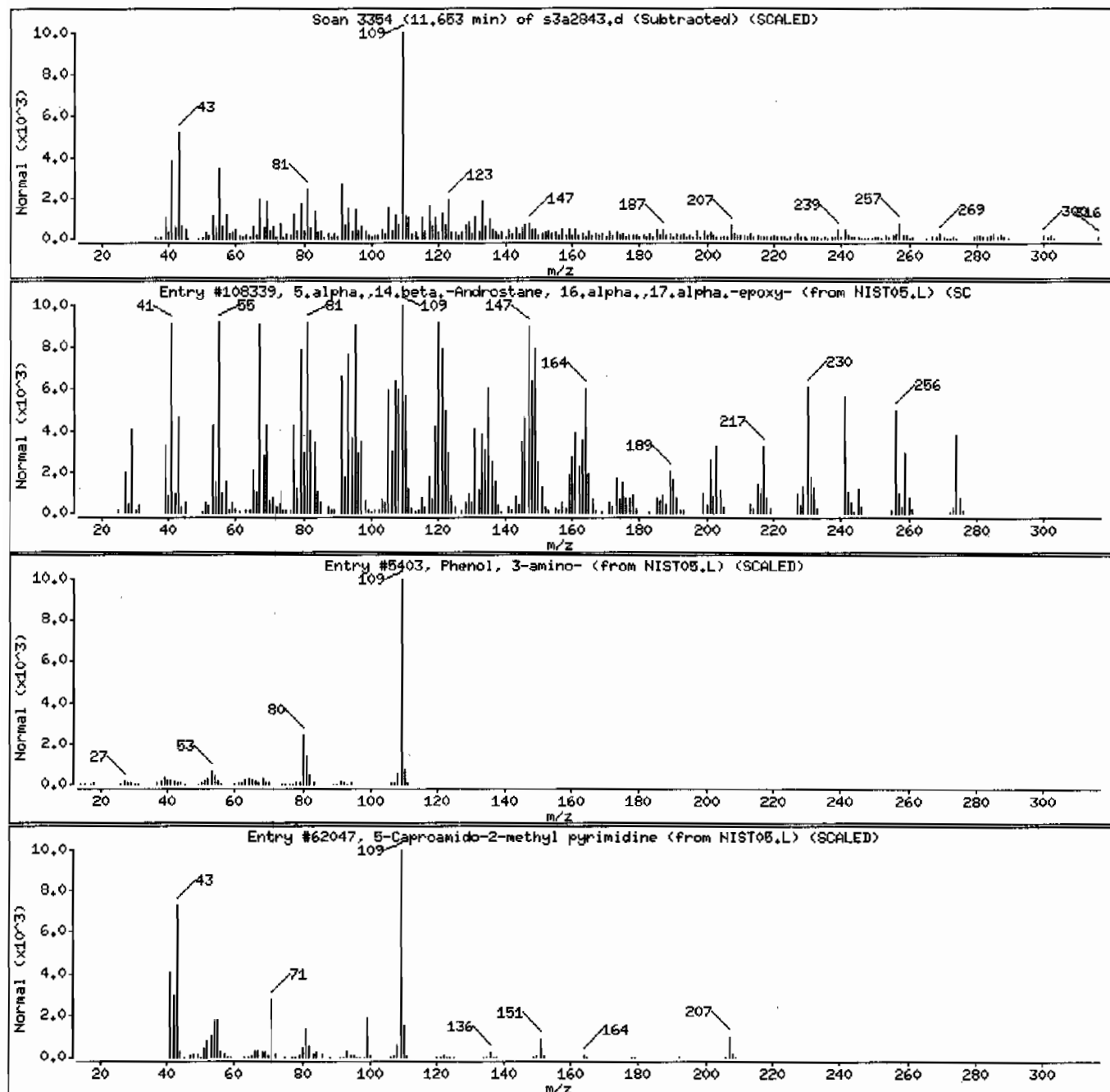
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula   | Weight |
|--|--------------|----------|--------|---------|-----------|--------|
| 5.alpha.,14.beta.-Androstane, 16.alpha., | 24174-25-2   | NIST05.L | 108339 | 93      | C19H30O   | 274    |
| Phenol, 3-amino-                         | 591-27-5     | NIST05.L | 5403   | 43      | C6H7NO    | 109    |
| 5-Caproamido-2-methyl pyrimidine         | 1000213-95-8 | NIST05.L | 62047  | 43      | C11H17N3O | 207    |



Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.1

Sample Info: 12451140151944874111SVHF111LANL

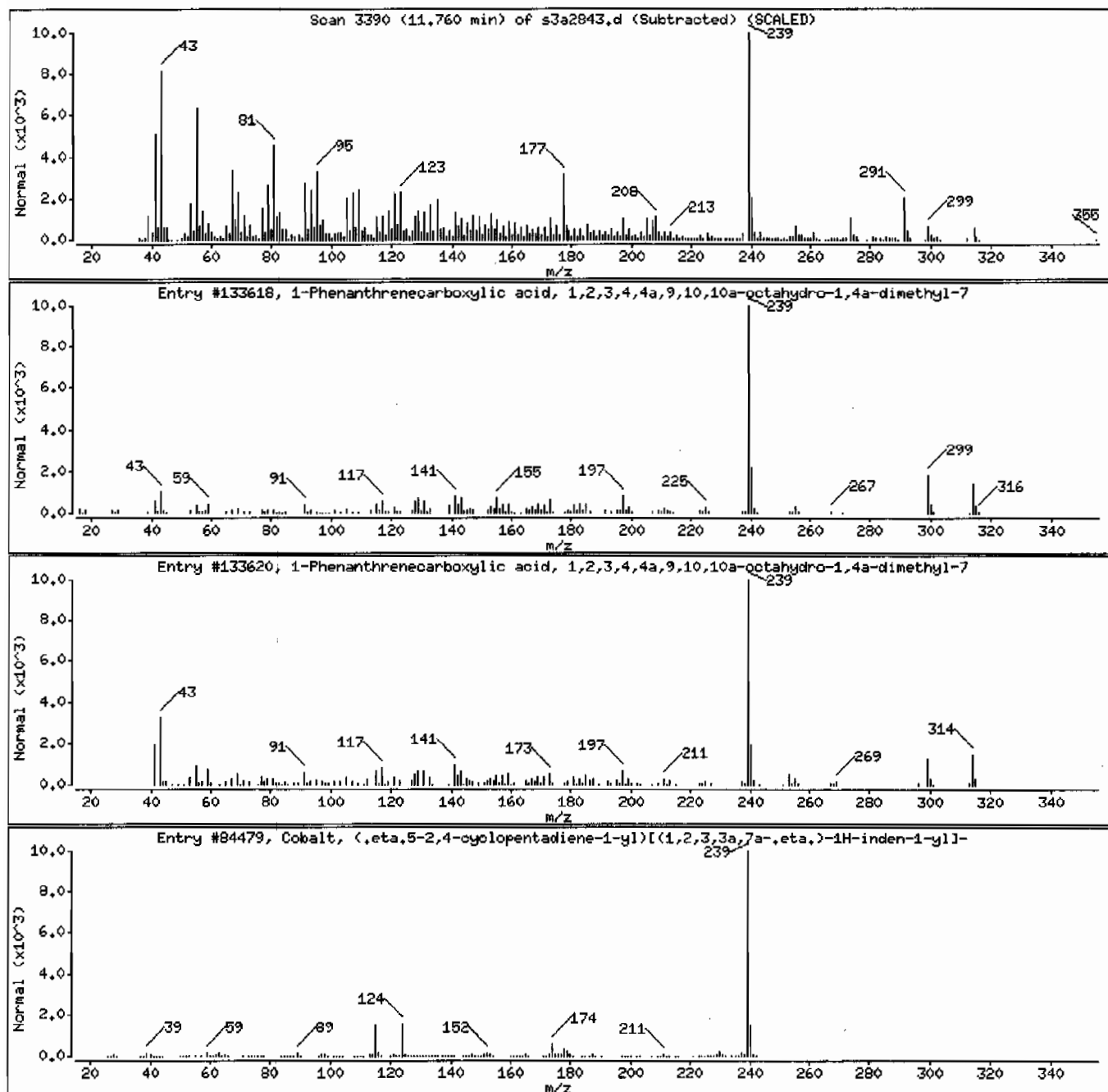
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133618 | 95      | C21H30O2 | 314    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133620 | 84      | C21H30O2 | 314    |
| Cobalt, (.eta,5-2,4-cyclopentadiene-1-yl | 88242-61-9 | NIST05.L | 84479  | 38      | C14H12Co | 239    |



Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.i

Sample Info: 12451140151944874111SVHF111LANL

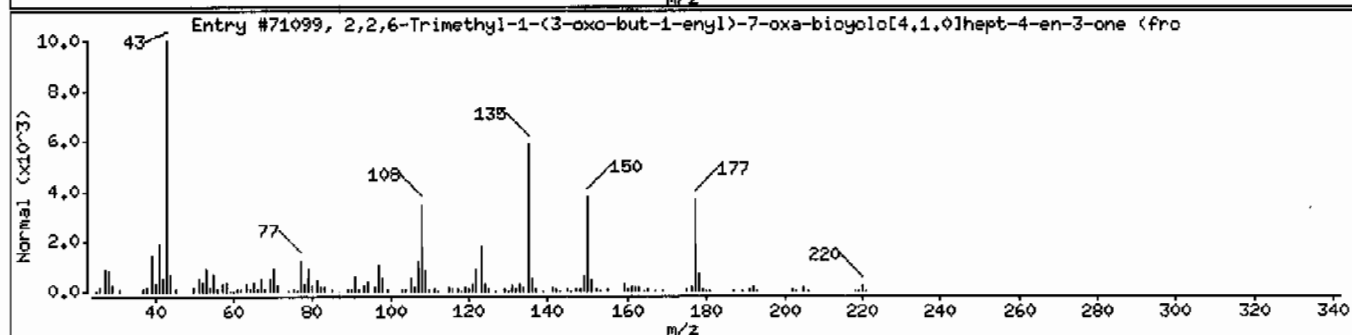
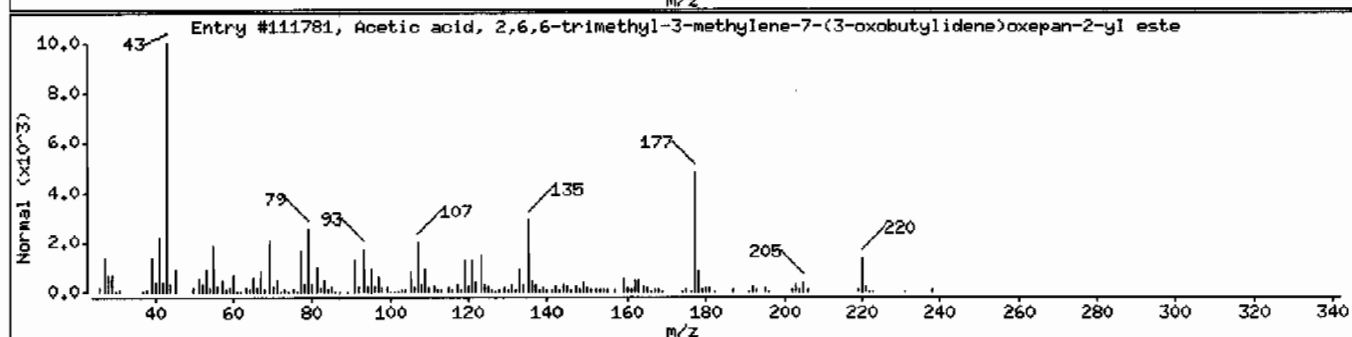
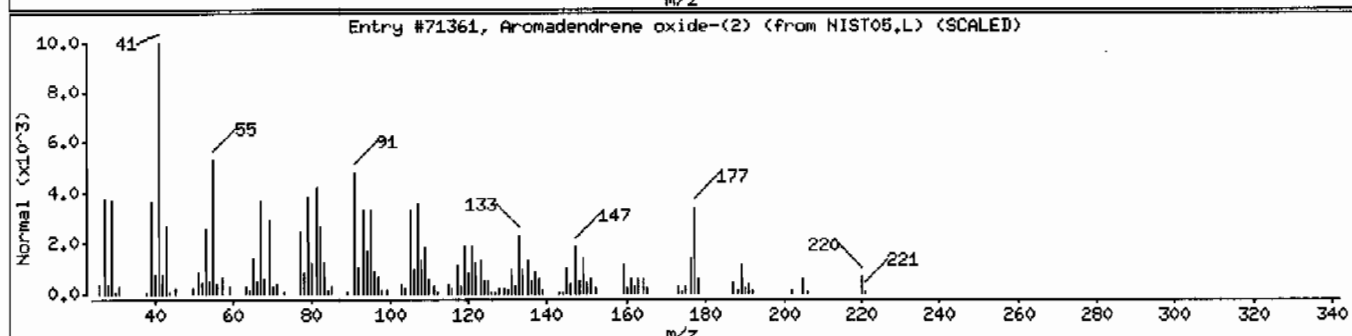
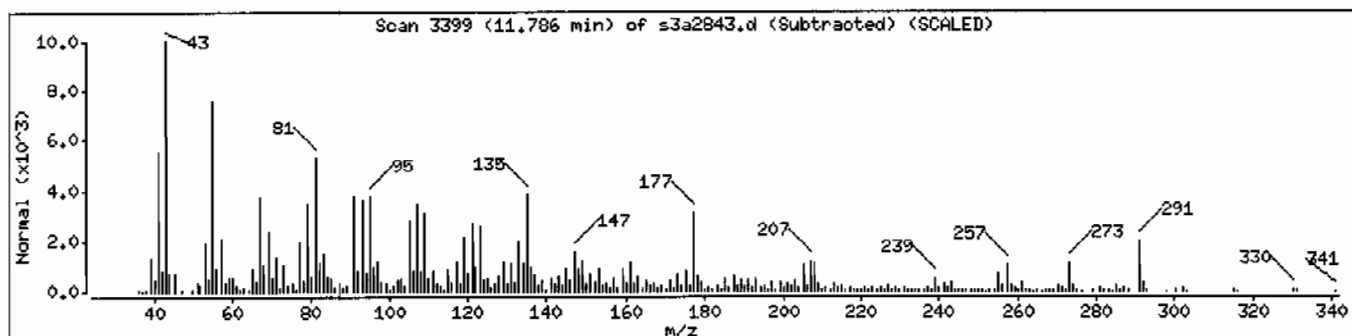
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|--|--------------|----------|--------|---------|----------|--------|
| Unknown                                  |              |          |        |         |          |        |
| Aromadendrene oxide-(2)                  | 1000151-98-6 | NIST05.L | 71361  | 47      | C15H24O  | 220    |
| Acetic acid, 2,6,6-trimethyl-3-methylene | 1000185-41-4 | NIST05.L | 111781 | 47      | C16H24O4 | 280    |
| 2,2,6-Trimethyl-1-(3-oxo-but-1-enyl)-7-o | 1000190-51-6 | NIST05.L | 71099  | 16      | C13H16O3 | 220    |



Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.i

Sample Info: 1245114015194487411SVHF111LANL

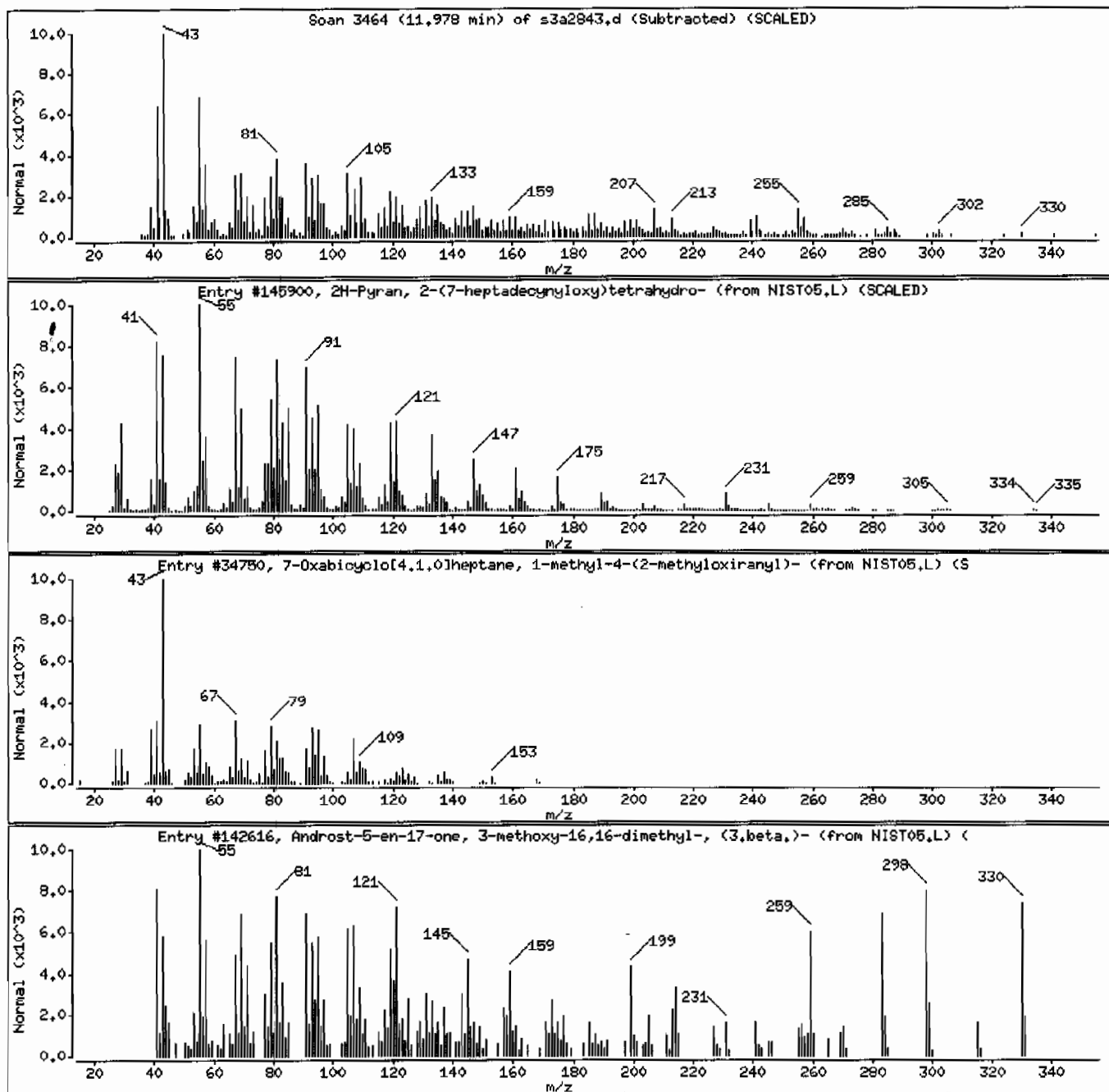
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| Unknown                                  |            |          |        |         |          |        |
| 2H-Pyran, 2-(7-heptadecyloxy)tetrahydr   | 56599-50-9 | NIST05.L | 145900 | 64      | C22H40O2 | 336    |
| 7-Oxabicyclo[4.1.0]heptane, 1-methyl-4-( | 96-08-2    | NIST05.L | 34750  | 52      | C10H16O2 | 168    |
| Androst-5-en-17-one, 3-methoxy-16,16-dim | 55837-03-1 | NIST05.L | 142616 | 49      | C22H34O2 | 330    |



Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.i

Sample Info: 12451140151944874111SVHF111LANL

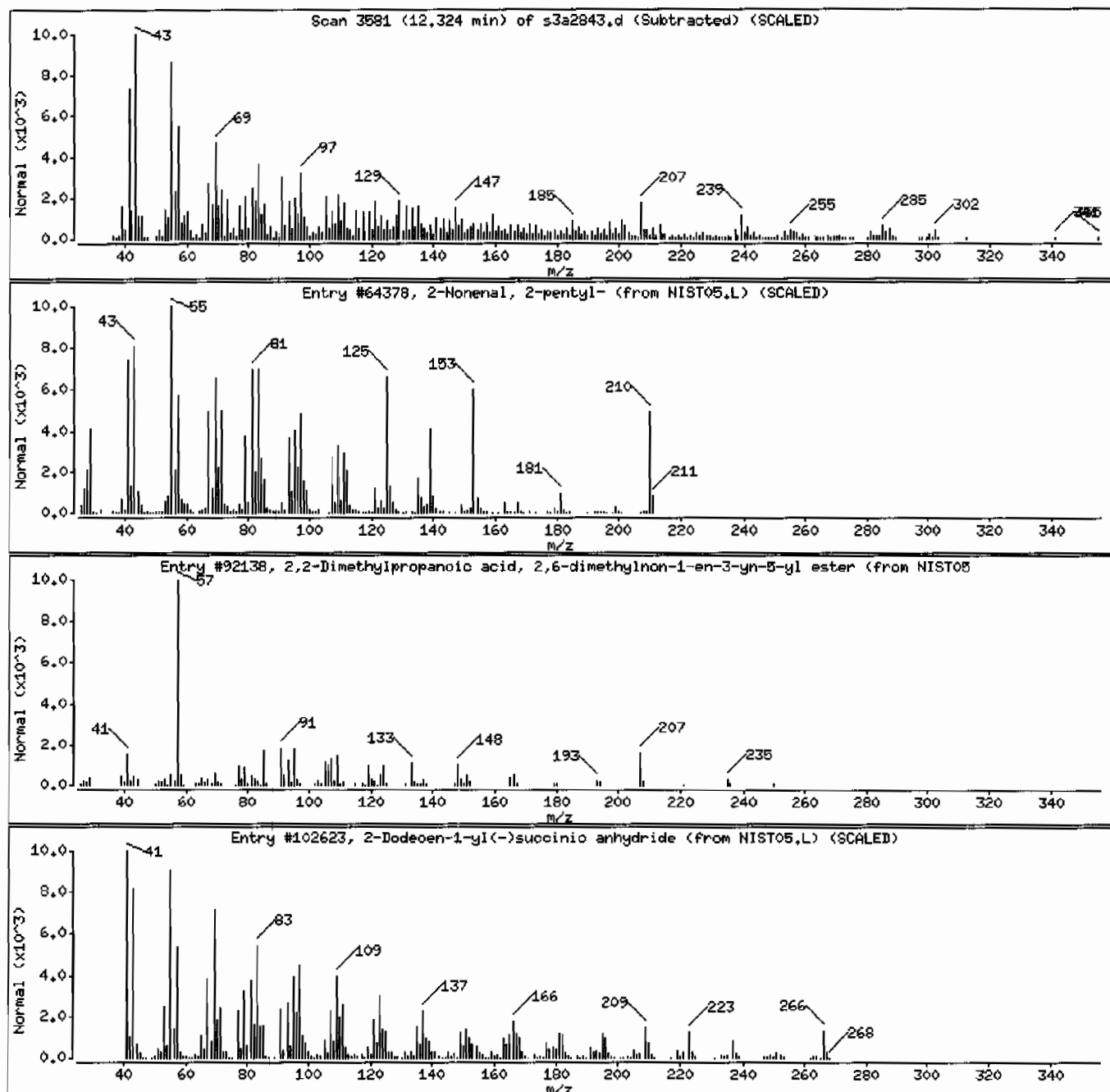
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|--|--------------|----------|--------|---------|--|--------|
| Unknown                                  |              |          |        |         |  |        |
| 2-Nonenal, 2-pentyl-                     | 3021-89-4    | NIST05.L | 64378  | 64      | C <sub>14</sub> H <sub>26</sub> O              | 210    |
| 2,2-Dimethylpropanoic acid, 2,6-dimethyl | 1000299-33-6 | NIST05.L | 92138  | 58      | C <sub>16</sub> H <sub>26</sub> O <sub>2</sub> | 250    |
| 2-Dodecen-1-yl(-)succinic anhydride      | 19780-11-1   | NIST05.L | 102623 | 50      | C <sub>16</sub> H <sub>26</sub> O <sub>3</sub> | 266    |



Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.i

Sample Info: 1245114015194487411|SVHF11|LANL

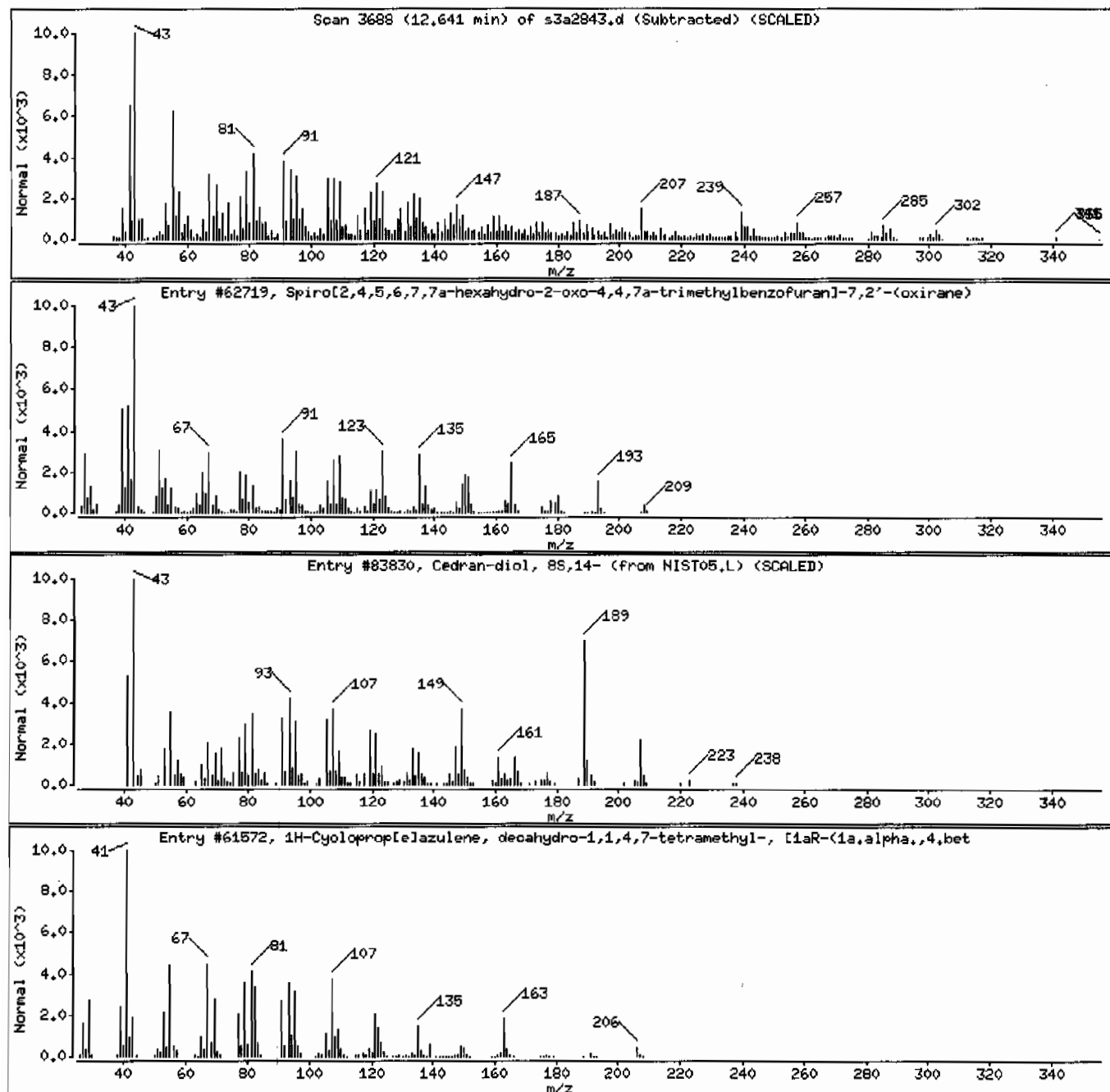
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula  | Weight |
|--|--------------|----------|-------|---------|----------|--------|
| Unknown                                  |              |          |       |         |          |        |
| Spiro[2,4,5,6,7,7a-hexahydro-2-oxo-4,4,7 | 1000197-10-9 | NIST05.L | 62719 | 60      | C12H16O3 | 208    |
| Cedran-diol, 8S,14-                      | 62600-05-9   | NIST05.L | 83830 | 55      | C15H26O2 | 238    |
| 1H-Cycloprop[elazulene, decahydro-1,1,4, | 28580-43-0   | NIST05.L | 61572 | 51      | C15H26   | 206    |





Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.1

Sample Info: 1245114015194487411SVHF111LANL

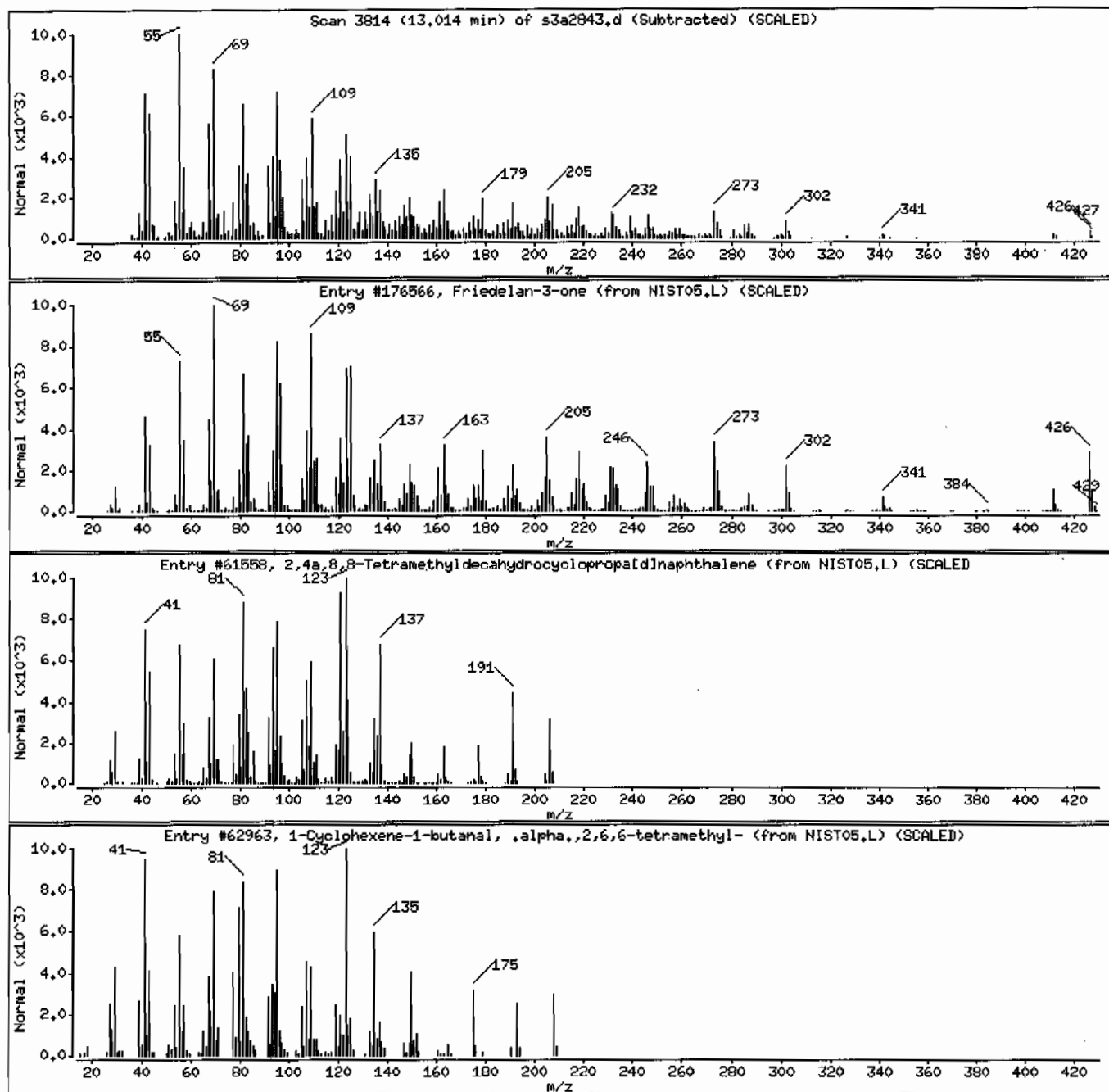
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula | Weight |
|--|------------|----------|--------|---------|---------|--------|
| Friedelan-3-one                          | 559-74-0   | NIST05.L | 176566 | 91      | C30H50O | 426    |
| 2,4a,8,8-Tetramethyldecahydrocyclopropa[ | 74022-04-1 | NIST05.L | 61558  | 72      | C15H26  | 206    |
| 1-Cyclohexene-1-butanol, .alpha.,2,6,6-t | 21632-06-4 | NIST05.L | 62963  | 53      | C14H24O | 208    |



Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.i

Sample Info: 1245114015194487411(SVMF11)LANL

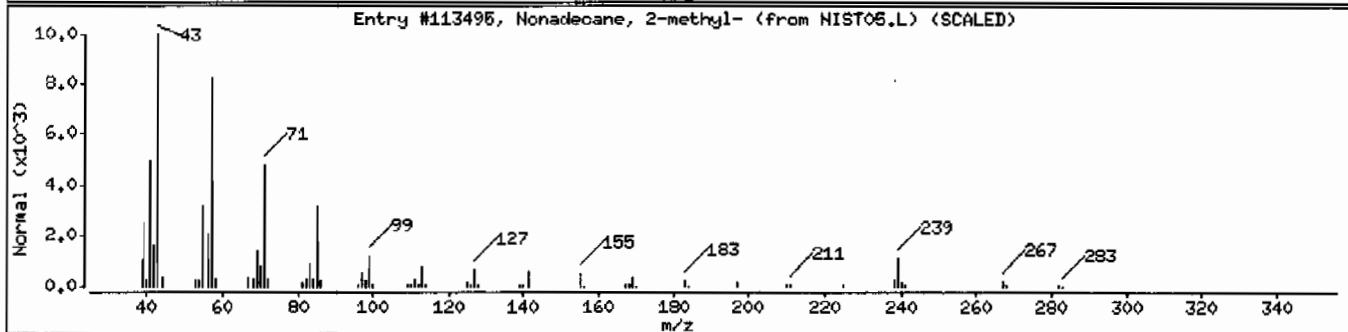
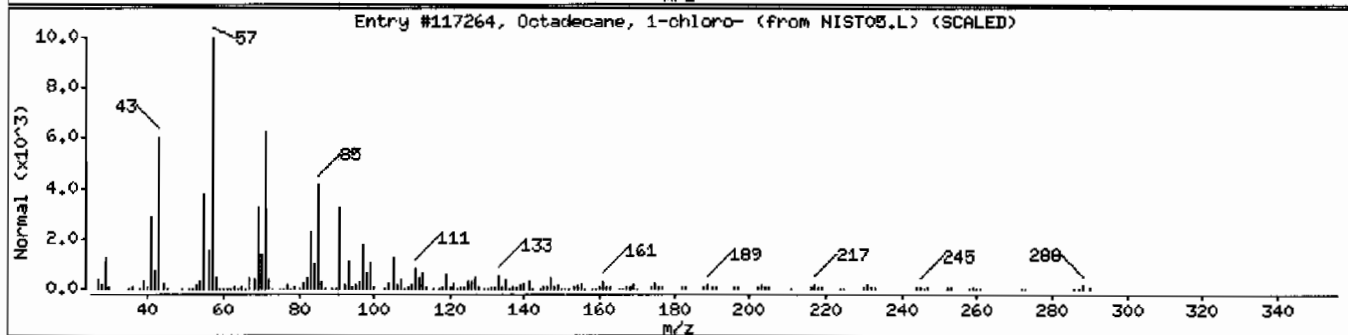
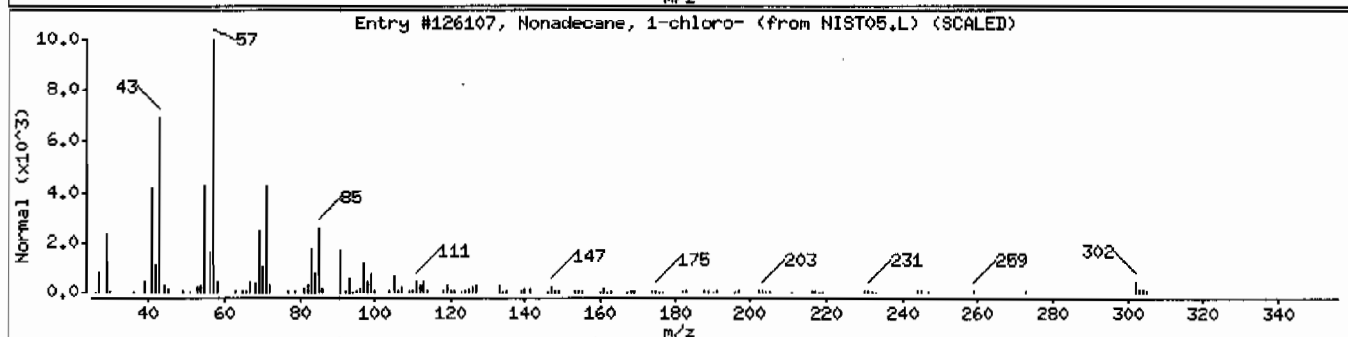
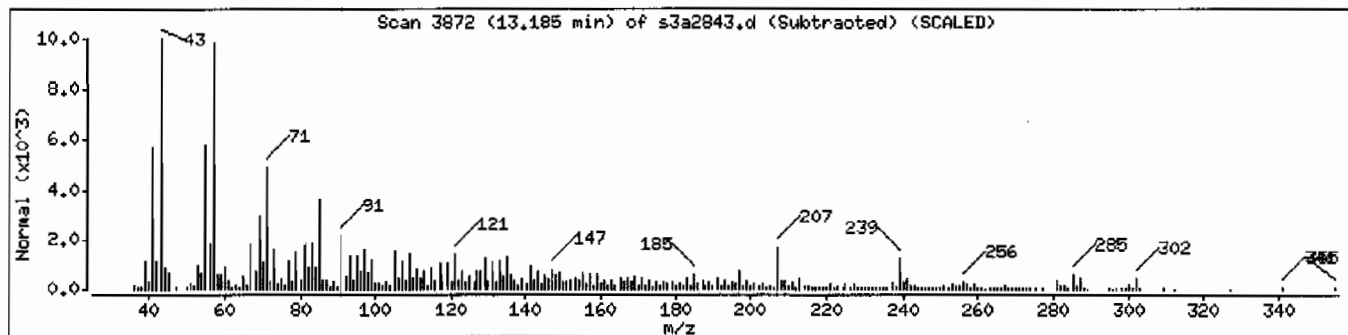
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|-------------------------------|------------|----------|--------|---------|----------|--------|
| Nonadecane, 1-chloro-         | 62016-76-6 | NIST05.L | 126107 | 95      | C19H39Cl | 302    |
| Octadecane, 1-chloro-         | 3386-33-2  | NIST05.L | 117264 | 95      | C18H37Cl | 288    |
| Nonadecane, 2-methyl-         | 1560-86-7  | NIST05.L | 113495 | 91      | C20H42   | 282    |



Date: 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.i

Sample Info: 1245114015194487411|SVHF11|LANL

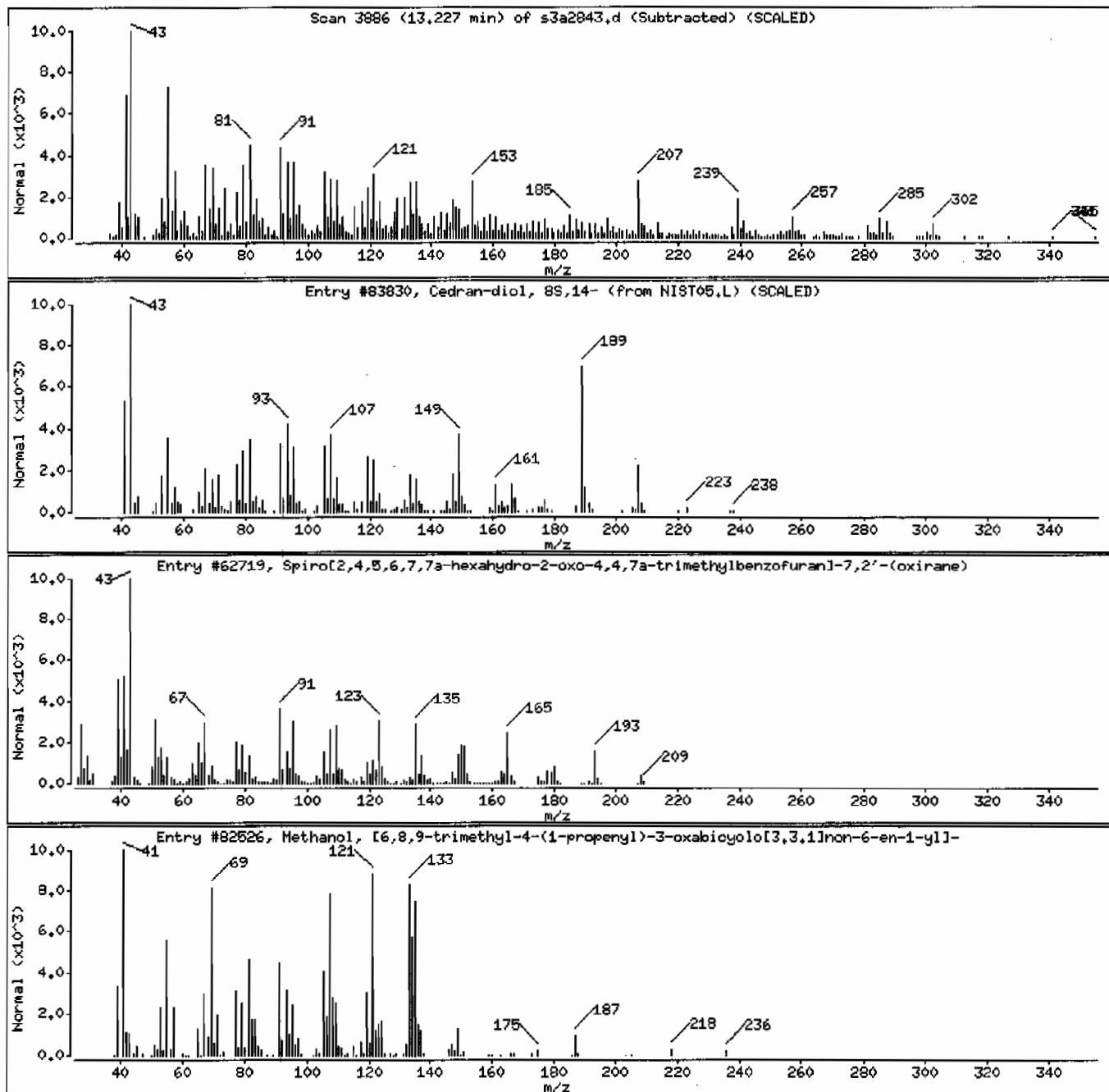
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula  | Weight |
|--|--------------|----------|-------|---------|----------|--------|
| Unknown                                  |              |          |       |         |          |        |
| Cedran-diol, 8S,14-                      | 62600-05-9   | NIST05.L | 83830 | 50      | C15H26O2 | 238    |
| Spiro[2,4,5,6,7,7a-hexahydro-2-oxo-4,4,7 | 1000197-10-9 | NIST05.L | 62719 | 38      | C12H16O3 | 208    |
| Methanol, [6,8,9-trimethyl-4-(1-propenyl | 1000277-60-9 | NIST05.L | 82526 | 38      | C15H24O2 | 236    |



Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.i

Sample Info: 1245114015194487411SVHF11LANL

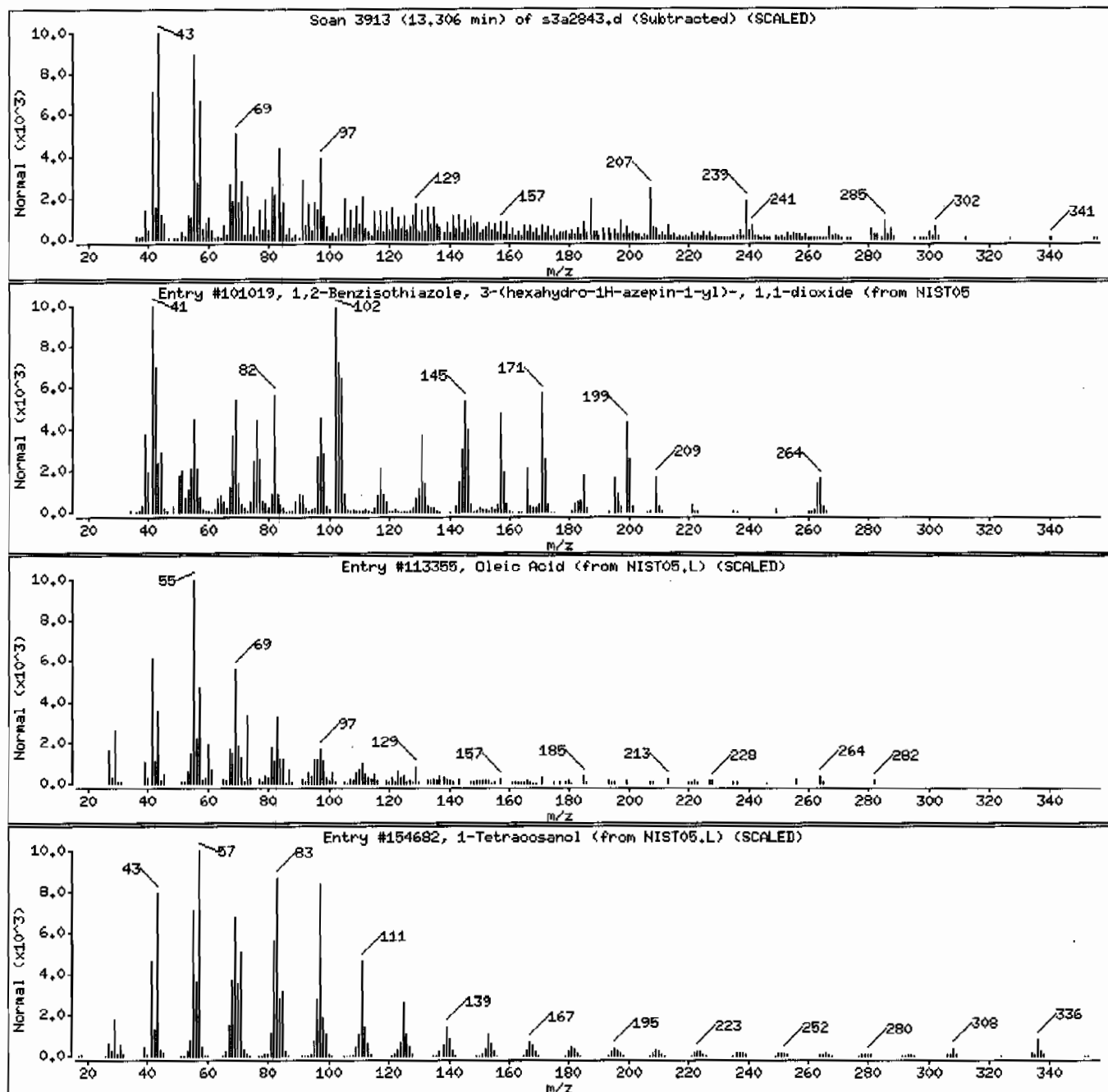
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5HS

Column diameter: 0.20

| Library Search Compound Match                      | CAS Number  | Library  | Entry  | Quality | Formula     | Weight |
|--|-------------|----------|--------|---------|-------------|--------|
| 1,2-Benzisothiazole, 3-(hexahydro-1H-azepin-1-yl)- | 309735-29-3 | NIST05.L | 101019 | 91      | C13H16N2O2S | 264    |
| Oleic Acid   | 112-80-1    | NIST05.L | 113355 | 78      | C18H34O2    | 282    |
| 1-Tetraacosanol                                    | 506-51-4    | NIST05.L | 154682 | 60      | C24H50O     | 354    |



Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.i

Sample Info: 12451140151944874111SVMF111LANL

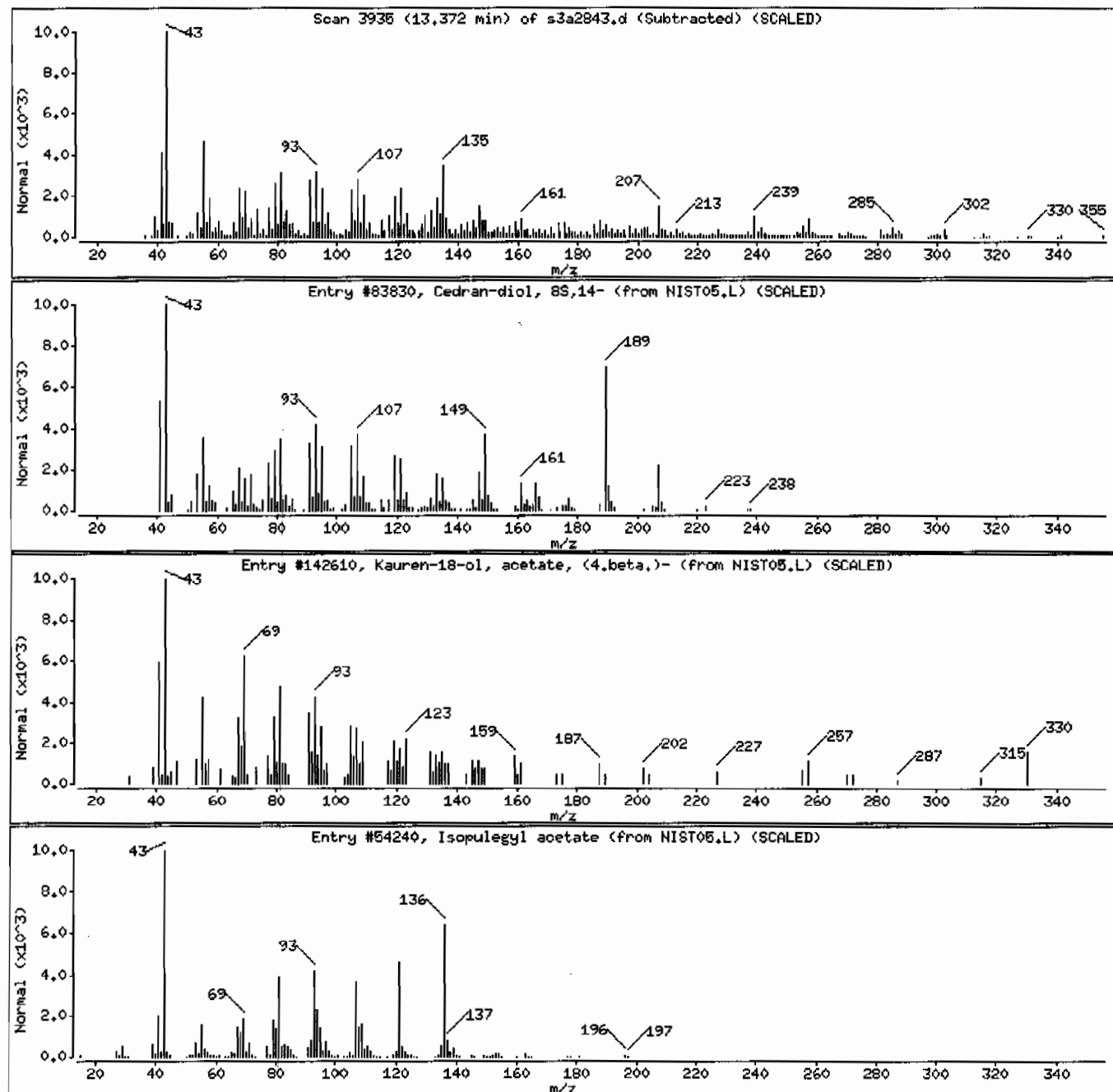
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match     | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|-----------------------------------|------------|----------|--------|---------|----------|--------|
| Cedran-diol, 8S,14-               | 62600-05-9 | NIST05.L | 83830  | 83      | C15H26O2 | 238    |
| Kauren-18-ol, acetate, (4,beta,)- | 72150-74-4 | NIST05.L | 142610 | 47      | C22H34O2 | 330    |
| Isopulegyl acetate                | 89-49-6    | NIST05.L | 54240  | 30      | C12H20O2 | 196    |



Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.i

Sample Info: 12451140151944874111SVHF111LANL

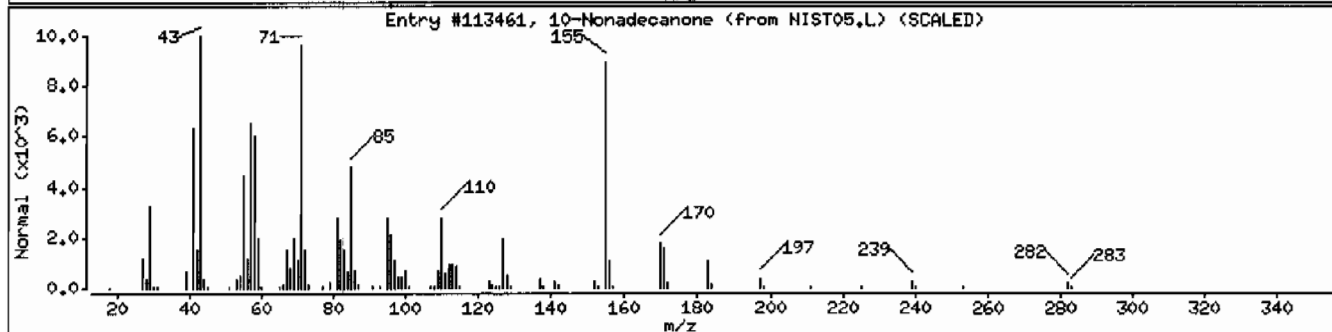
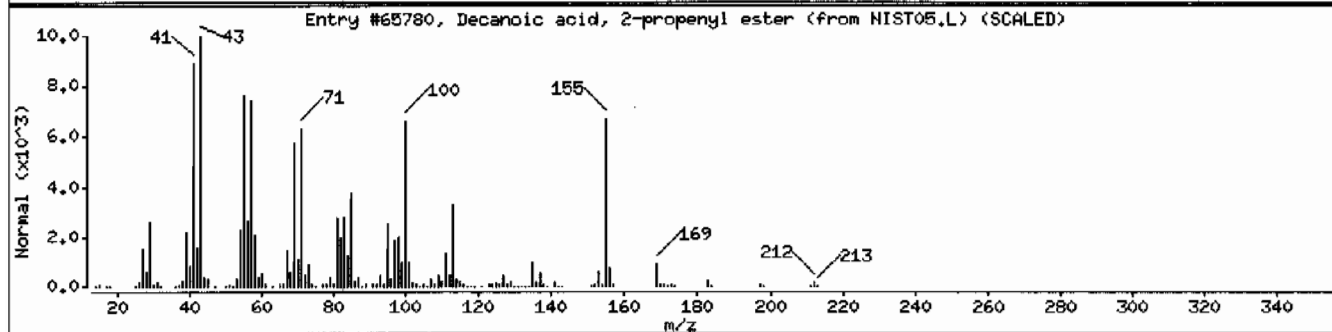
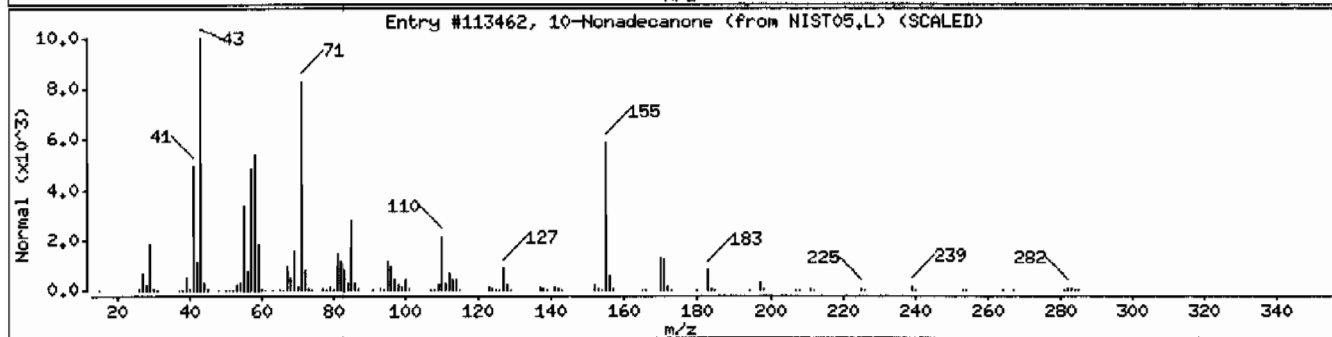
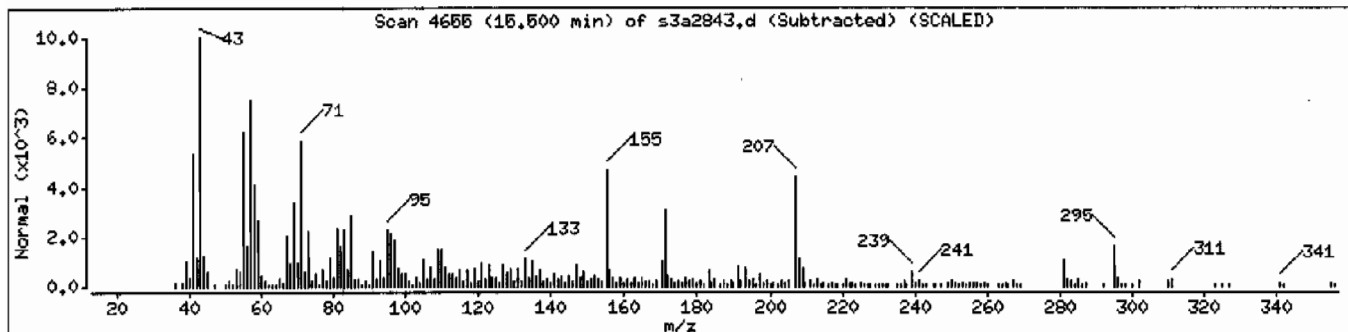
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match   | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|---------------------------------|------------|----------|--------|---------|----------|--------|
| 10-Nonadecanone                 | 504-57-4   | NIST05.L | 113462 | 81      | C19H38O  | 282    |
| Decanoic acid, 2-propenyl ester | 57856-81-2 | NIST05.L | 65780  | 30      | C13H24O2 | 212    |
| 10-Nonadecanone                 | 504-57-4   | NIST05.L | 113461 | 27      | C19H38O  | 282    |



Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.i

Sample Info: 1245114015194487411SVHF11ILANL

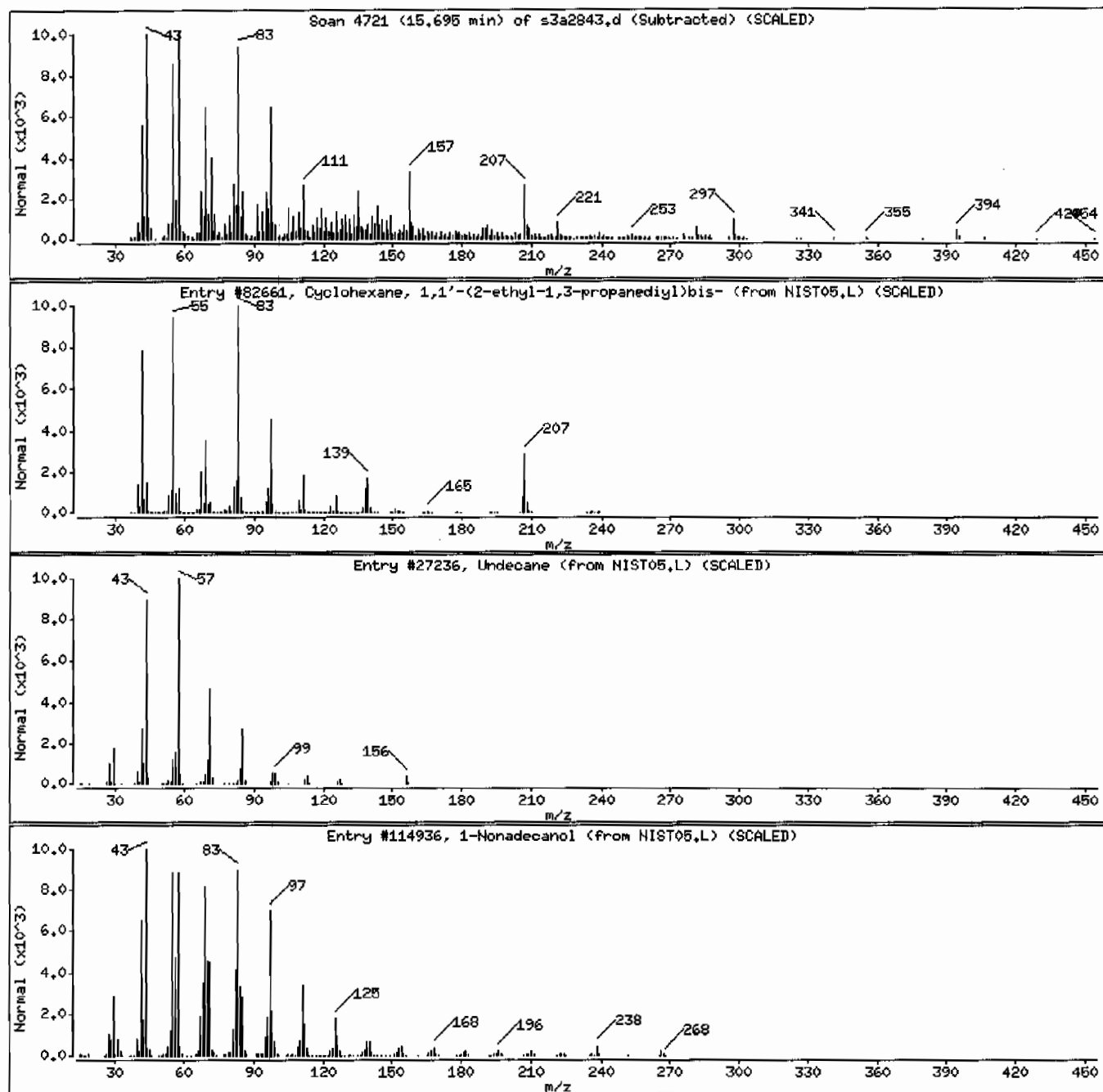
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;H DB-5HS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula | Weight |
|--|------------|----------|--------|---------|---------|--------|
| Unknown                                  |            |          |        |         |         |        |
| Cyclohexane, 1,1'-(2-ethyl-1,3-propanedi | 54833-34-0 | NIST05.L | 82661  | 70      | C17H32  | 236    |
| Undecane                                 | 1120-21-4  | NIST05.L | 27236  | 59      | C11H24  | 156    |
| 1-Nonadecanol                            | 1454-84-8  | NIST05.L | 114936 | 58      | C19H40O | 284    |



Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.1

Sample Info: 1245114015194487411SVHF11ILANL

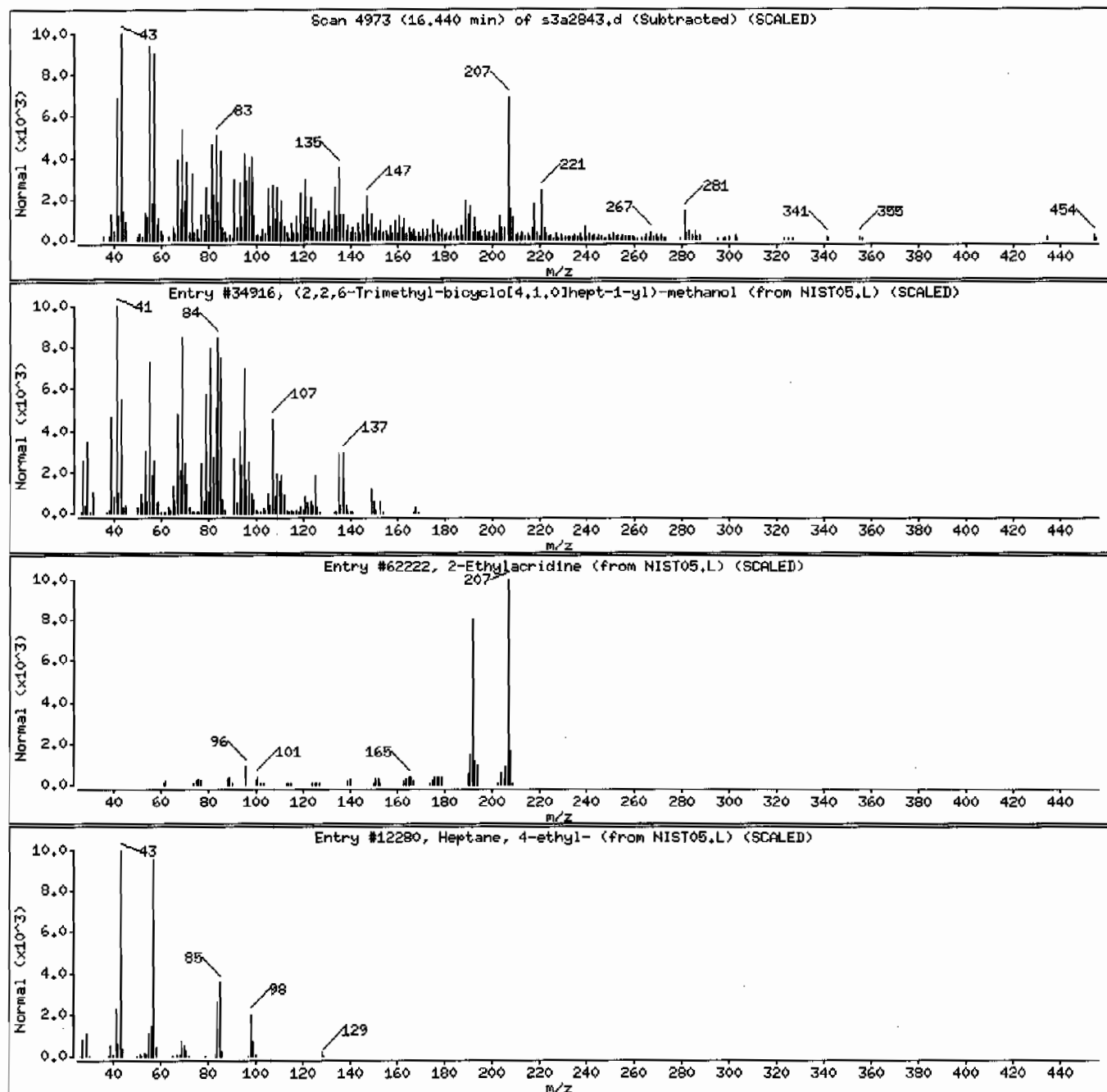
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--|------------|----------|-------|---------|---------|--------|
| Unknown                                  |            |          |       |         |         |        |
| (2,2,6-Trimethyl-bicyclo[4.1.0]hept-1-yl | 78996-11-9 | NIST05.L | 34916 | 30      | C11H20O | 168    |
| 2-Ethylacridine                          | 55751-93-2 | NIST05.L | 62222 | 25      | C15H13N | 207    |
| Heptane, 4-ethyl-                        | 2216-32-2  | NIST05.L | 12280 | 20      | C9H20   | 128    |





Date : 29-JAN-2010 04:14

Client ID: RE15-10-8420

Instrument: MSD3.i

Sample Info: 1245114015194487411SVHF111LANL

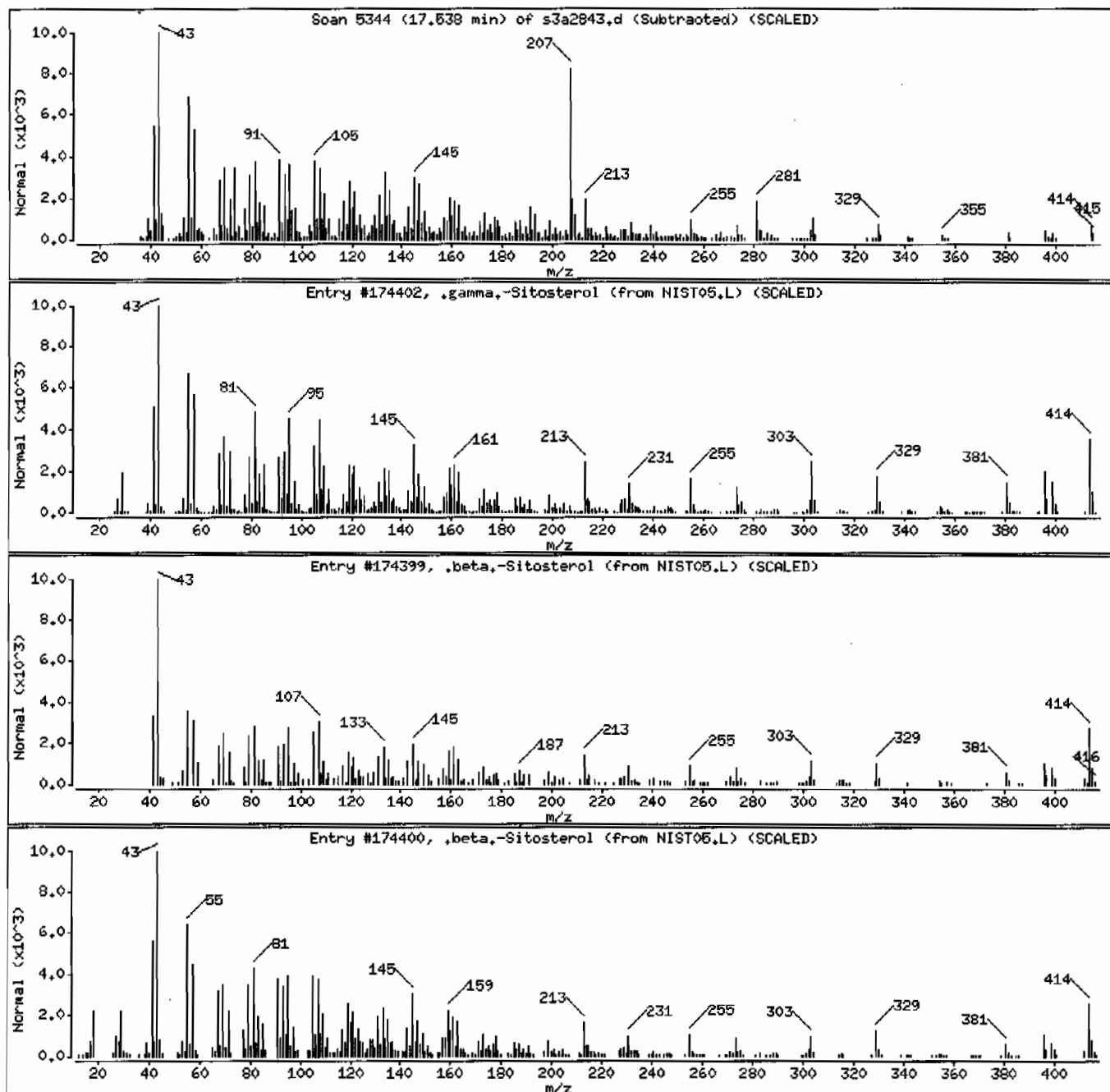
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry  | Quality | Formula | Weight |
|-------------------------------|------------|----------|--------|---------|---------|--------|
| .gamma.-Sitosterol            | 83-47-6    | NIST05.L | 174402 | 93      | C29H50O | 414    |
| .beta.-Sitosterol             | 83-46-5    | NIST05.L | 174399 | 91      | C29H50O | 414    |
| .beta.-Sitosterol             | 83-46-5    | NIST05.L | 174400 | 91      | C29H50O | 414    |



Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1324  
Lab Sample ID: 245114014

Client ID: RE15-10-8421  
Batch ID: 944874  
Run Date: 01/29/2010 03:49  
Prep Date: 01/25/2010 21:06  
Data File: s3a2842.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 12.5  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 380    | ug/kg | 76.1    | 380     |
| 108-95-2   | Phenol                        | U         | 380    | ug/kg | 76.1    | 380     |
| 95-57-8    | 2-Chlorophenol                | U         | 380    | ug/kg | 76.1    | 380     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 380    | ug/kg | 76.1    | 380     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 380    | ug/kg | 76.1    | 380     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 380    | ug/kg | 76.1    | 380     |
| 83-32-9    | Acenaphthene                  | U         | 38.0   | ug/kg | 12.6    | 38.0    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 380    | ug/kg | 38.0    | 380     |
| 100-02-7   | 4-Nitrophenol                 | U         | 380    | ug/kg | 126     | 380     |
| 87-86-5    | Pentachlorophenol             | U         | 380    | ug/kg | 95.1    | 380     |
| 129-00-0   | Pyrene                        | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 110-86-1   | Pyridine                      | U         | 380    | ug/kg | 76.1    | 380     |
| 62-53-3    | Aniline                       | U         | 380    | ug/kg | 114     | 380     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 380    | ug/kg | 76.1    | 380     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 380    | ug/kg | 76.1    | 380     |
| 100-51-6   | Benzyl alcohol                | U         | 380    | ug/kg | 114     | 380     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 380    | ug/kg | 76.1    | 380     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 380    | ug/kg | 76.1    | 380     |
| 95-48-7    | o-Cresol                      | U         | 380    | ug/kg | 76.1    | 380     |
| 65794-96-9 | m,p-Cresols                   | U         | 380    | ug/kg | 114     | 380     |
| 67-72-1    | Hexachloroethane              | U         | 380    | ug/kg | 76.1    | 380     |
| 98-95-3    | Nitrobenzene                  | U         | 380    | ug/kg | 76.1    | 380     |
| 78-59-1    | Isophorone                    | U         | 380    | ug/kg | 76.1    | 380     |
| 88-75-5    | 2-Nitrophenol                 | U         | 380    | ug/kg | 76.1    | 380     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 380    | ug/kg | 133     | 380     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 380    | ug/kg | 76.1    | 380     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 380    | ug/kg | 76.1    | 380     |
| 65-85-0    | Benzoic acid                  | U         | 761    | ug/kg | 190     | 761     |
| 91-20-3    | Naphthalene                   | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 106-47-8   | 4-Chloroaniline               | U         | 380    | ug/kg | 76.1    | 380     |
| 87-68-3    | Hexachlorobutadiene           | U         | 380    | ug/kg | 76.1    | 380     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 38.0   | ug/kg | 7.61    | 38.0    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 380    | ug/kg | 76.1    | 380     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 380    | ug/kg | 76.1    | 380     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 380    | ug/kg | 76.1    | 380     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 38.0   | ug/kg | 12.6    | 38.0    |
| 88-74-4    | 2-Nitroaniline                | U         | 380    | ug/kg | 76.1    | 380     |
|            | <i>o</i> -Nitroaniline        |           |        |       |         |         |
| 99-09-2    | 3-Nitroaniline                | U         | 380    | ug/kg | 76.1    | 380     |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1324  
Lab Sample ID: 245114014

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 12.5  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|-------------------------------|-----------|--------|-------|---------|---------|
|           | <i>m</i> -Nitroaniline        |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate             | U         | 380    | ug/kg | 76.1    | 380     |
| 606-20-2  | 2,6-Dinitrotoluene            | U         | 380    | ug/kg | 38.0    | 380     |
| 208-96-8  | Acenaphthylene                | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 51-28-5   | 2,4-Dinitrophenol             | U         | 761    | ug/kg | 145     | 761     |
| 132-64-9  | Dibenzofuran                  | U         | 380    | ug/kg | 76.1    | 380     |
| 84-66-2   | Diethylphthalate              | U         | 380    | ug/kg | 76.1    | 380     |
| 86-73-7   | Fluorene                      | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 7005-72-3 | 4-Chlorophenylphenylether     | U         | 380    | ug/kg | 76.1    | 380     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol    | U         | 380    | ug/kg | 76.1    | 380     |
| 100-01-6  | 4-Nitroaniline                | U         | 380    | ug/kg | 114     | 380     |
|           | <i>p</i> -Nitroaniline        |           |        |       |         |         |
| 122-39-4  | Diphenylamine                 | U         | 380    | ug/kg | 76.1    | 380     |
| 122-66-7  | Azobenzene                    | U         | 380    | ug/kg | 76.1    | 380     |
|           | <i>1,2</i> -Diphenylhydrazine |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether      | U         | 380    | ug/kg | 76.1    | 380     |
| 118-74-1  | Hexachlorobenzene             | U         | 380    | ug/kg | 76.1    | 380     |
| 85-01-8   | Phenanthrene                  | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 120-12-7  | Anthracene                    | U         | 38.0   | ug/kg | 7.61    | 38.0    |
| 84-74-2   | Di-n-butylphthalate           | U         | 380    | ug/kg | 76.1    | 380     |
| 206-44-0  | Fluoranthene                  | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 85-68-7   | Butylbenzylphthalate          | U         | 380    | ug/kg | 76.1    | 380     |
| 56-55-3   | Benzo(a)anthracene            | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 91-94-1   | 3,3'-Dichlorobenzidine        | U         | 380    | ug/kg | 114     | 380     |
| 218-01-9  | Chrysene                      | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate    | U         | 380    | ug/kg | 76.1    | 380     |
| 117-84-0  | Di-n-octylphthalate           | U         | 380    | ug/kg | 76.1    | 380     |
| 205-99-2  | Benzo(b)fluoranthene          | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 207-08-9  | Benzo(k)fluoranthene          | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 50-32-8   | Benzo(a)pyrene                | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene        | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 53-70-3   | Dibenzo(a,h)anthracene        | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 191-24-2  | Benzo(ghi)perylene            | U         | 38.0   | ug/kg | 11.4    | 38.0    |
| 120-82-1  | 1,2,4-Trichlorobenzene        | U         | 380    | ug/kg | 76.1    | 380     |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.07 | 2110      | ug/kg |     | J    |
|         | Unknown                               | 2.24 | 242       | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114014

Client ID: RE15-10-8421  
Batch ID: 944874  
Run Date: 01/29/2010 03:49  
Prep Date: 01/25/2010 21:06  
Data File: s3a2842.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 12.5  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |                                       |       |           |       |     |      |
|---|---------------------------------------|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC) | RT    | Estimated | Units | Fit | Qual |
|   | Unknown Aldol Condensate              | 3.32  | 195       | ug/kg |     | JA   |
|   | Unknown                               | 15.66 | 2000      | ug/kg |     | J    |
|   | Unknown                               | 16.43 | 1920      | ug/kg |     | J    |
|   | Unknown                               | 16.95 | 220       | ug/kg |     | J    |
|   | Unknown                               | 17.6  | 498       | ug/kg |     | J    |
|   | Unknown                               | 17.64 | 285       | ug/kg |     | J    |
|   | Unknown                               | 18.06 | 341       | ug/kg |     | J    |

Report Date: 29-Jan-2010 12:08

## GEL Laboratories LLC

Data file : /chem/MSD3.i/s012810a.b/s3a2842.d

Lab Smp Id: 245114014

Client Smp ID: RE15-10-8421

Inj Date : 29-JAN-2010 03:49

Operator : JLD1

Inst ID: MSD3.i

Smp Info : |245114014|944874|1|SVMF|1|LANL

Misc Info : |MSD8270\_S|WBN100107-02|

Comment : Column: J&amp;W DB-5MS, 25 m x 0.20 mm x 0.33 micron film

Method : /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m

Meth Date : 29-Jan-2010 10:49 jen00986 Quant Type: ISTD

Cal Date : 21-JAN-2010 21:36

Cal File: s3a2130.d

Als bottle: 17

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1324.sub

Target Version: 3.50

Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.03000  | weight of sample          |
| M    | 12.47020  | % moisture                |

Cpnd Variable

Local Compound Variable

| Compounds                   | QUANT SIG<br>MASS | RT     | EXP RT | REL RT  | RESPONSE | CONCENTRATIONS       |                  |
|-----------------------------|-------------------|--------|--------|---------|----------|----------------------|------------------|
|                             |                   |        |        |         |          | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/Kg) |
| * 10 1,4-Dichlorobenzene-d4 | 152               | 4.723  | 4.722  | (1.000) | 547364   | 40.0000              |                  |
| * 29 Naphthalene-d8         | 136               | 5.999  | 6.003  | (1.000) | 2109838  | 40.0000              |                  |
| * 46 Acenaphthene-d10       | 164               | 7.871  | 7.875  | (1.000) | 1156870  | 40.0000              |                  |
| * 67 Phenanthrene-d10       | 188               | 9.485  | 9.486  | (1.000) | 1769108  | 40.0000              |                  |
| * 91 Chrysene-d12           | 240               | 12.477 | 12.478 | (1.000) | 879149   | 40.0000              |                  |
| * 98 Perylene-d12           | 264               | 14.764 | 14.762 | (1.000) | 442632   | 40.0000              |                  |
| \$ 3 2-Fluorophenol         | 112               | 3.558  | 3.549  | (0.753) | 973199   | 68.3277              | 2600             |
| \$ 5 Phenol-d5              | 99                | 4.333  | 4.331  | (0.917) | 1160368  | 64.8231              | 2470             |
| \$ 20 Nitrobenzene-d5       | 82                | 5.257  | 5.262  | (0.876) | 543813   | 34.8931              | 1330             |
| \$ 39 2-Fluorobiphenyl      | 172               | 7.128  | 7.128  | (0.906) | 1081536  | 36.1685              | 1380             |
| \$ 60 2,4,6-Tribromophenol  | 329               | 8.724  | 8.724  | (1.108) | 218035   | 65.7439              | 2500             |
| \$ 81 p-Terphenyl-d14       | 244               | 11.198 | 11.196 | (0.898) | 846541   | 56.0218              | 2130             |

## ION RATIO REPORT

## SV REPORT

Data file: s3a2842.d

Report Date: 01/29/2010 11:49

Lab. ID: 245114014

SampleType: SAMPLE

Injection Date: 29-JAN-2010 03:49

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245114014|944874|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1324

Sample Matrix: SOIL

| MASS  | RESPONSE               | RT   | EXPECT RT      | TARGET RANGE | RATIO | QUAL |
|-------|------------------------|------|----------------|--------------|-------|------|
| ===== |                        |      |                |              |       |      |
| 4     | Aniline                |      | CAS#: 62-53-3  |              |       |      |
| 66    | 66310                  | 4.33 | 4.41           | 80-120       | 100   | (T)  |
| 93    | 6017                   | 4.39 | 4.41           | 201-261      | 9     | (Q)  |
| ----- |                        |      |                |              |       |      |
| 17    | N-Nitrosodipropylamine |      | CAS#: 621-64-7 |              |       |      |
| 70    | 76950                  | 5.26 | 5.10           | 80-120       | 100   | (T)  |
| 42    | 51317                  | 5.26 | 5.10           | 45-105       | 67    | (T)  |
| ----- |                        |      |                |              |       |      |
| 41    | m-Nitroaniline         |      | CAS#: 99-09-2  |              |       |      |
| 138   | 187                    | 7.87 | 7.82           | 80-120       | 100   | ( )  |
| 92    | 6162                   | 7.87 | 7.82           | 80-140       | 3280  | (Q)  |
| 108   | 24626                  | 7.87 | 7.82           | 0- 40        | 13106 | (Q)  |
| ----- |                        |      |                |              |       |      |
| 44    | 2,6-Dinitrotoluene     |      | CAS#: 606-20-2 |              |       |      |
| 165   | 149733                 | 7.87 | 7.63           | 80-120       | 100   | (T)  |
| 63    | 2117                   | 7.87 | 7.63           | 35- 95       | 1     | (QT) |
| ----- |                        |      |                |              |       |      |
| 50    | 2,4-Dinitrotoluene     |      | CAS#: 121-14-2 |              |       |      |
| 165   | 149733                 | 7.87 | 8.07           | 80-120       | 100   | (T)  |
| 89    | 2128                   | 7.87 | 8.07           | 43-103       | 1     | (QT) |
| 63    | 2117                   | 7.87 | 8.07           | 23- 83       | 1     | (QT) |

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012810a.b/s3a2842.d  
Lab Smp Id: 245114014 Client Smp ID: RE15-10-8421  
Inj Date : 29-JAN-2010 03:49  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |245114014|944874|1|SVMF|1|LANL  
Misc Info : |MSD8270 S|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m  
Meth Date : 29-Jan-2010 10:49 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 17  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1324.sub  
Target Version: 3.50  
Processing Host: hpc1pl

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.03000  | weight of sample          |
| M    | 12.47020  | % moisture                |

Cpnd Variable

Local Compound Variable

| ISTD                        | RT     | AREA    | AMOUNT |
|-----------------------------|--------|---------|--------|
| =====                       | =====  | =====   | =====  |
| * 10 1,4-Dichlorobenzene-d4 | 4.723  | 3509459 | 40.000 |
| * 98 Perylene-d12           | 14.764 | 1328884 | 40.000 |

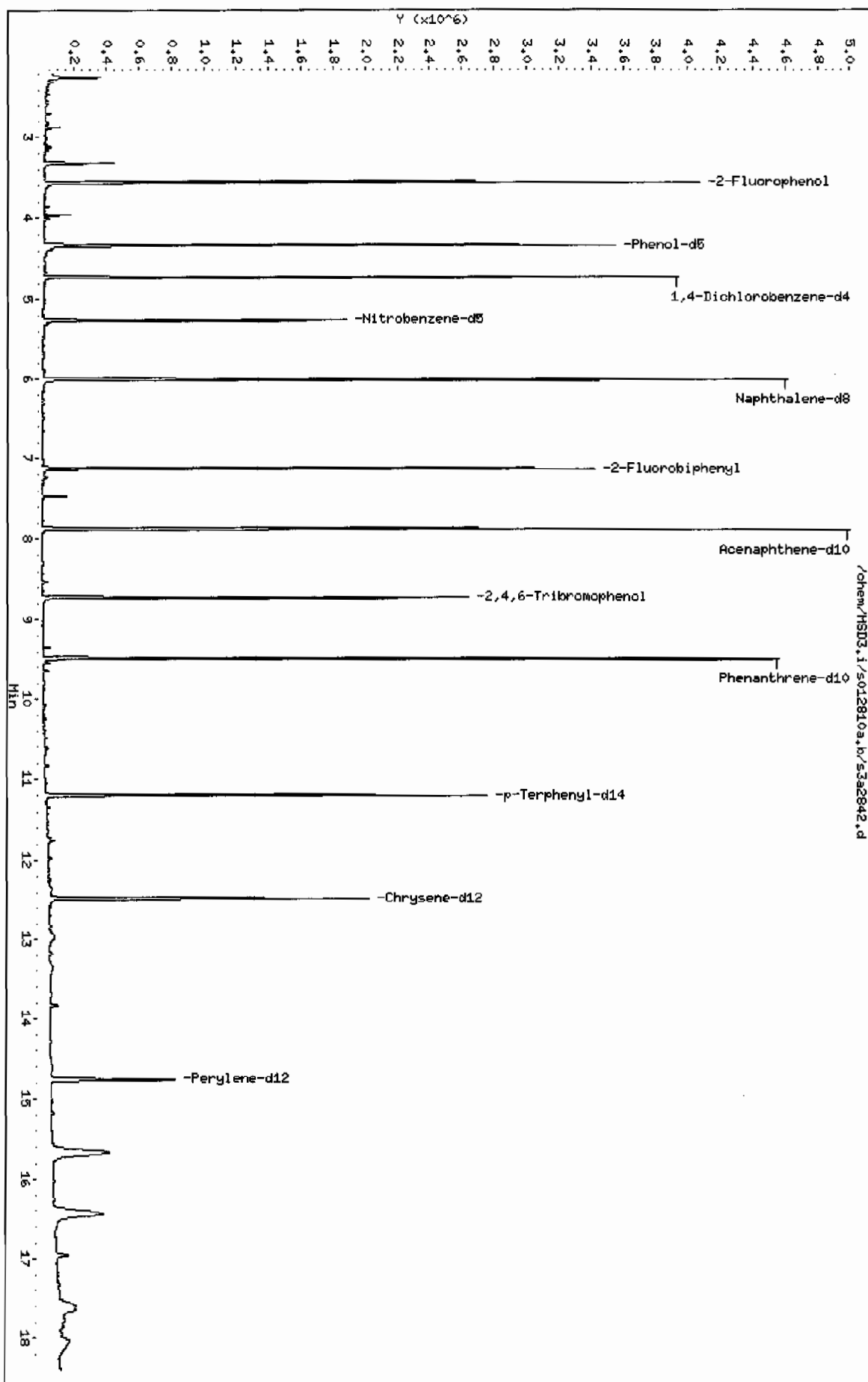
| CONCENTRATIONS |         |               |              | QUANT  |         |           |
|----------------|---------|---------------|--------------|--------|---------|-----------|
| RT             | AREA    | ON-COL(ng/ul) | FINAL(ug/Kg) | QUAL   | LIBRARY | LIB ENTRY |
| ----           | ----    | -----         | -----        | ----   | -----   | -----     |
| Unknown        |         |               |              | CAS #: |         |           |
| 2.065          | 4865317 | 55.4537399    | 2110         | 0      |         | 0 10      |

| RT                       | CONCENTRATIONS |               |              | QUAL   | QUANT   |           | CPND # |
|--------------------------|----------------|---------------|--------------|--------|---------|-----------|--------|
|                          | AREA           | ON-COL(ng/ul) | FINAL(ug/Kg) |        | LIBRARY | LIB ENTRY |        |
| Unknown                  |                |               |              | CAS #: |         |           |        |
| 2.241                    | 556947         | 6.34795022    | 242          | 0      |         | 0         | 10     |
| Unknown Aldol Condensate |                |               |              | CAS #: |         |           |        |
| 3.324                    | 449002         | 5.11761448    | 195          | 0      |         | 0         | 10     |
| Unknown                  |                |               |              | CAS #: |         |           |        |
| 15.661                   | 1745720        | 52.5469154    | 2000         | 0      |         | 0         | 98     |
| Unknown                  |                |               |              | CAS #: |         |           |        |
| 16.434                   | 1675756        | 50.4409684    | 1920         | 0      |         | 0         | 98     |
| Unknown                  |                |               |              | CAS #: |         |           |        |
| 16.948                   | 191914         | 5.77669670    | 220          | 0      |         | 0         | 98     |
| Unknown                  |                |               |              | CAS #: |         |           |        |
| 17.600                   | 434889         | 13.0903576    | 498          | 0      |         | 0         | 98     |
| Unknown                  |                |               |              | CAS #: |         |           |        |
| 17.642                   | 248904         | 7.49210950    | 285          | 0      |         | 0         | 98     |
| Unknown                  |                |               |              | CAS #: |         |           |        |
| 18.064                   | 297413         | 8.95226463    | 340          | 0      |         | 0         | 98     |



Data File: /chem/HSD3.i/s012810a.b/s3a2842.d  
Date: 29-Jan-2010 03:49  
Client ID: REIS-10-8421  
Sample Info: 124514014/94487411SVNF111L4NL  
Volume Injected (uL): 0.5  
Column phase: J&W DB-5HS

Instrument: HSD3.i  
Operator: JLDI  
Column diameter: 0.20



Date : 29-JAN-2010 03:49

Client ID: RE15-10-8421

Instrument: MSD3.i

Sample Info: 1245114014|944874|11SVMF11|LANL

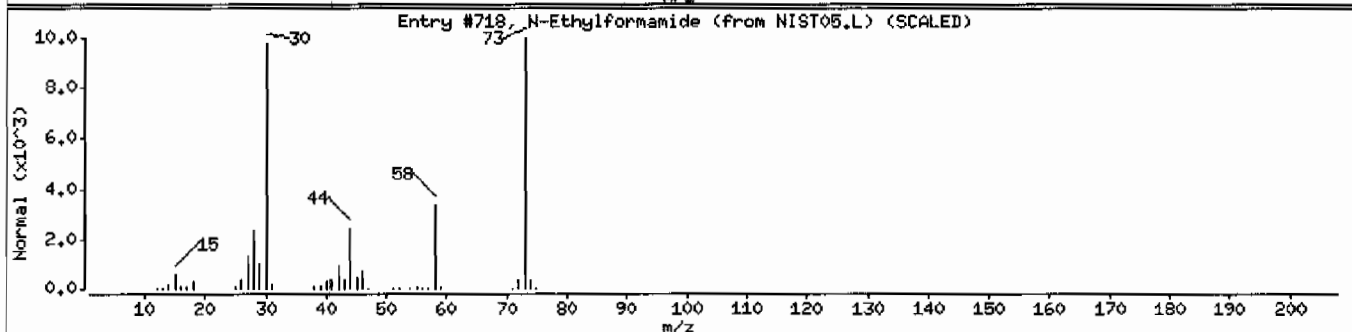
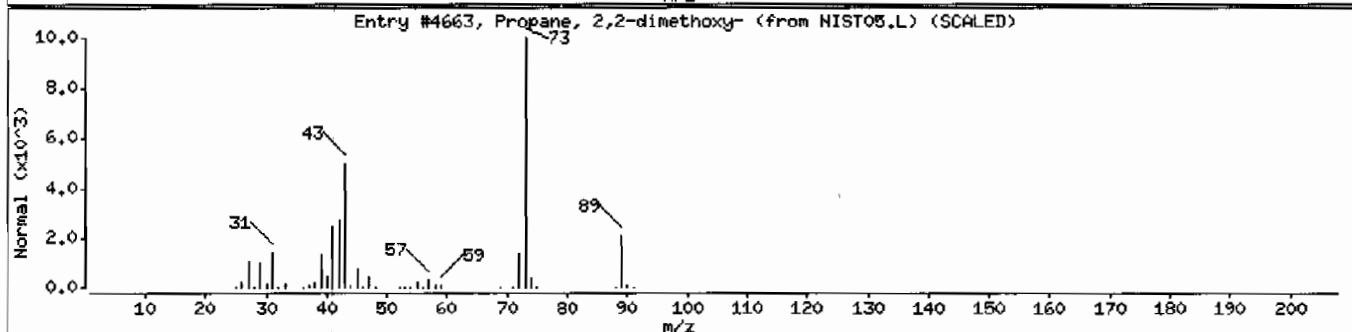
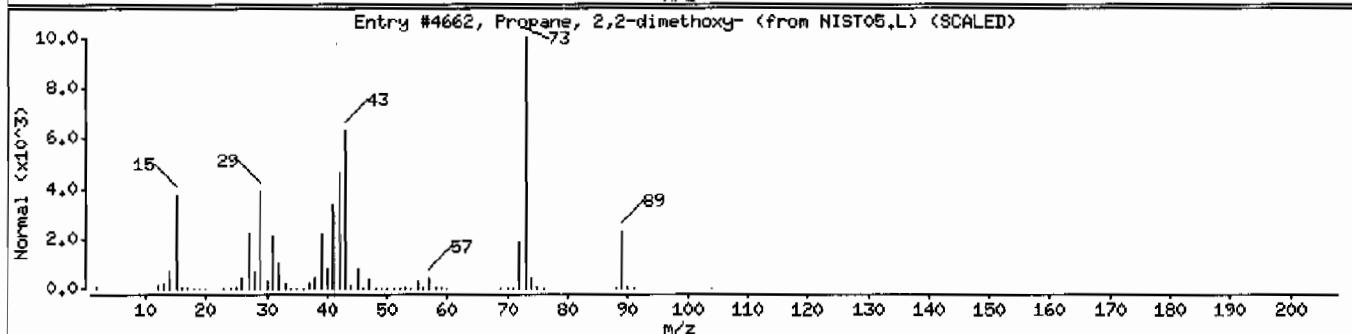
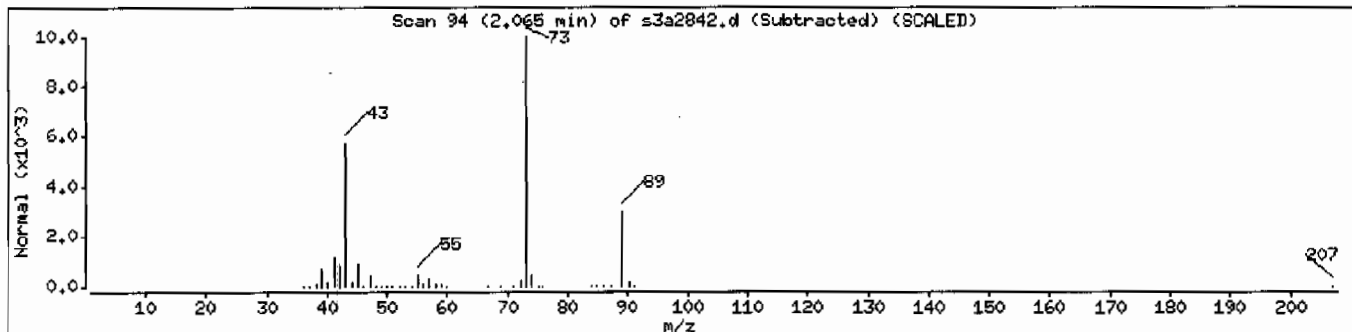
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown                       |            |          |       |         |         |        |
| Propane, 2,2-dimethoxy-       | 77-76-9    | NIST05.L | 4662  | 50      | C5H12O2 | 104    |
| Propane, 2,2-dimethoxy-       | 77-76-9    | NIST05.L | 4663  | 38      | C5H12O2 | 104    |
| N-Ethylformamide              | 627-45-2   | NIST05.L | 718   | 9       | C3H7NO  | 73     |



Date : 29-JAN-2010 03:49

Client ID: RE15-10-8421

Instrument: MSD3.i

Sample Info: 12451140141944874111SVMF111LANL

Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match

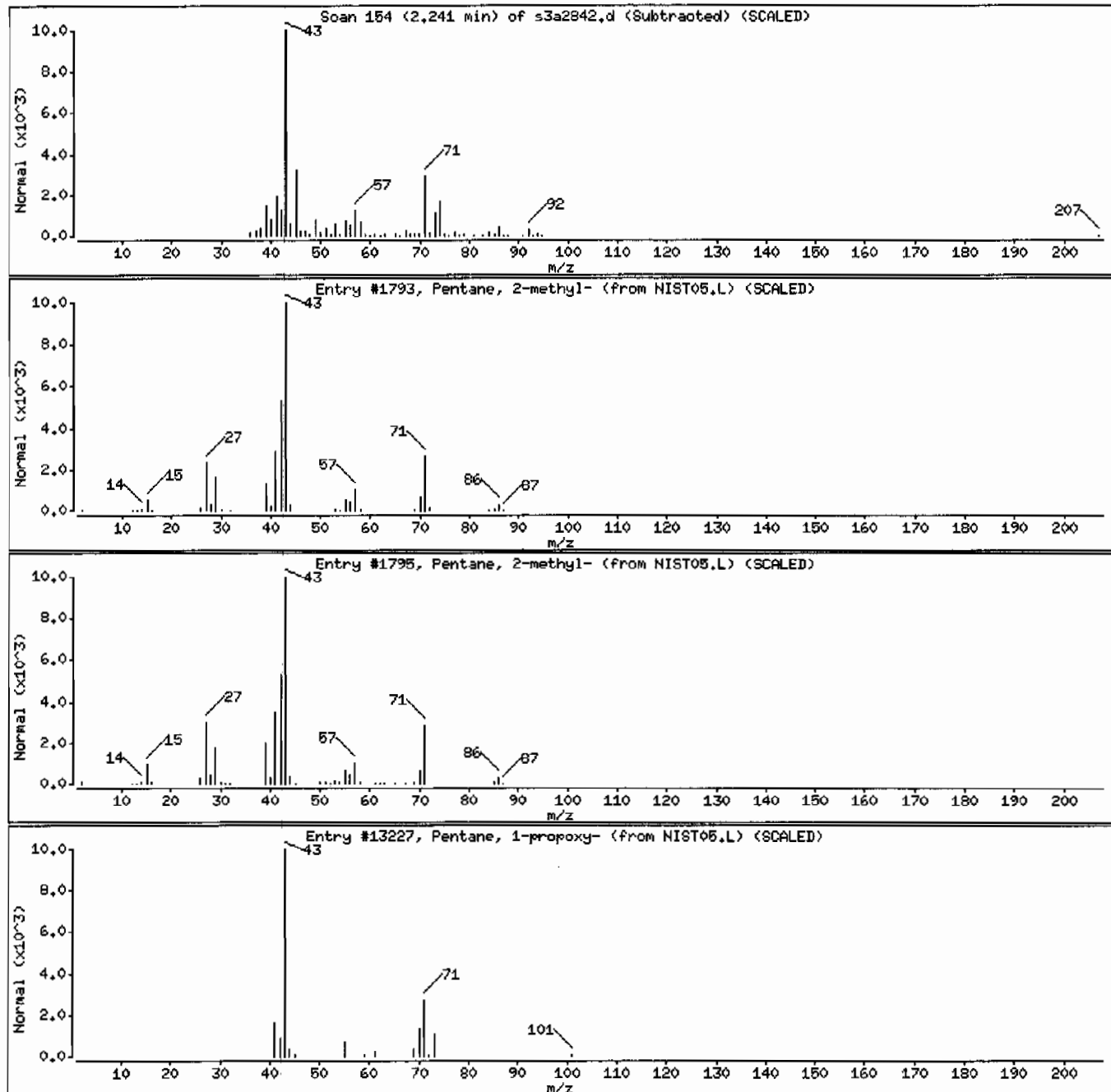
Unknown

Pentane, 2-methyl-

| CAS Number | Library  | Entry | Quality | Formula | Weight |
|------------|----------|-------|---------|---------|--------|
| 107-83-5   | NIST05.L | 1793  | 30      | C6H14   | 86     |
| 107-83-5   | NIST05.L | 1795  | 27      | C6H14   | 86     |
| 18641-82-2 | NIST05.L | 13227 | 22      | C8H18O  | 130    |

Pentane, 2-methyl-

Pentane, 1-propoxy-



Date : 29-JAN-2010 03:49

Client ID: RE15-10-8421

Instrument: MSD3.1

Sample Info: 1245114014194487411SVHF111LANL

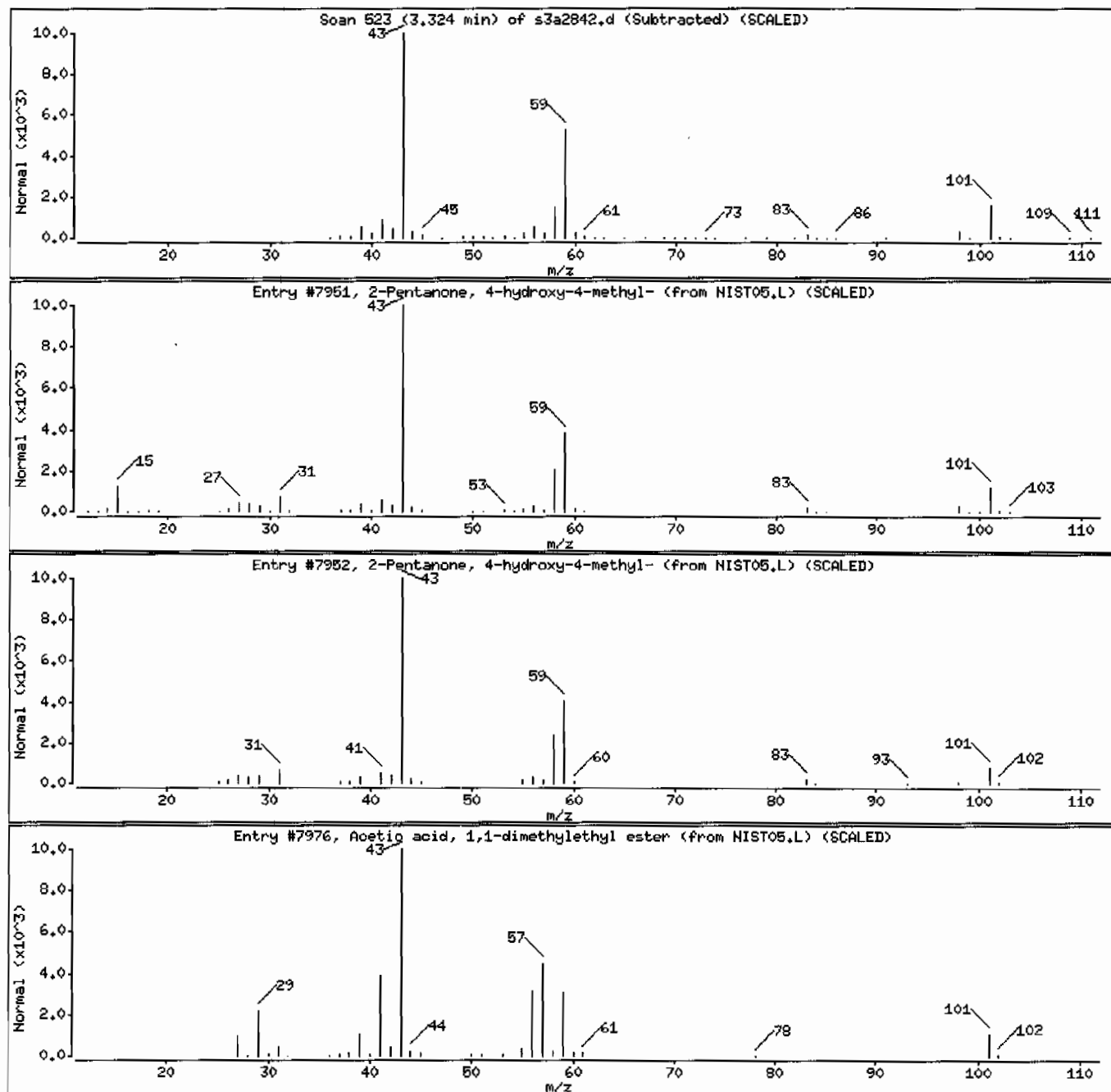
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match        | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--------------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown Aldol Condensate             |            |          |       |         |         |        |
| 2-Pentanone, 4-hydroxy-4-methyl-     | 123-42-2   | NIST05.L | 7951  | 59      | C6H12O2 | 116    |
| 2-Pentanone, 4-hydroxy-4-methyl-     | 123-42-2   | NIST05.L | 7952  | 50      | C6H12O2 | 116    |
| Acetic acid, 1,1-dimethylethyl ester | 540-88-6   | NIST05.L | 7976  | 38      | C6H12O2 | 116    |



Date : 29-JAN-2010 03:49

Client ID: RE15-10-8421

Instrument: MSD3.i

Sample Info: 1245114014194487411SVHF11ILANL

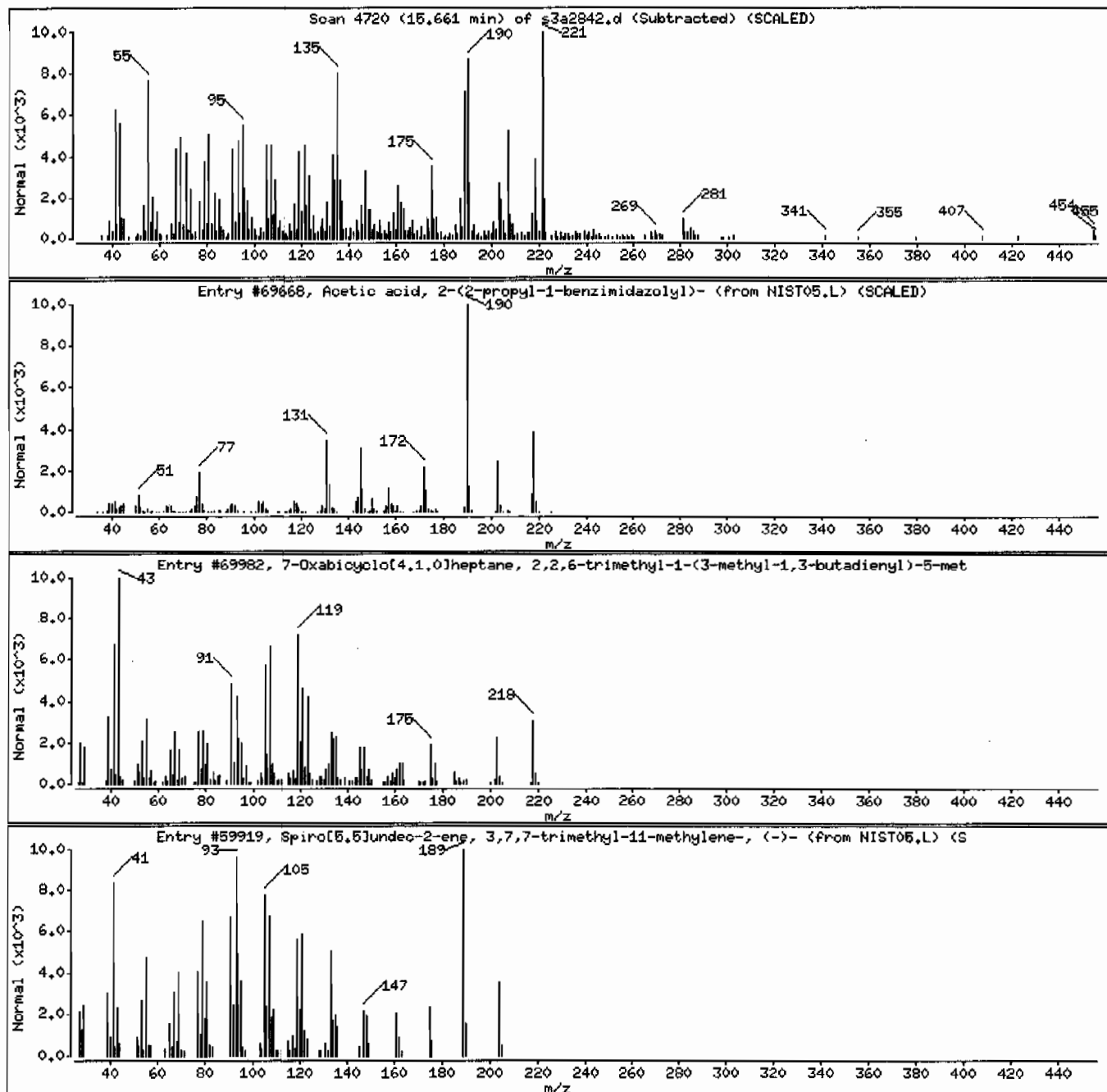
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match             | CAS Number  | Library  | Entry | Quality | Formula    | Weight |
|---|-------------|----------|-------|---------|------------|--------|
| Unknown                                   |             |          |       |         |            |        |
| Acetic acid, 2-(2-propyl-1-benzimidazolyl | 331736-92-6 | NIST05.L | 69668 | 58      | C12H14N2O2 | 218    |
| 7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet  | 70038-20-9  | NIST05.L | 69982 | 40      | C15H22O    | 218    |
| Spiro[5.5]undec-2-ene, 3,7,7-trimethyl-1  | 18431-82-8  | NIST05.L | 59919 | 25      | C15H24     | 204    |



Date : 29-JAN-2010 03:49

Client ID: RE15-10-8421

Instrument: MSD3.i

Sample Info: 12451140141944874111SVMF111LANL

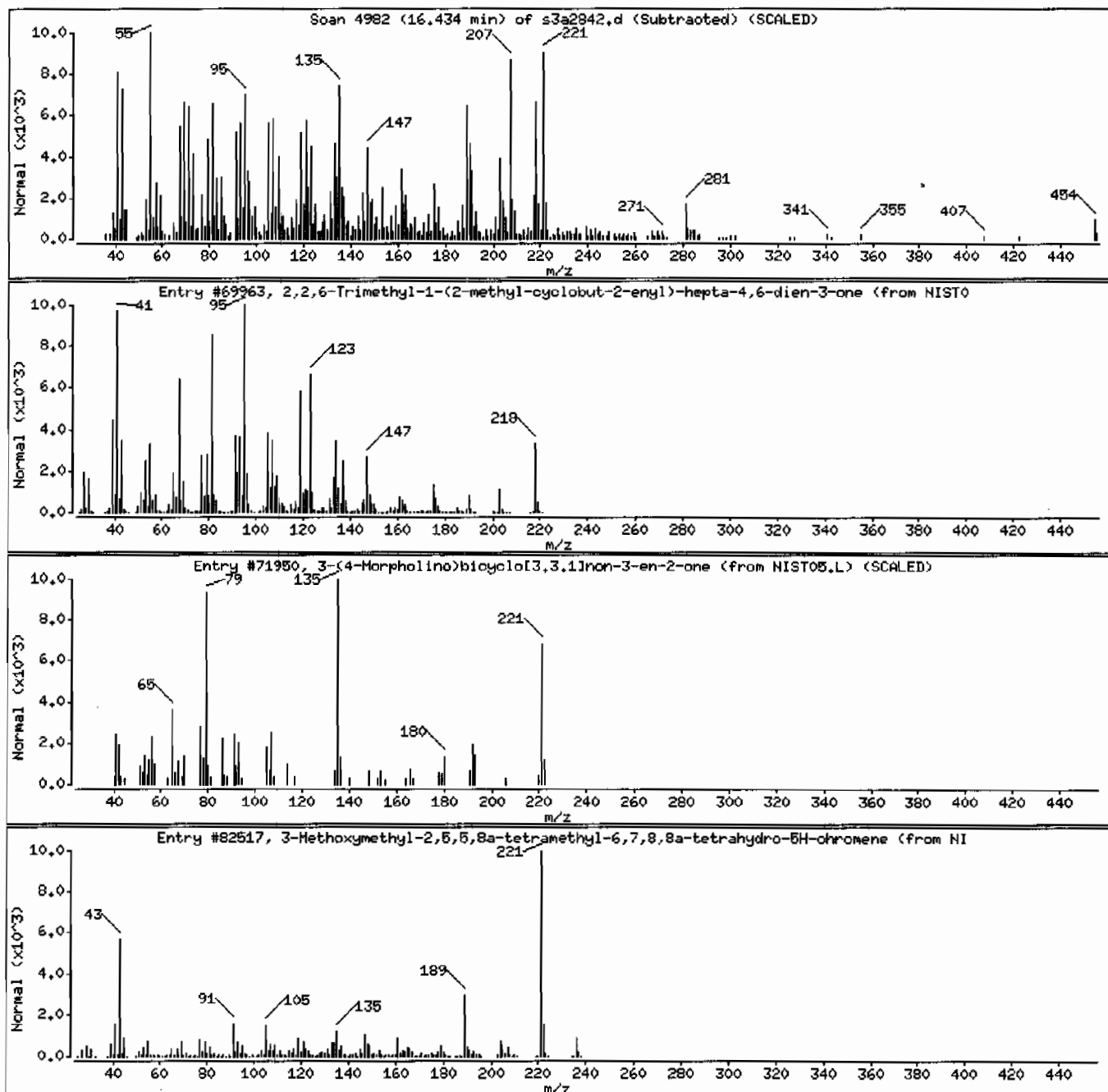
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match  | CAS Number   | Library  | Entry | Quality | Formula   | Weight |
|--|--------------|----------|-------|---------|-----------|--------|
| Unknown  |              |          |       |         |           |        |
| 2,2,6-Trimethyl-1-(2-methyl-cyclobut-2-en-3-(4-Morpholino)bicyclo[3.3.1]non-3-en-2 | 1000188-72-8 | NIST05.L | 69963 | 40      | C15H22O   | 218    |
| 3-Methoxymethyl-2,5,5,8a-tetramethyl-6,7   | 1000101-15-7 | NIST05.L | 71950 | 35      | C13H19NO2 | 221    |
|  | 64201-73-6   | NIST05.L | 82517 | 27      | C15H24O2  | 236    |



Date : 29-JAN-2010 03:49

Client ID: RE15-10-8421

Instrument: MSD3.i

Sample Info: 12451140141944874111SVHF111LANL

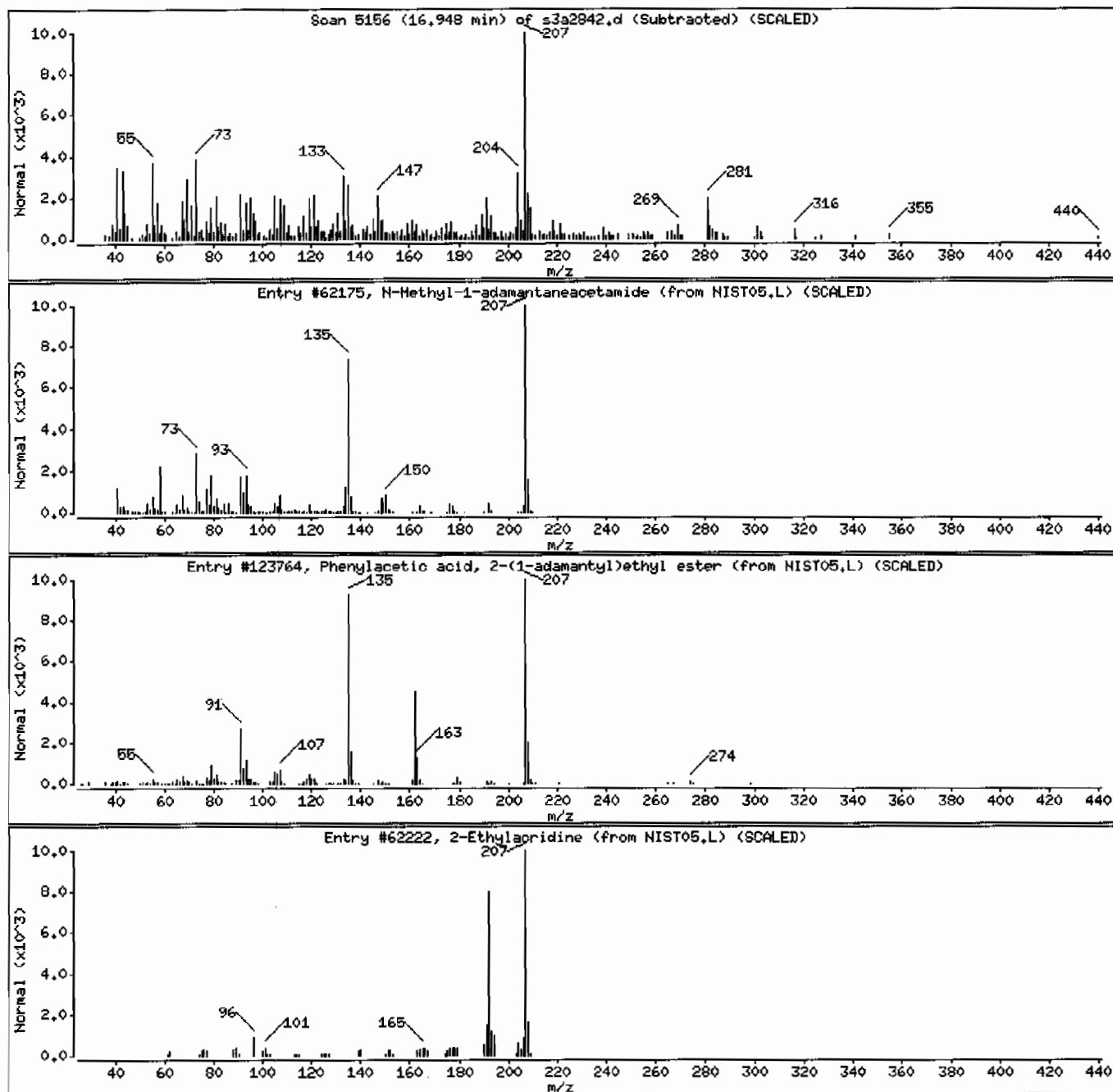
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match           | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|---|--------------|----------|--------|---------|----------|--------|
| Unknown                                 |              |          |        |         |          |        |
| N-Methyl-1-adamantaneacetamide          | 31897-93-5   | NIST05.L | 62175  | 38      | C13H21NO | 207    |
| Phenylacetic acid, 2-(1-adamantyl)ethyl | 1000282-91-2 | NIST05.L | 123764 | 35      | C20H26O2 | 298    |
| 2-Ethylacridine                         | 66751-83-2   | NIST05.L | 62222  | 35      | C15H13N  | 207    |



Date : 29-JAN-2010 03:49

Client ID: RE15-10-8421

Instrument: MSD3.i

Sample Info: 12451140141944874111SVMF111LANL

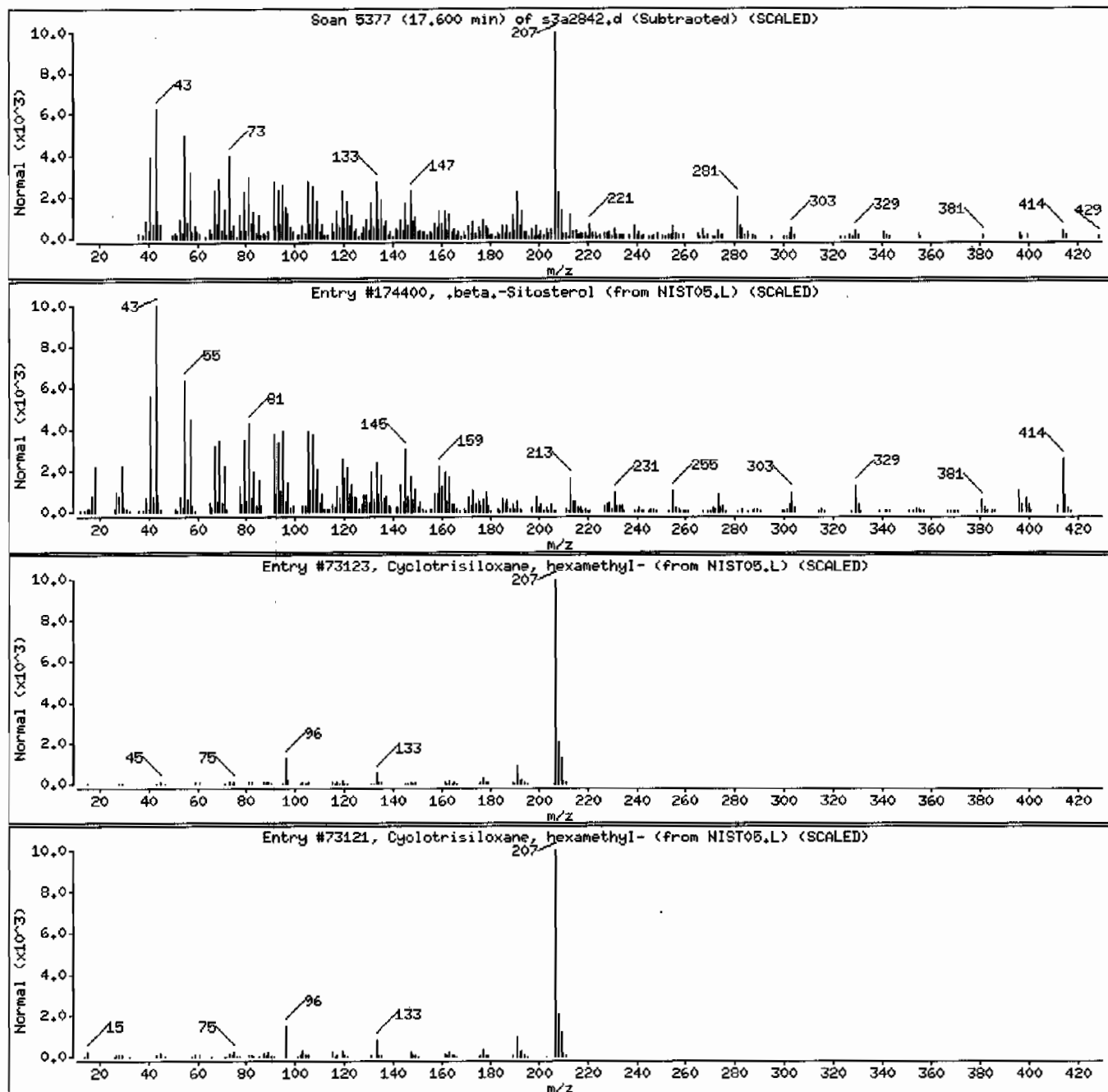
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry  | Quality | Formula   | Weight |
|-------------------------------|------------|----------|--------|---------|---|--------|
| Unknown                       |            |          |        |         |   |        |
| .beta.-Sitosterol             | 83-46-5    | NIST05.L | 174400 | 59      | C <sub>29</sub> H <sub>50</sub> O                             | 414    |
| Cyclotrisiloxane, hexamethyl- | 541-05-9   | NIST05.L | 73123  | 43      | C <sub>6</sub> H <sub>18</sub> O <sub>3</sub> Si <sub>3</sub> | 222    |
| Cyclotrisiloxane, hexamethyl- | 541-05-9   | NIST05.L | 73121  | 43      | C <sub>6</sub> H <sub>18</sub> O <sub>3</sub> Si <sub>3</sub> | 222    |





Date : 29-JAN-2010 03:49

Client ID: RE15-10-8421

Instrument: MSD3.1

Sample Info: 1245114014194487411SVHF11ILANL

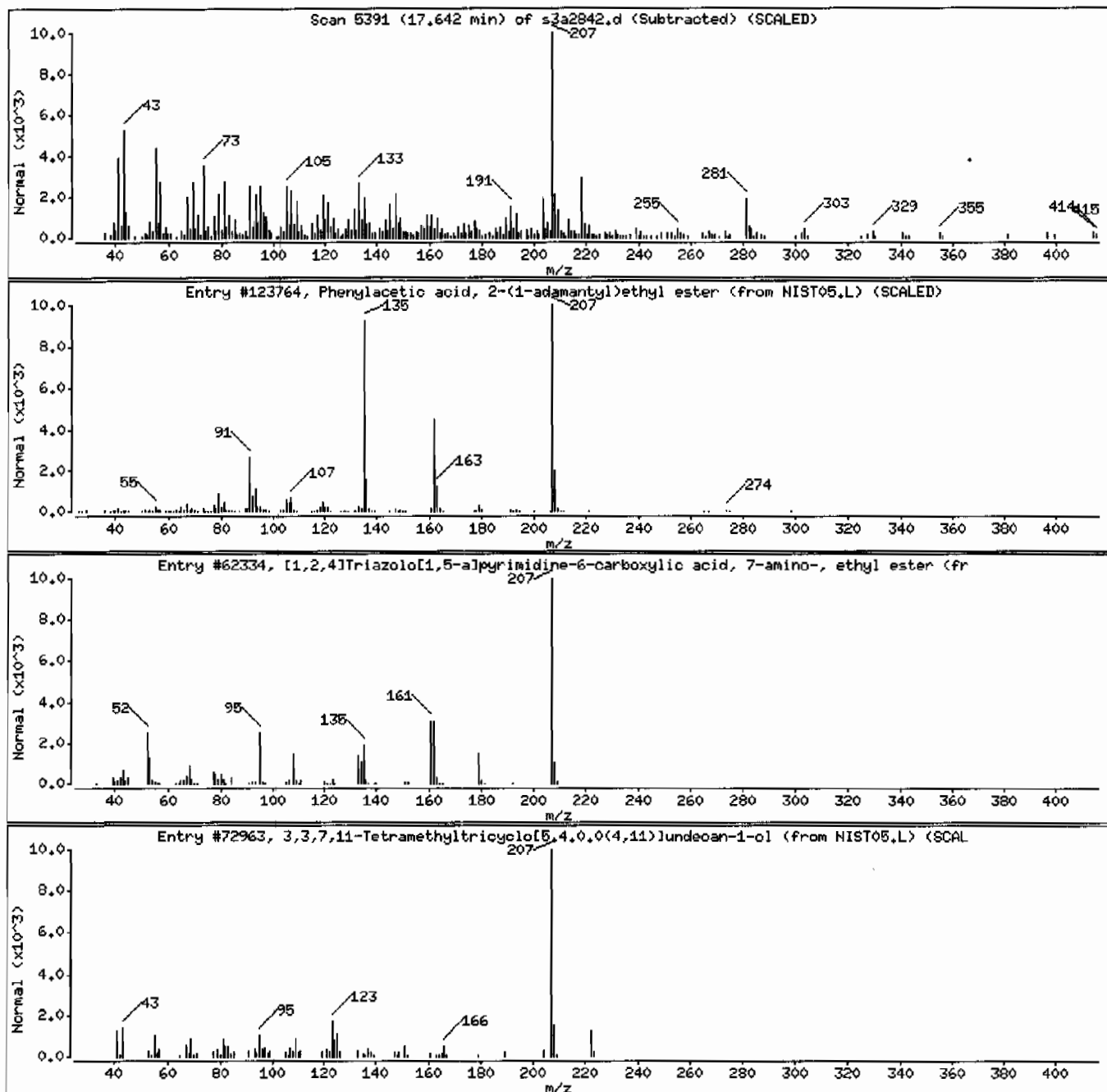
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|--|--------------|----------|--------|---------|----------|--------|
| Unknown                                  |              |          |        |         |          |        |
| Phenylacetic acid, 2-(1-adamantyl)ethyl  | 1000282-91-2 | NIST05.L | 123764 | 38      | C20H26O2 | 298    |
| [1,2,4]Triazolo[1,5-a]pyrimidine-6-carbo | 1000316-75-8 | NIST05.L | 62334  | 35      | C8H9N5O2 | 207    |
| 3,3,7,11-Tetramethyltricyclo[5.4.0.0(4,1 | 117591-80-7  | NIST05.L | 72963  | 35      | C15H26O  | 222    |



Date : 29-JAN-2010 03:49

Client ID: RE15-10-8421

Instrument: MSD3.i

Sample Info: 12451140141944874111SVMF111LANL

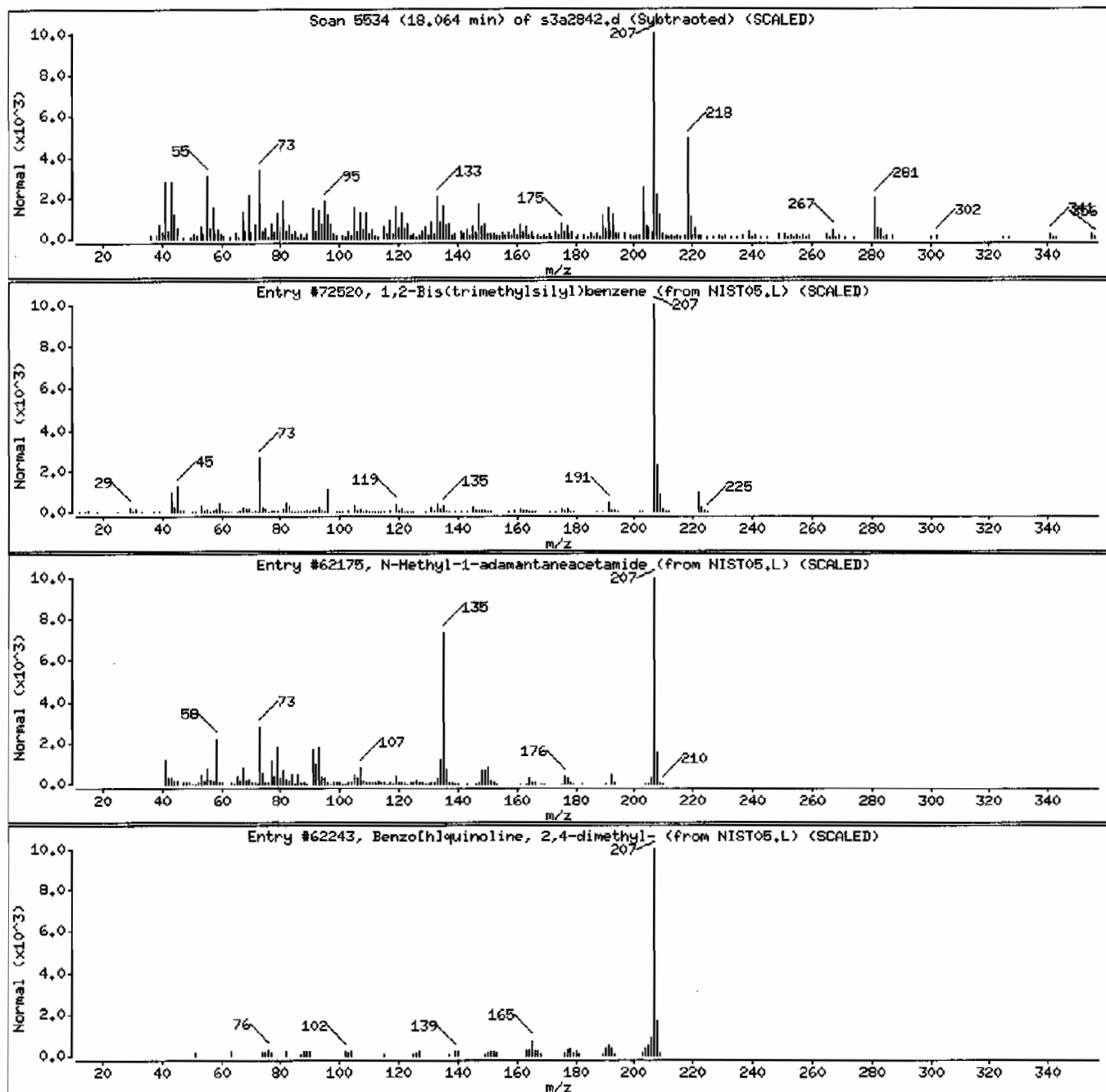
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match    | CAS Number | Library  | Entry | Quality | Formula   | Weight |
|----------------------------------|------------|----------|-------|---------|-----------|--------|
| Unknown                          |            |          |       |         |           |        |
| 1,2-Bis(trimethylsilyl)benzene   | 17151-09-6 | NIST05.L | 72520 | 43      | C12H22Si2 | 222    |
| N-Methyl-1-adamantaneacetamide   | 31897-93-5 | NIST05.L | 62175 | 41      | C13H21NO  | 207    |
| Benzo[h]quinoline, 2,4-dimethyl- | 605-67-4   | NIST05.L | 62243 | 38      | C16H13N   | 207    |



Semi-Volatile  
Certificate of Analysis  
Sample Summary

Page 1 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114008

Client ID: RE15-10-8422  
Batch ID: 944874  
Run Date: 01/29/2010 01:19  
Prep Date: 01/25/2010 21:06  
Data File: s3a2836.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/23/2010 09:20  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3J  
Analyst: JLD1  
Aliquot: 30.1 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parname                       | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 373    | ug/kg | 74.6    | 373     |
| 108-95-2   | Phenol                        | U         | 373    | ug/kg | 74.6    | 373     |
| 95-57-8    | 2-Chlorophenol                | U         | 373    | ug/kg | 74.6    | 373     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 373    | ug/kg | 74.6    | 373     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 373    | ug/kg | 74.6    | 373     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 373    | ug/kg | 74.6    | 373     |
| 83-32-9    | Acenaphthene                  | U         | 37.3   | ug/kg | 12.3    | 37.3    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 373    | ug/kg | 37.3    | 373     |
| 100-02-7   | 4-Nitrophenol                 | U         | 373    | ug/kg | 123     | 373     |
| 87-86-5    | Pentachlorophenol             | U         | 373    | ug/kg | 93.3    | 373     |
| 129-00-0   | Pyrene                        |           | 51.4   | ug/kg | 11.2    | 37.3    |
| 110-86-1   | Pyridine                      | U         | 373    | ug/kg | 74.6    | 373     |
| 62-53-3    | Aniline                       | U         | 373    | ug/kg | 112     | 373     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 373    | ug/kg | 74.6    | 373     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 373    | ug/kg | 74.6    | 373     |
| 100-51-6   | Benzyl alcohol                | U         | 373    | ug/kg | 112     | 373     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 373    | ug/kg | 74.6    | 373     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 373    | ug/kg | 74.6    | 373     |
| 95-48-7    | o-Cresol                      | U         | 373    | ug/kg | 74.6    | 373     |
| 65794-96-9 | m,p-Cresols                   | U         | 373    | ug/kg | 112     | 373     |
| 67-72-1    | Hexachloroethane              | U         | 373    | ug/kg | 74.6    | 373     |
| 98-95-3    | Nitrobenzene                  | U         | 373    | ug/kg | 74.6    | 373     |
| 78-59-1    | Isophorone                    | U         | 373    | ug/kg | 74.6    | 373     |
| 88-75-5    | 2-Nitrophenol                 | U         | 373    | ug/kg | 74.6    | 373     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 373    | ug/kg | 131     | 373     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 373    | ug/kg | 74.6    | 373     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 373    | ug/kg | 74.6    | 373     |
| 65-85-0    | Benzoic acid                  | U         | 746    | ug/kg | 187     | 746     |
| 91-20-3    | Naphthalene                   | U         | 37.3   | ug/kg | 11.2    | 37.3    |
| 106-47-8   | 4-Chloroaniline               | U         | 373    | ug/kg | 74.6    | 373     |
| 87-68-3    | Hexachlorobutadiene           | U         | 373    | ug/kg | 74.6    | 373     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 37.3   | ug/kg | 7.46    | 37.3    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 373    | ug/kg | 74.6    | 373     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 373    | ug/kg | 74.6    | 373     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 373    | ug/kg | 74.6    | 373     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 37.3   | ug/kg | 12.3    | 37.3    |
| 88-74-4    | 2-Nitroaniline                | U         | 373    | ug/kg | 74.6    | 373     |
|            | <i>o</i> -Nitroaniline        |           |        |       |         |         |
| 99-09-2    | 3-Nitroaniline                | U         | 373    | ug/kg | 74.6    | 373     |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1324  
Lab Sample ID: 245114008

Client ID: RE15-10-8422  
Batch ID: 944874  
Run Date: 01/29/2010 01:19  
Prep Date: 01/25/2010 21:06  
Data File: s3a2836.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/23/2010 09:20  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.1 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|-------------------------------|-----------|--------|-------|---------|---------|
|           | <i>m</i> -Nitroaniline        |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate             | U         | 373    | ug/kg | 74.6    | 373     |
| 606-20-2  | 2,6-Dinitrotoluene            | U         | 373    | ug/kg | 37.3    | 373     |
| 208-96-8  | Acenaphthylene                | U         | 37.3   | ug/kg | 11.2    | 37.3    |
| 51-28-5   | 2,4-Dinitrophenol             | U         | 746    | ug/kg | 142     | 746     |
| 132-64-9  | Dibenzofuran                  | U         | 373    | ug/kg | 74.6    | 373     |
| 84-66-2   | Diethylphthalate              | U         | 373    | ug/kg | 74.6    | 373     |
| 86-73-7   | Fluorene                      | U         | 37.3   | ug/kg | 11.2    | 37.3    |
| 7005-72-3 | 4-Chlorophenylphenylether     | U         | 373    | ug/kg | 74.6    | 373     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol    | U         | 373    | ug/kg | 74.6    | 373     |
| 100-01-6  | 4-Nitroaniline                | U         | 373    | ug/kg | 112     | 373     |
|           | <i>p</i> -Nitroaniline        |           |        |       |         |         |
| 122-39-4  | Diphenylamine                 | U         | 373    | ug/kg | 74.6    | 373     |
| 122-66-7  | Azobenzene                    | U         | 373    | ug/kg | 74.6    | 373     |
|           | <i>1,2</i> -Diphenylhydrazine |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether      | U         | 373    | ug/kg | 74.6    | 373     |
| 118-74-1  | Hexachlorobenzene             | U         | 373    | ug/kg | 74.6    | 373     |
| 85-01-8   | Phenanthrene                  | J         | 15.8   | ug/kg | 11.2    | 37.3    |
| 120-12-7  | Anthracene                    | U         | 37.3   | ug/kg | 7.46    | 37.3    |
| 84-74-2   | Di-n-butylphthalate           | J         | 206    | ug/kg | 74.6    | 373     |
| 206-44-0  | Fluoranthene                  | J         | 20.1   | ug/kg | 11.2    | 37.3    |
| 85-68-7   | Butylbenzylphthalate          | U         | 373    | ug/kg | 74.6    | 373     |
| 56-55-3   | Benzo(a)anthracene            | J         | 21.3   | ug/kg | 11.2    | 37.3    |
| 91-94-1   | 3,3'-Dichlorobenzidine        | U         | 373    | ug/kg | 112     | 373     |
| 218-01-9  | Chrysene                      | J         | 17.4   | ug/kg | 11.2    | 37.3    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate    | U         | 373    | ug/kg | 74.6    | 373     |
| 117-84-0  | Di-n-octylphthalate           | U         | 373    | ug/kg | 74.6    | 373     |
| 205-99-2  | Benzo(b)fluoranthene          | U         | 37.3   | ug/kg | 11.2    | 37.3    |
| 207-08-9  | Benzo(k)fluoranthene          | U         | 37.3   | ug/kg | 11.2    | 37.3    |
| 50-32-8   | Benzo(a)pyrene                | J         | 19.4   | ug/kg | 11.2    | 37.3    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene        | U         | 37.3   | ug/kg | 11.2    | 37.3    |
| 53-70-3   | Dibenzo(a,h)anthracene        | U         | 37.3   | ug/kg | 11.2    | 37.3    |
| 191-24-2  | Benzo(ghi)perylene            | U         | 37.3   | ug/kg | 11.2    | 37.3    |
| 120-82-1  | 1,2,4-Trichlorobenzene        | U         | 373    | ug/kg | 74.6    | 373     |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.07 | 3080      | ug/kg |     | J    |
|         | Unknown                               | 2.24 | 179       | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114008

Client ID: RE15-10-8422  
Batch ID: 944874  
Run Date: 01/29/2010 01:19  
Prep Date: 01/25/2010 21:06  
Data File: s3a2836.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/23/2010 09:20  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.1 g  
Column: J&W DB-5MS

Matrix: R  
% Moisture: 10.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |  |       |           |       |     |      |
|---|--|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC)    | RT    | Estimated | Units | Fit | Qual |
|   | Unknown Aldol Condensate                 | 3.32  | 207       | ug/kg |     | JA   |
| 7785-70-8                               | 1R- $\alpha$ -Pinene                     | 4.09  | 152       | ug/kg | 98  | NJ   |
| 498-15-7                                | Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy | 4.66  | 184       | ug/kg | 97  | NJ   |
|   | Unknown                                  | 6.69  | 358       | ug/kg |     | J    |
| 1117-52-8                               | 5,9,13-Pentadecatrien-2-one, 6,10,14-tri | 9.86  | 301       | ug/kg | 91  | NJ   |
|   | Unknown                                  | 11.42 | 236       | ug/kg |     | J    |
|   | Unknown                                  | 11.51 | 208       | ug/kg |     | J    |
|   | Unknown                                  | 11.65 | 377       | ug/kg |     | J    |
| 1235-74-1                               | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.76 | 436       | ug/kg | 98  | NJ   |
|   | Unknown                                  | 11.87 | 155       | ug/kg |     | J    |
| 309735-29-3                             | 1,2-Benzisothiazole, 3-(hexahydro-1H-aze | 11.98 | 399       | ug/kg | 90  | NJ   |
|   | Unknown                                  | 12.83 | 263       | ug/kg |     | J    |
|   | Unknown                                  | 12.91 | 280       | ug/kg |     | J    |
|   | Unknown                                  | 12.94 | 447       | ug/kg |     | J    |
|   | Unknown                                  | 15    | 364       | ug/kg |     | J    |
|   | Unknown                                  | 15.66 | 4840      | ug/kg |     | J    |
|   | Unknown                                  | 16.44 | 4890      | ug/kg |     | J    |
|   | Unknown                                  | 16.57 | 511       | ug/kg |     | J    |
|   | Unknown                                  | 17.61 | 1510      | ug/kg |     | J    |
|   | Unknown                                  | 17.77 | 2020      | ug/kg |     | J    |

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012810a.b/s3a2836.d  
Lab Smp Id: 245114008 Client Smp ID: RE15-10-8422  
Inj Date : 29-JAN-2010 01:19  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |245114008|944874|1|SVMF|1|LANL  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m  
Meth Date : 29-Jan-2010 10:49 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 11  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1324.sub  
Target Version: 3.50  
Processing Host: hpclp1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.10000  | weight of sample          |
| M    | 10.94660  | % moisture                |

Cpnd Variable Local Compound Variable

| Compounds                   | QUANT SIG |        |        |         | RESPONSE | CONCENTRATIONS       |                  |
|-----------------------------|-----------|--------|--------|---------|----------|----------------------|------------------|
|                             | MASS      | RT     | EXP RT | REL RT  |          | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/Kg) |
| * 10 1,4-Dichlorobenzene-d4 | 152       | 4.721  | 4.722  | (1.000) | 552577   | 40.0000              |                  |
| * 29 Naphthalene-d8         | 136       | 5.998  | 6.003  | (1.000) | 2079079  | 40.0000              |                  |
| * 46 Acenaphthene-d10       | 164       | 7.871  | 7.875  | (1.000) | 1120987  | 40.0000              |                  |
| * 67 Phenanthrene-d10       | 188       | 9.485  | 9.486  | (1.000) | 1702590  | 40.0000              |                  |
| * 91 Chrysene-d12           | 240       | 12.477 | 12.478 | (1.000) | 842046   | 40.0000              |                  |
| * 98 Perylene-d12           | 264       | 14.761 | 14.762 | (1.000) | 384918   | 40.0000              |                  |
| \$ 3 2-Fluorophenol         | 112       | 3.559  | 3.549  | (0.754) | 900814   | 62.6490              | 2340             |
| \$ 5 Phenol-d5              | 99        | 4.327  | 4.331  | (0.917) | 1055189  | 58.3912              | 2180             |
| \$ 20 Nitrobenzene-d5       | 82        | 5.255  | 5.262  | (0.876) | 493609   | 32.1404              | 1200             |
| \$ 39 2-Fluorobiphenyl      | 172       | 7.127  | 7.128  | (0.905) | 962955   | 33.2338              | 1240             |
| \$ 60 2,4,6-Tribromophenol  | 329       | 8.722  | 8.724  | (1.108) | 174715   | 54.3680              | 2030             |
| \$ 81 p-Terphenyl-d14       | 244       | 11.196 | 11.196 | (0.897) | 691298   | 47.7640              | 1780             |

| Compounds              | QUANT SIG |        |        |         |          | CONCENTRATIONS       |                  |
|------------------------|-----------|--------|--------|---------|----------|----------------------|------------------|
|                        | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/Kg) |
| 79 Pyrene              | 202       | 11.049 | 11.052 | (0.886) | 33244    | 1.37814              | 51.4             |
| 68 Phenanthrene        | 178       | 9.508  | 9.513  | (1.002) | 15893    | 0.42467              | 15.8(a)          |
| 72 Di-n-butylphthalate | 149       | 10.077 | 10.080 | (1.062) | 249070   | 5.51205              | 206(a)           |
| 76 Fluoranthene        | 202       | 10.798 | 10.803 | (1.138) | 18354    | 0.53898              | 20.1(a)          |
| 89 Benzo(a)anthracene  | 228       | 12.462 | 12.461 | (0.999) | 11022    | 0.57167              | 21.3(a)          |
| 92 Chrysene            | 228       | 12.509 | 12.514 | (1.003) | 8451     | 0.46599              | 17.4(a)          |
| 97 Benzo(a)pyrene      | 252       | 14.661 | 14.662 | (0.993) | 4088     | 0.51935              | 19.4(a)          |

#### QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

## ION RATIO REPORT

## SV REPORT

Data file: s3a2836.d

Report Date: 01/29/2010 11:14

Lab. ID: 245114008

SampleType: SAMPLE

Injection Date: 29-JAN-2010 01:19

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245114008|944874|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1324

Sample Matrix: SOIL

| MASS                      | RESPONSE | RT             | EXPECT RT | TARGET RANGE | RATIO | QUAL |
|---------------------------|----------|----------------|-----------|--------------|-------|------|
| =====                     |          |                |           |              |       |      |
| 4 Aniline                 |          | CAS#: 62-53-3  |           |              |       |      |
| 66                        | 62439    | 4.33           | 4.41      | 80-120       | 100   | (T)  |
| 93                        | 12937    | 4.39           | 4.41      | 201-261      | 21    | (Q)  |
| -----                     |          |                |           |              |       |      |
| 17 N-Nitrosodipropylamine |          | CAS#: 621-64-7 |           |              |       |      |
| 70                        | 74168    | 5.26           | 5.10      | 80-120       | 100   | (T)  |
| 42                        | 49623    | 5.26           | 5.10      | 45-105       | 67    | (T)  |
| -----                     |          |                |           |              |       |      |
| 40 2-Chloronaphthalene    |          | CAS#: 91-58-7  |           |              |       |      |
| 162                       | 22064    | 7.47           | 7.27      | 80-120       | 100   | (T)  |
| 164                       | 1323     | 7.47           | 7.27      | 3- 63        | 6     | (T)  |
| 127                       | 1622     | 7.47           | 7.27      | 10- 70       | 7     | (QT) |
| -----                     |          |                |           |              |       |      |
| 42 o-Nitroaniline         |          | CAS#: 88-74-4  |           |              |       |      |
| 65                        | 29607    | 7.47           | 7.37      | 80-120       | 100   | (T)  |
| 92                        | 32525    | 7.47           | 7.37      | 32- 92       | 110   | (QT) |
| 138                       | 2742     | 7.47           | 7.37      | 72-132       | 9     | (QT) |
| -----                     |          |                |           |              |       |      |
| 41 m-Nitroaniline         |          | CAS#: 99-09-2  |           |              |       |      |
| 138                       | 269      | 7.87           | 7.82      | 80-120       | 100   | ( )  |
| 92                        | 7517     | 7.87           | 7.82      | 80-140       | 2792  | (Q)  |
| 108                       | 25607    | 7.87           | 7.82      | 0- 40        | 9512  | (Q)  |
| -----                     |          |                |           |              |       |      |
| 44 2,6-Dinitrotoluene     |          | CAS#: 606-20-2 |           |              |       |      |
| 165                       | 145814   | 7.87           | 7.63      | 80-120       | 100   | (T)  |
| 63                        | 2143     | 7.87           | 7.63      | 35- 95       | 1     | (QT) |
| -----                     |          |                |           |              |       |      |



| MASS                      | RESPONSE | RT             | EXPECT RT | TARGET RANGE | RATIO | QUAL |
|---------------------------|----------|----------------|-----------|--------------|-------|------|
| <hr/>                     |          |                |           |              |       |      |
| 50 2,4-Dinitrotoluene     |          | CAS#: 121-14-2 |           |              |       |      |
| 165                       | 145814   | 7.87           | 8.07      | 80-120       | 100   | (T)  |
| 89                        | 2135     | 7.87           | 8.07      | 43-103       | 1     | (QT) |
| 63                        | 2143     | 7.87           | 8.07      | 23- 83       | 1     | (QT) |
| <hr/>                     |          |                |           |              |       |      |
| 56 p-Nitroaniline         |          | CAS#: 100-01-6 |           |              |       |      |
| 138                       | 186      | 8.53           | 8.48      | 80-120       | 100   | ( )  |
| 108                       | 166      | 8.53           | 8.48      | 42-102       | 89    | ( )  |
| 92                        | 419      | 8.46           | 8.48      | 17- 77       | 225   | (Q)  |
| <hr/>                     |          |                |           |              |       |      |
| 68 Phenanthrene           |          | CAS#: 85-01-8  |           |              |       |      |
| 178                       | 15893    | 9.51           | 9.51      | 80-120       | 100   | ( )  |
| 179                       | 2589     | 9.51           | 9.51      | 0- 45        | 16    | ( )  |
| 176                       | 2989     | 9.51           | 9.51      | 0- 49        | 19    | ( )  |
| <hr/>                     |          |                |           |              |       |      |
| 69 Anthracene             |          | CAS#: 120-12-7 |           |              |       |      |
| 178                       | 15893    | 9.51           | 9.57      | 80-120       | 100   | (T)  |
| 179                       | 2589     | 9.51           | 9.57      | 0- 45        | 16    | (T)  |
| 176                       | 2989     | 9.51           | 9.57      | 0- 48        | 19    | (T)  |
| <hr/>                     |          |                |           |              |       |      |
| 72 Di-n-butylphthalate    |          | CAS#: 84-74-2  |           |              |       |      |
| 149                       | 249070   | 10.08          | 10.08     | 80-120       | 100   | ( )  |
| 150                       | 22667    | 10.08          | 10.08     | 0- 39        | 9     | ( )  |
| 104                       | 14261    | 10.08          | 10.08     | 0- 35        | 6     | ( )  |
| <hr/>                     |          |                |           |              |       |      |
| 76 Fluoranthene           |          | CAS#: 206-44-0 |           |              |       |      |
| 202                       | 18354    | 10.80          | 10.80     | 80-120       | 100   | ( )  |
| 203                       | 3298     | 10.80          | 10.80     | 0- 47        | 18    | ( )  |
| 101                       | 2737     | 10.80          | 10.80     | 0- 44        | 15    | ( )  |
| <hr/>                     |          |                |           |              |       |      |
| 79 Pyrene                 |          | CAS#: 129-00-0 |           |              |       |      |
| 202                       | 33244    | 11.05          | 11.05     | 80-120       | 100   | ( )  |
| 200                       | 7247     | 11.05          | 11.05     | 0- 51        | 22    | ( )  |
| 101                       | 6329     | 11.05          | 11.05     | 0- 47        | 19    | ( )  |
| <hr/>                     |          |                |           |              |       |      |
| 89 Benzo(a)anthracene     |          | CAS#: 56-55-3  |           |              |       |      |
| 228                       | 11022    | 12.46          | 12.46     | 80-120       | 100   | ( )  |
| 226                       | 2311     | 12.46          | 12.46     | 0- 56        | 21    | ( )  |
| 229                       | 3264     | 12.47          | 12.46     | 0- 50        | 30    | ( )  |
| <hr/>                     |          |                |           |              |       |      |
| 90 3,3'-Dichlorobenzidine |          | CAS#: 91-94-1  |           |              |       |      |
| 252                       | 143      | 12.42          | 12.41     | 80-120       | 100   | ( )  |
| 254                       | 387      | 12.39          | 12.41     | 33- 93       | 271   | (Q)  |
| 126                       | 239      | 12.42          | 12.41     | 0- 46        | 167   | (Q)  |
| <hr/>                     |          |                |           |              |       |      |
| 92 Chrysene               |          | CAS#: 218-01-9 |           |              |       |      |
| 228                       | 8451     | 12.51          | 12.51     | 80-120       | 100   | ( )  |
| 229                       | 1814     | 12.51          | 12.51     | 0- 50        | 21    | ( )  |
| 226                       | 3063     | 12.51          | 12.51     | 0- 59        | 36    | ( )  |
| <hr/>                     |          |                |           |              |       |      |

| MASS                    | RESPONSE | RT    | EXPECT RT | TARGET RANGE   | RATIO | QUAL |
|-------------------------|----------|-------|-----------|----------------|-------|------|
| 95 Benzo(b)fluoranthene |          |       |           | CAS#: 205-99-2 |       |      |
| 252                     | 5155     | 14.10 | 14.10     | 80-120         | 100   | ( )  |
| 253                     | 1295     | 14.10 | 14.10     | 0- 52          | 25    | ( )  |
| 125                     | 1071     | 14.10 | 14.10     | 0- 44          | 21    | ( )  |
| 96 Benzo(k)fluoranthene |          |       |           | CAS#: 207-08-9 |       |      |
| 252                     | 5155     | 14.10 | 14.14     | 80-120         | 100   | ( )  |
| 253                     | 1295     | 14.10 | 14.14     | 0- 52          | 25    | ( )  |
| 125                     | 1071     | 14.10 | 14.14     | 0- 44          | 21    | ( )  |
| 97 Benzo(a)pyrene       |          |       |           | CAS#: 50-32-8  |       |      |
| 252                     | 4088     | 14.66 | 14.66     | 80-120         | 100   | ( )  |
| 253                     | 603      | 14.66 | 14.66     | 0- 52          | 15    | ( )  |
| 125                     | 1146     | 14.66 | 14.66     | 0- 47          | 28    | ( )  |

Q qualifier indicates ion failed ratio requirement

Report Date: 29-Jan-2010 11:41

## GEL Laboratories LLC

Data file : /chem/MSD3.i/s012810a.b/s3a2836.d  
 Lab Smp Id: 245114008 Client Smp ID: RE15-10-8422  
 Inj Date : 29-JAN-2010 01:19  
 Operator : JLD1 Inst ID: MSD3.i  
 Smp Info : |245114008|944874|1|SVMF|1|LANL  
 Misc Info : |MSD8270 S|WBN100107-02|  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m  
 Meth Date : 29-Jan-2010 10:49 jen00986 Quant Type: ISTD  
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
 Als bottle: 11  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1324.sub  
 Target Version: 3.50  
 Processing Host: hpc1p1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.10000  | weight of sample          |
| M    | 10.94660  | % moisture                |

Cpnd Variable

Local Compound Variable

| ISTD                        | RT     | AREA    | AMOUNT |
|-----------------------------|--------|---------|--------|
| =====                       | =====  | =====   | =====  |
| * 10 1,4-Dichlorobenzene-d4 | 4.721  | 3562096 | 40.000 |
| * 29 Naphthalene-d8         | 5.998  | 4507646 | 40.000 |
| * 67 Phenanthrene-d10       | 9.485  | 4425991 | 40.000 |
| * 91 Chrysene-d12           | 12.477 | 2865449 | 40.000 |
| * 98 Perylene-d12           | 14.761 | 1107425 | 40.000 |

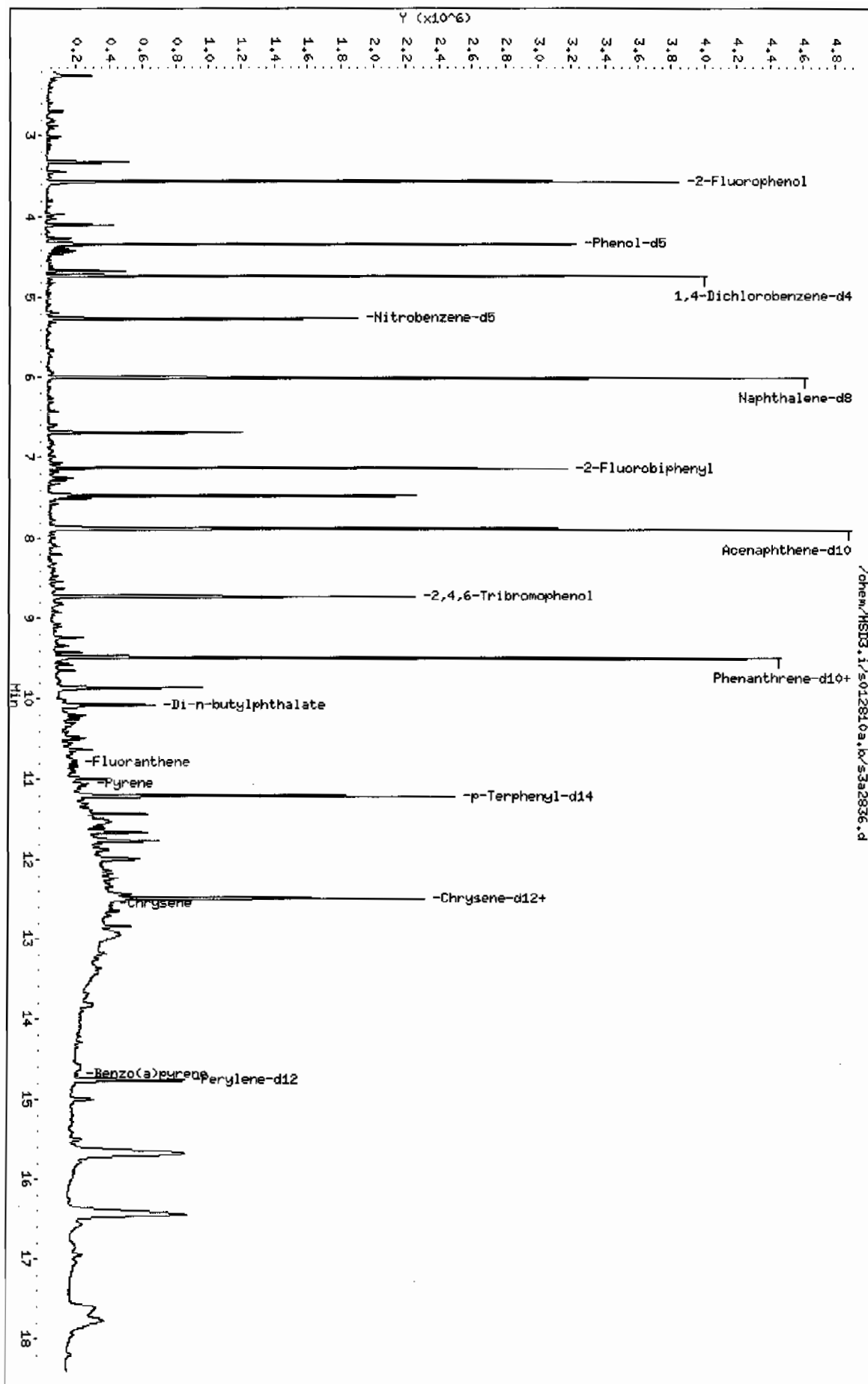
| CONCENTRATIONS |       |               |              |       | QUANT   |           |        |
|----------------|-------|---------------|--------------|-------|---------|-----------|--------|
| RT             | AREA  | ON-COL(ng/ul) | FINAL(ug/Kg) | QUAL  | LIBRARY | LIB ENTRY | CPND # |
| =====          | ===== | =====         | =====        | ===== | =====   | =====     | =====  |

| RT                                       | CONCENTRATIONS |               |              | QUAL               | QUANT    |           | CPND # |
|--|----------------|---------------|--------------|--------------------|----------|-----------|--------|
|  | AREA           | ON-COL(ng/ul) | FINAL(ug/Kg) |                    | LIBRARY  | LIB ENTRY |        |
| ----                                     | ----           | -----         | -----        | ----               | -----    | -----     | -----  |
| Unknown                                  |                |               |              | CAS #:             |          |           |        |
| 2.071                                    | 7350340        | 82.5394815    | 3080         | 0                  |          | 0         | 10     |
| Unknown                                  |                |               |              | CAS #:             |          |           |        |
| 2.244                                    | 427956         | 4.80566181    | 179          | 0                  |          | 0         | 10     |
| Unknown Aldol Condensate                 |                |               |              | CAS #:             |          |           |        |
| 3.324                                    | 493790         | 5.54494028    | 207          | 0                  |          | 0         | 10     |
| 1R-.alpha.-Pinene                        |                |               |              | CAS #: 7785-70-8   |          |           |        |
| 4.093                                    | 362779         | 4.07377132    | 152          | 98                 | NIST05.L | 15188     | 10     |
| Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy |                |               |              | CAS #: 498-15-7    |          |           |        |
| 4.662                                    | 439420         | 4.93440066    | 184          | 97                 | NIST05.L | 15369     | 10     |
| Unknown                                  |                |               |              | CAS #:             |          |           |        |
| 6.689                                    | 1080205        | 9.58553667    | 358          | 0                  |          | 0         | 29     |
| 5,9,13-Pentadecatrien-2-one, 6,10,14-tri |                |               |              | CAS #: 1117-52-8   |          |           |        |
| 9.862                                    | 891364         | 8.05572397    | 300          | 91                 | NIST05.L | 100204    | 67     |
| Unknown                                  |                |               |              | CAS #:             |          |           |        |
| 11.418                                   | 453565         | 6.33150452    | 236          | 0                  |          | 0         | 91     |
| Unknown                                  |                |               |              | CAS #:             |          |           |        |
| 11.510                                   | 399093         | 5.57110161    | 208          | 0                  |          | 0         | 91     |
| Unknown                                  |                |               |              | CAS #:             |          |           |        |
| 11.652                                   | 724259         | 10.1102345    | 377          | 0                  |          | 0         | 91     |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 |                |               |              | CAS #: 1235-74-1   |          |           |        |
| 11.758                                   | 837381         | 11.6893450    | 436          | 98                 | NIST05.L | 133618    | 91     |
| Unknown                                  |                |               |              | CAS #:             |          |           |        |
| 11.868                                   | 297237         | 4.14924896    | 155          | 0                  |          | 0         | 91     |
| 1,2-Benzisothiazole, 3-(hexahydro-1H-aze |                |               |              | CAS #: 309735-29-3 |          |           |        |
| 11.977                                   | 766731         | 10.7031160    | 399          | 90                 | NIST05.L | 101019    | 91     |
| Unknown                                  |                |               |              | CAS #:             |          |           |        |
| 12.832                                   | 504237         | 7.03884878    | 262          | 0                  |          | 0         | 91     |
| Unknown                                  |                |               |              | CAS #:             |          |           |        |
| 12.915                                   | 536897         | 7.49477451    | 280          | 0                  |          | 0         | 91     |

| RT      | CONCENTRATIONS |               |              | QUANT  |         |           | CPND # |
|---------|----------------|---------------|--------------|--------|---------|-----------|--------|
|         | AREA           | ON-COL(ng/ul) | FINAL(ug/Kg) | QUAL   | LIBRARY | LJB ENTRY |        |
| Unknown |                |               |              | CAS #: |         |           |        |
| 12.944  | 859020         | 11.9914191    | 447          | 0      |         | 0         | 91     |
| Unknown |                |               |              | CAS #: |         |           |        |
| 14.995  | 270451         | 9.76862688    | 364          | 0      |         | 0         | 98     |
| Unknown |                |               |              | CAS #: |         |           |        |
| 15.661  | 3590689        | 129.694961    | 4840         | 0      |         | 0         | 98     |
| Unknown |                |               |              | CAS #: |         |           |        |
| 16.439  | 3630997        | 131.150875    | 4890         | 0      |         | 0         | 98     |
| Unknown |                |               |              | CAS #: |         |           |        |
| 16.566  | 379022         | 13.6901868    | 511          | 0      |         | 0         | 98     |
| Unknown |                |               |              | CAS #: |         |           |        |
| 17.605  | 1117404        | 40.3604128    | 1500         | 0      |         | 0         | 98     |
| Unknown |                |               |              | CAS #: |         |           |        |
| 17.768  | 1501761        | 54.2433044    | 2020         | 0      |         | 0         | 98     |

Data File: /chem/HSD3.i/s012810a.k/s3a2836.d  
 Date: 29-JAN-2010 01:19  
 Client ID: RE15-10-8422  
 Sample Info: 1245114008194487411SVWF111LNL  
 Volume Injected (uL): 0.5  
 Column phase: JSM DB-5MS

Instrument: HSD3.i  
 Operator: JLD  
 Column diameter: 0.20



Date: 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 1245114008194487411SVHF111LANL

Volume Injected (uL): 0.5

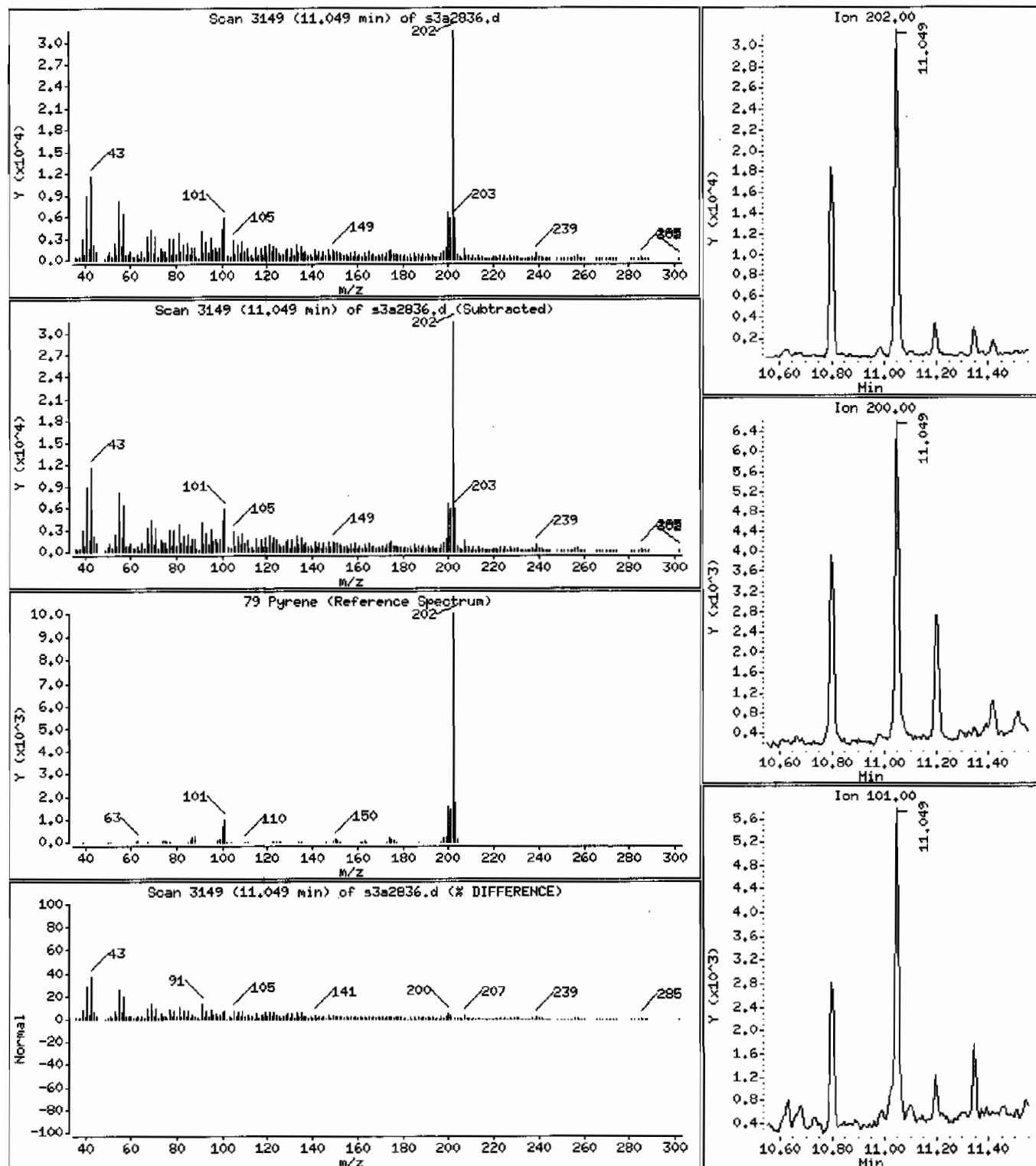
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 51.4 ug/Kg



Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 1245114008194487411|SVHF|11|LANL

Volume Injected (uL): 0.5

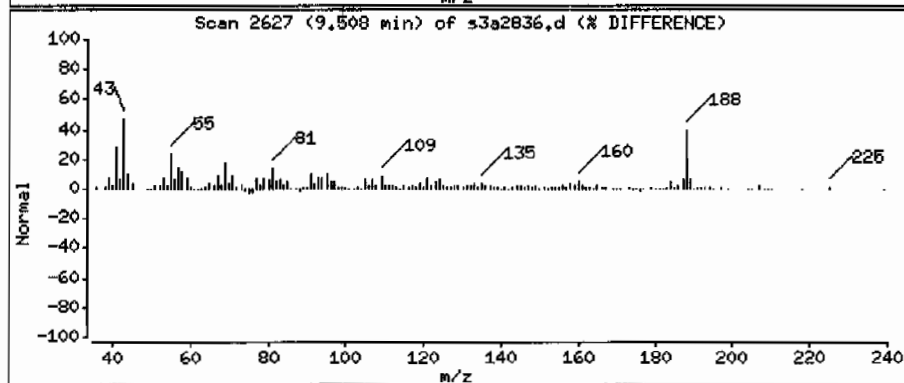
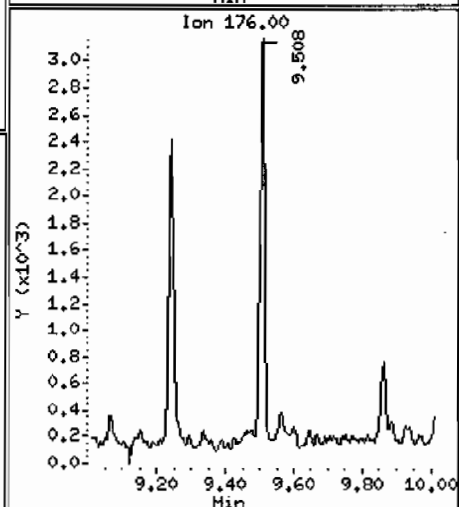
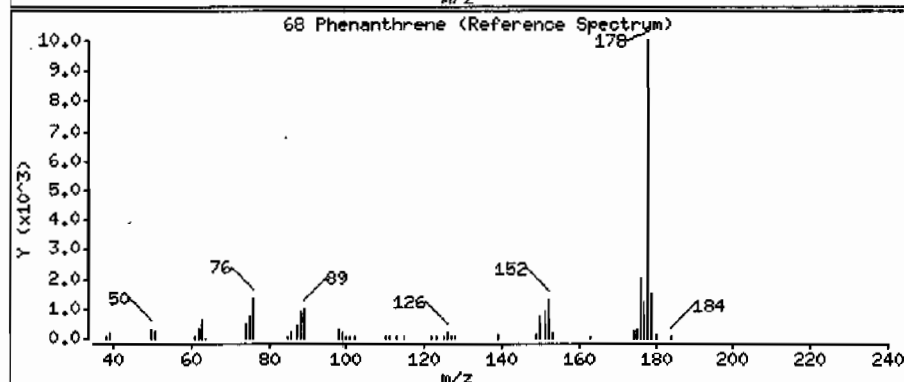
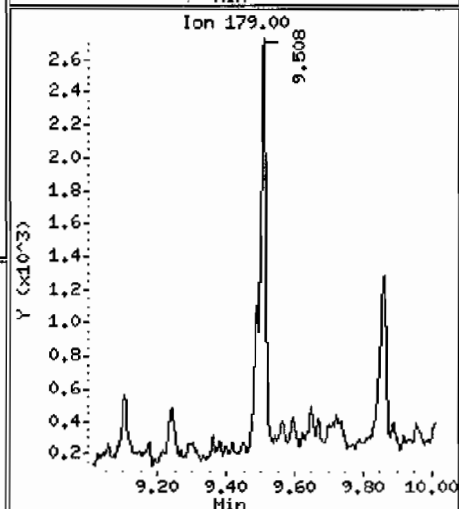
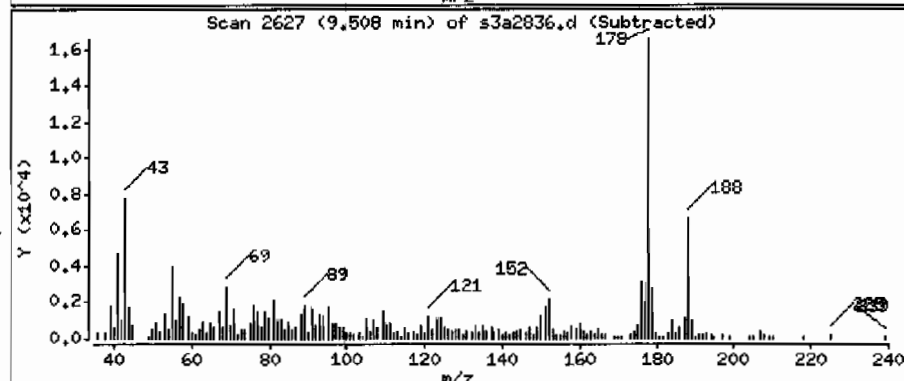
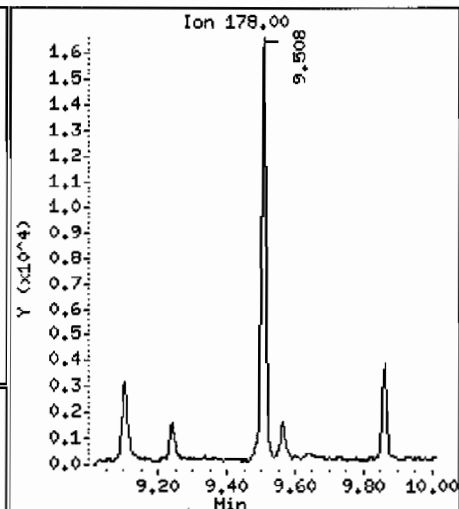
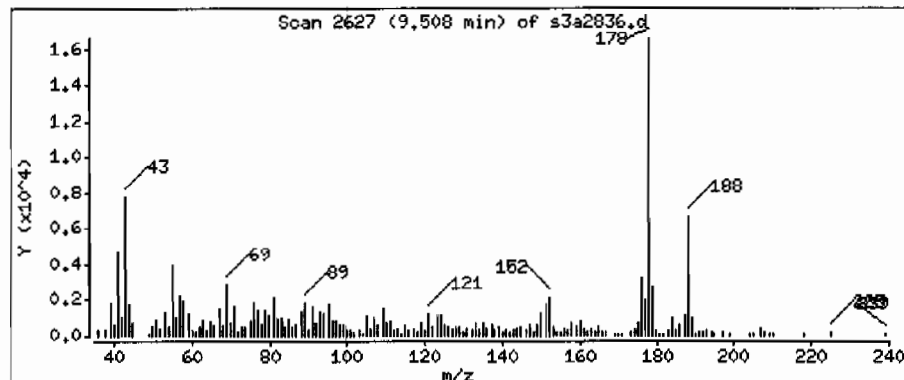
Operator: JLD1

Column phase: J&amp;W DB-5HS

Column diameter: 0.20

68 Phenanthrene

Concentration: 15.8 ug/Kg





Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 1245114008194487411|SVHF11|LANL

Volume Injected (uL): 0.5

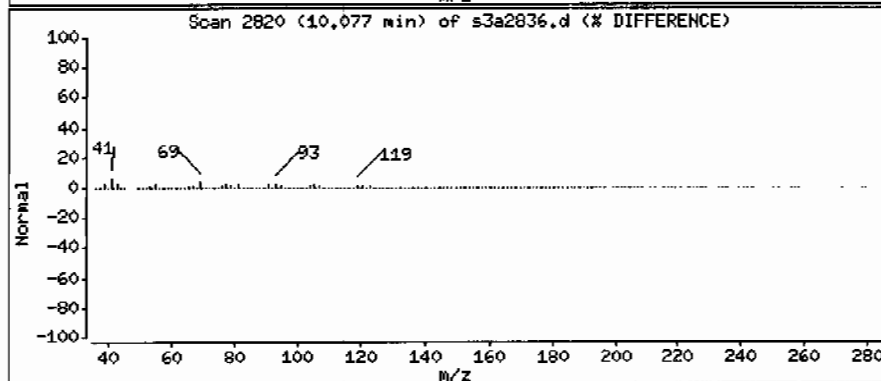
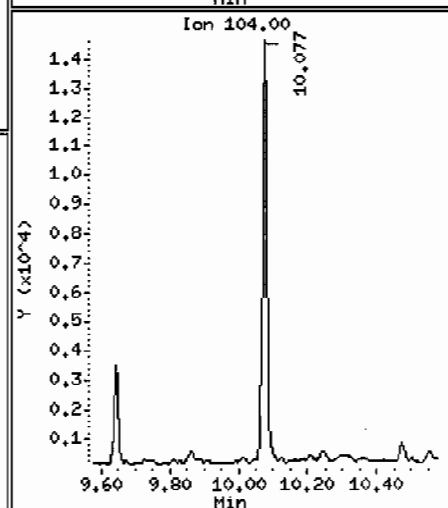
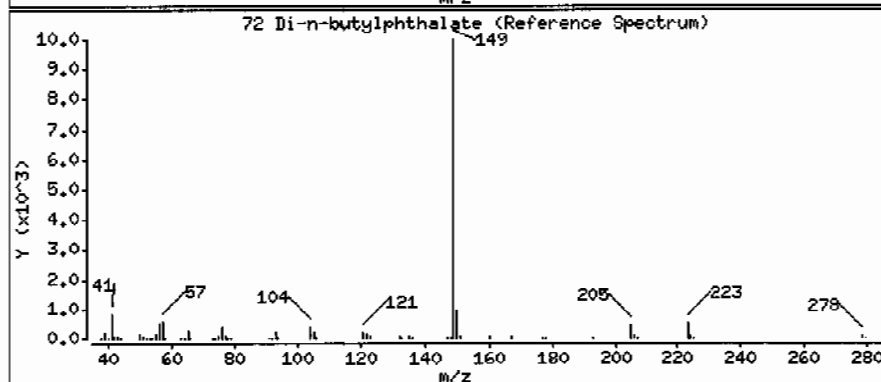
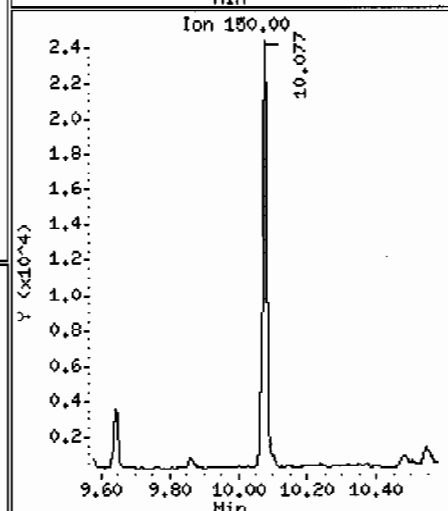
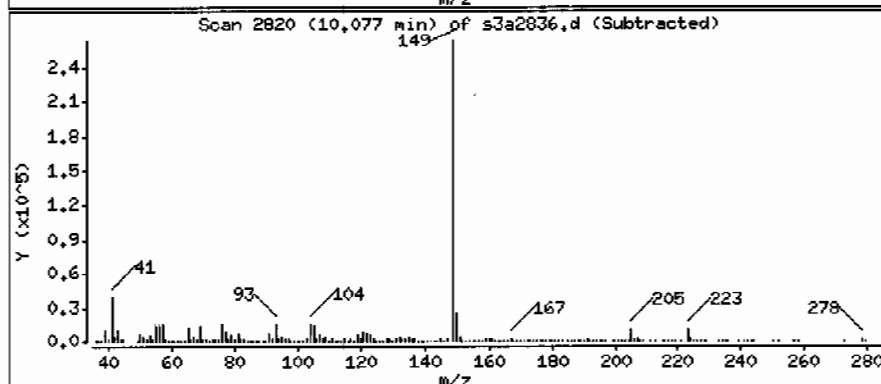
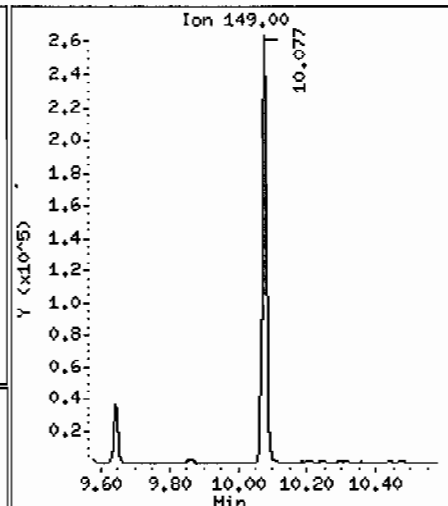
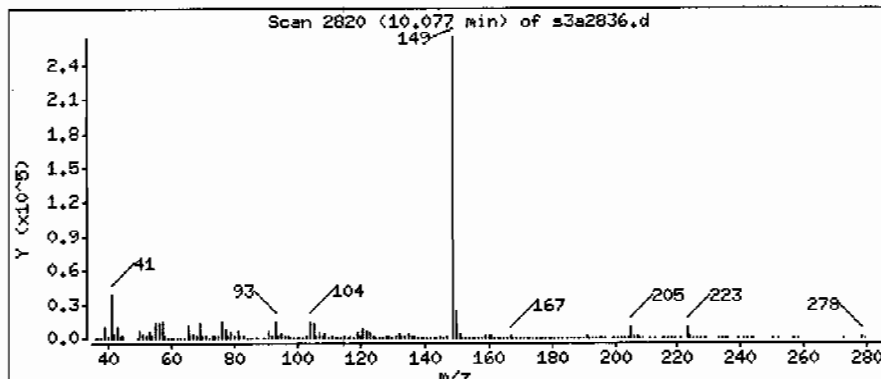
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

72 Di-n-butylphthalate

Concentration: 206 ug/Kg



Date: 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 12451140081944874111SVHF111LANL

Volume Injected (uL): 0.5

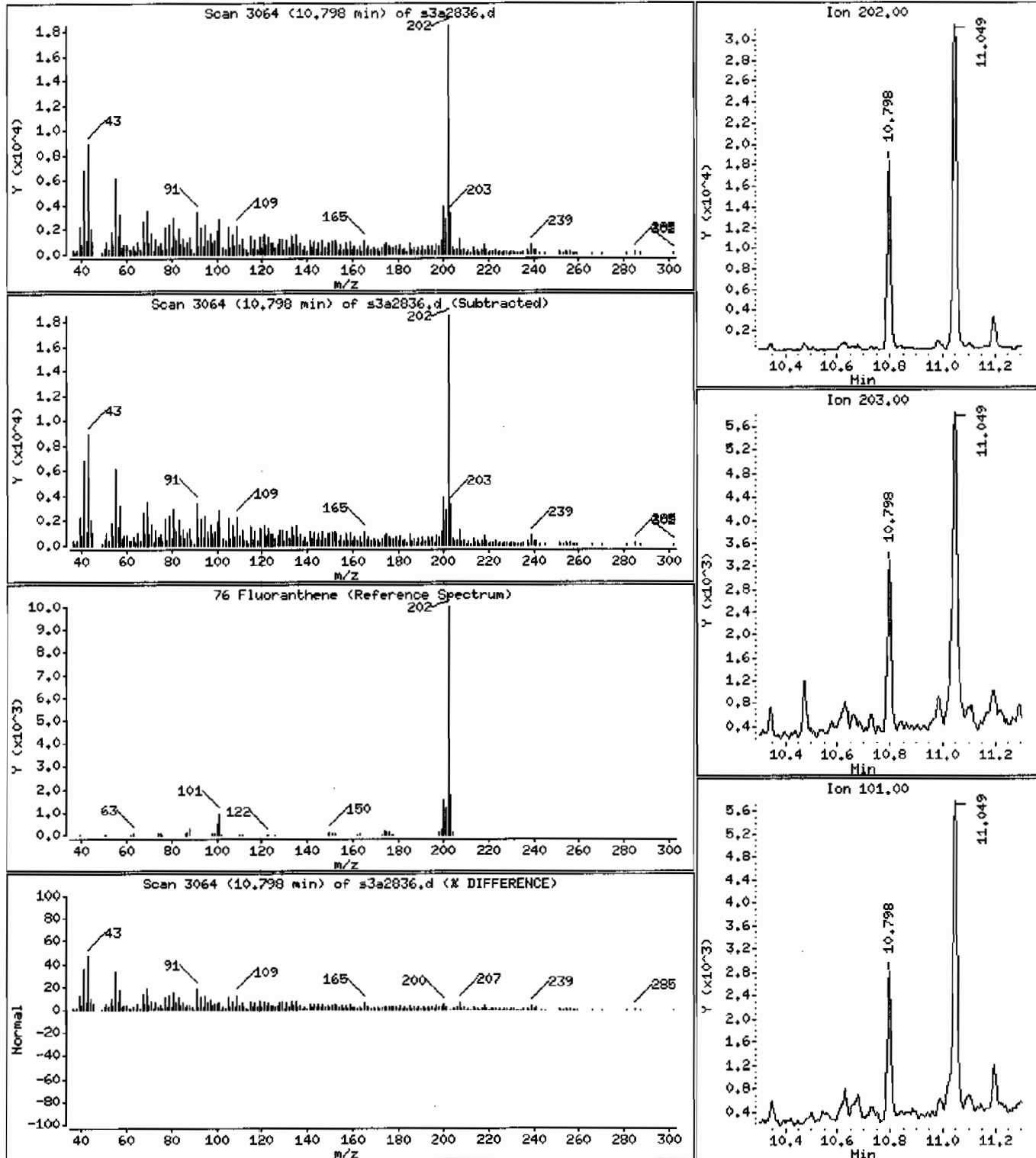
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 20.1 ug/Kg



Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 1245114008194487411|SVMF11|LANL

Volume Injected (uL): 0.5

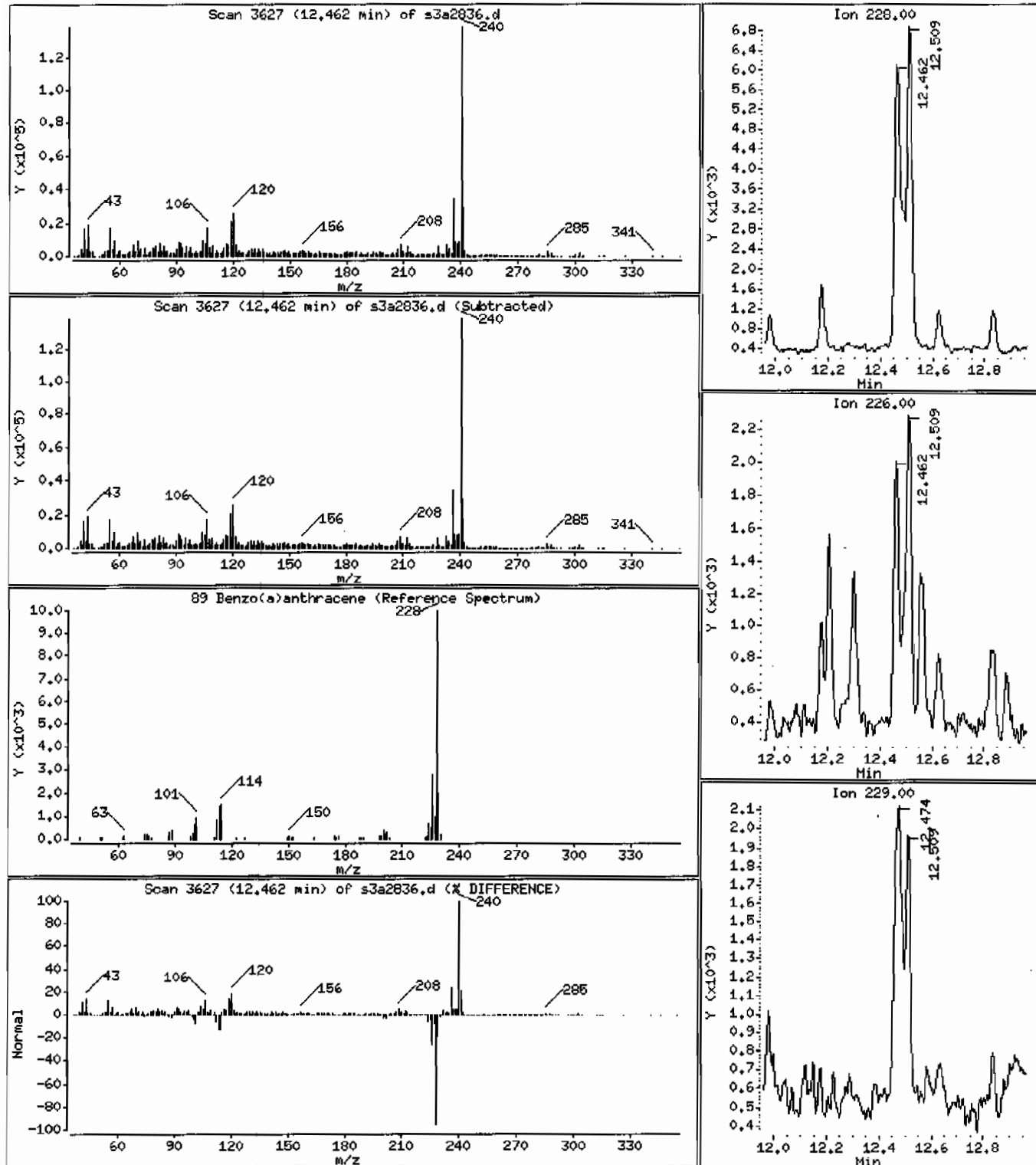
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 21.3 ug/Kg



Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 1245114008194487411|SVHF11|LANL

Volume Injected (uL): 0.5

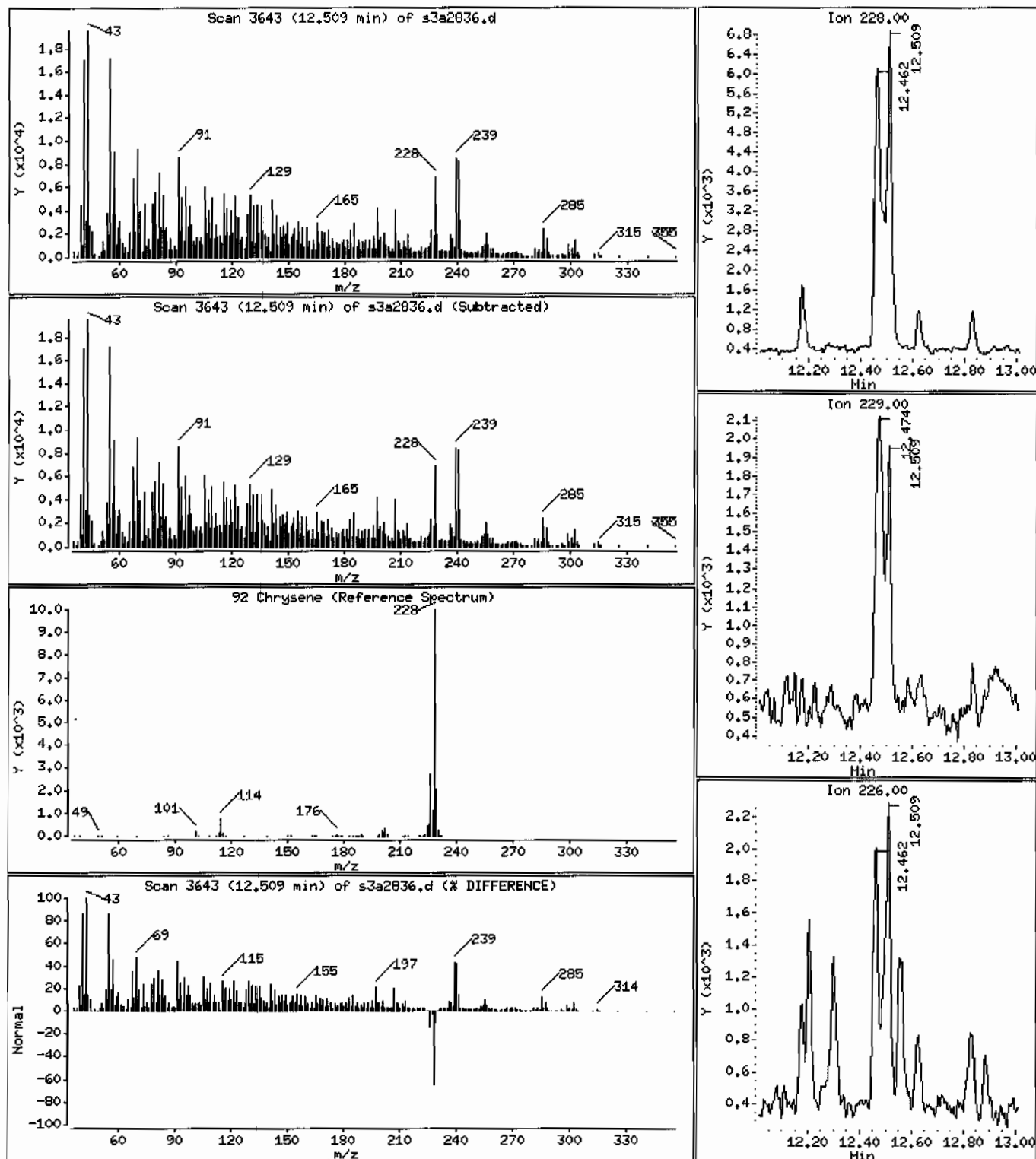
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 17.4 ug/Kg



Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.1

Sample Info: 1245114008|94487411|SVHF11|LANL

Volume Injected (uL): 0.5

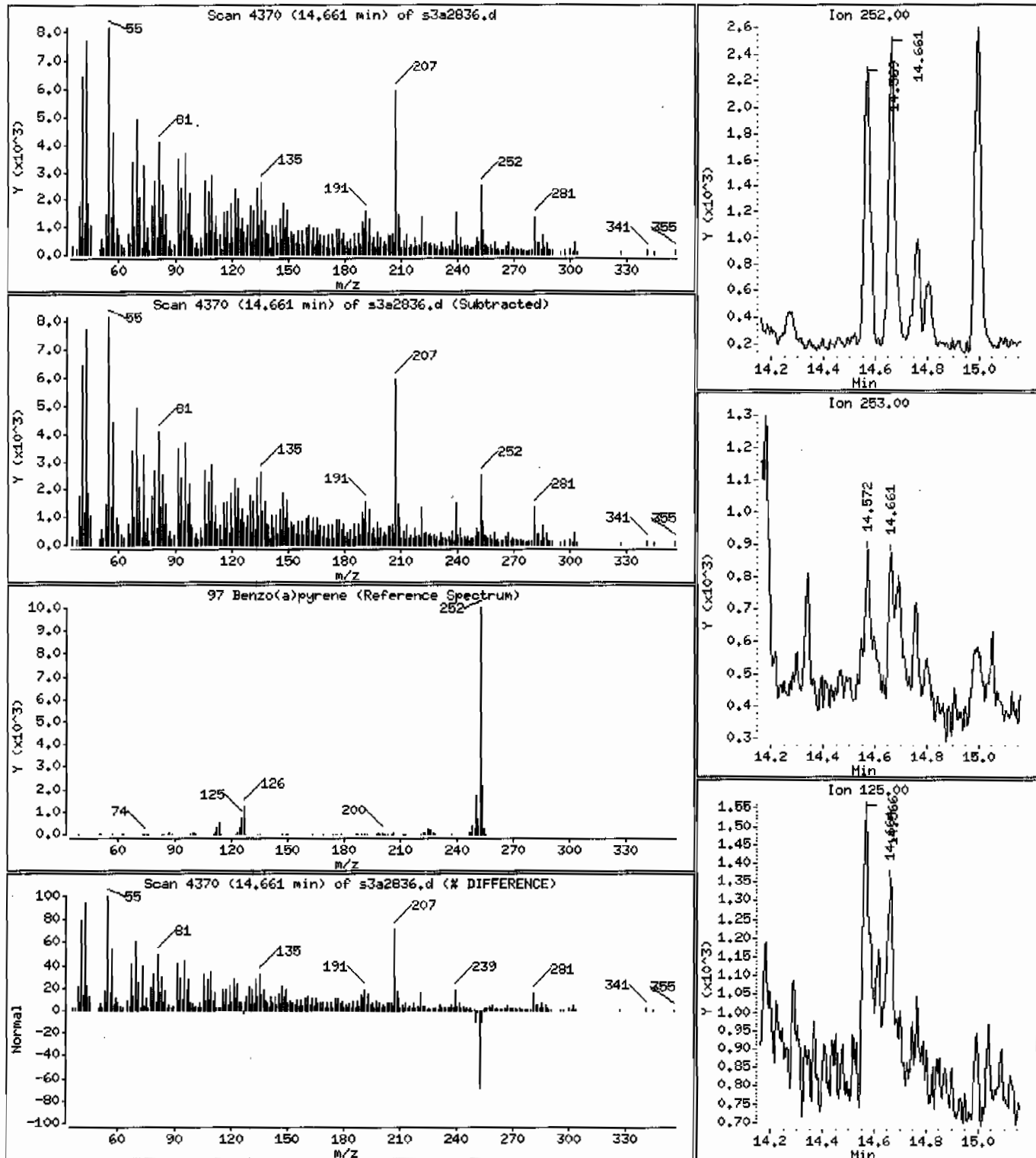
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 19.4 ug/Kg



Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 12451140081944874111SVHF111LANL

Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

## Library Search Compound Match

Unknown

Propane, 2,2-dimethoxy-

Pentane, 3-methoxy-

N-Ethylformamide

CAS Number

Library

Entry

Quality

Formula

Weight

77-76-9

NIST05.L

4663

39

C5H12O2

104

36839-67-5

NIST05.L

4336

17

C6H14O

102

627-48-2

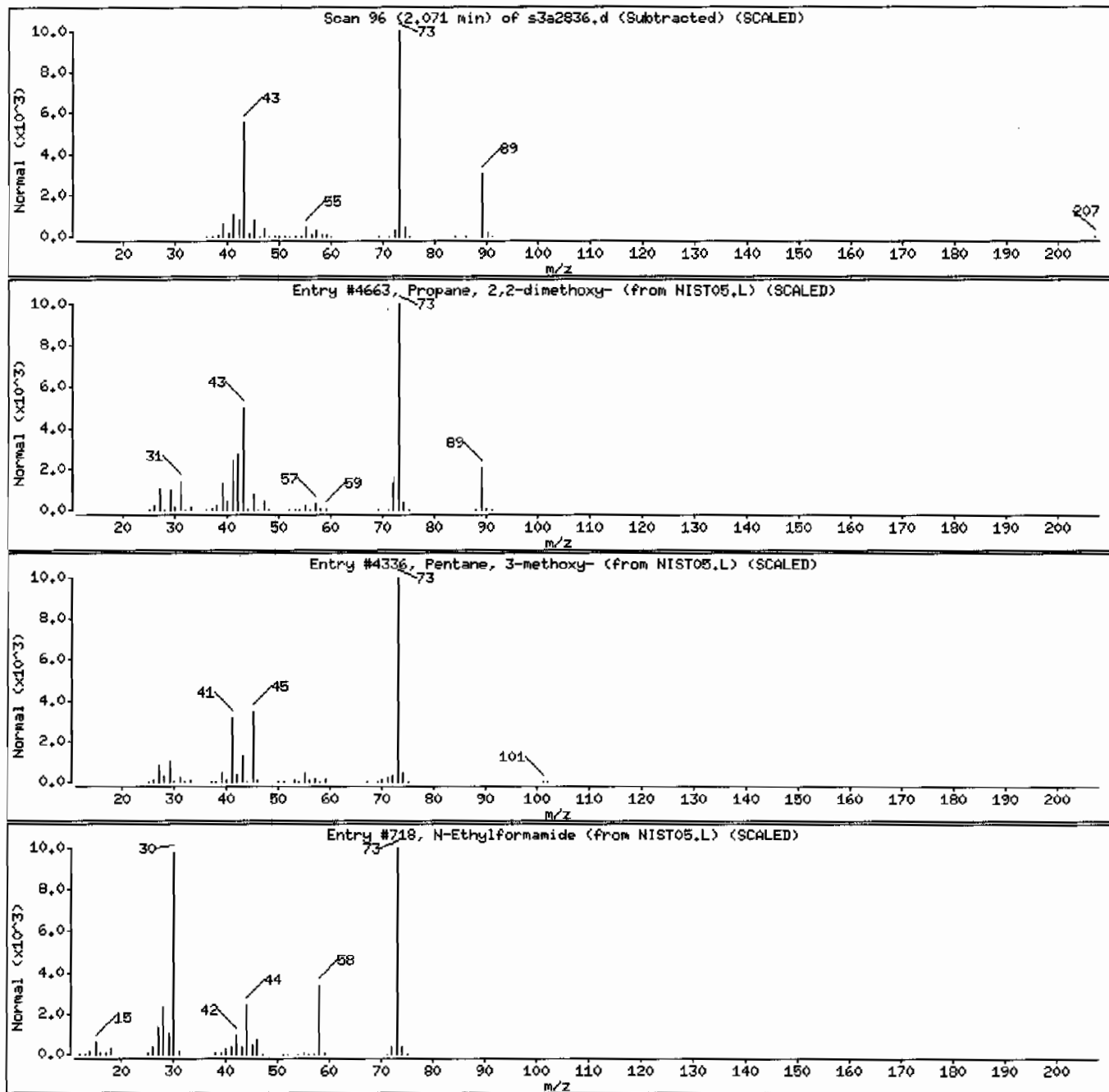
NIST05.L

718

9

C3H7NO

73



Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.1

Sample Info: 12451140081944874111SVMF111LANL

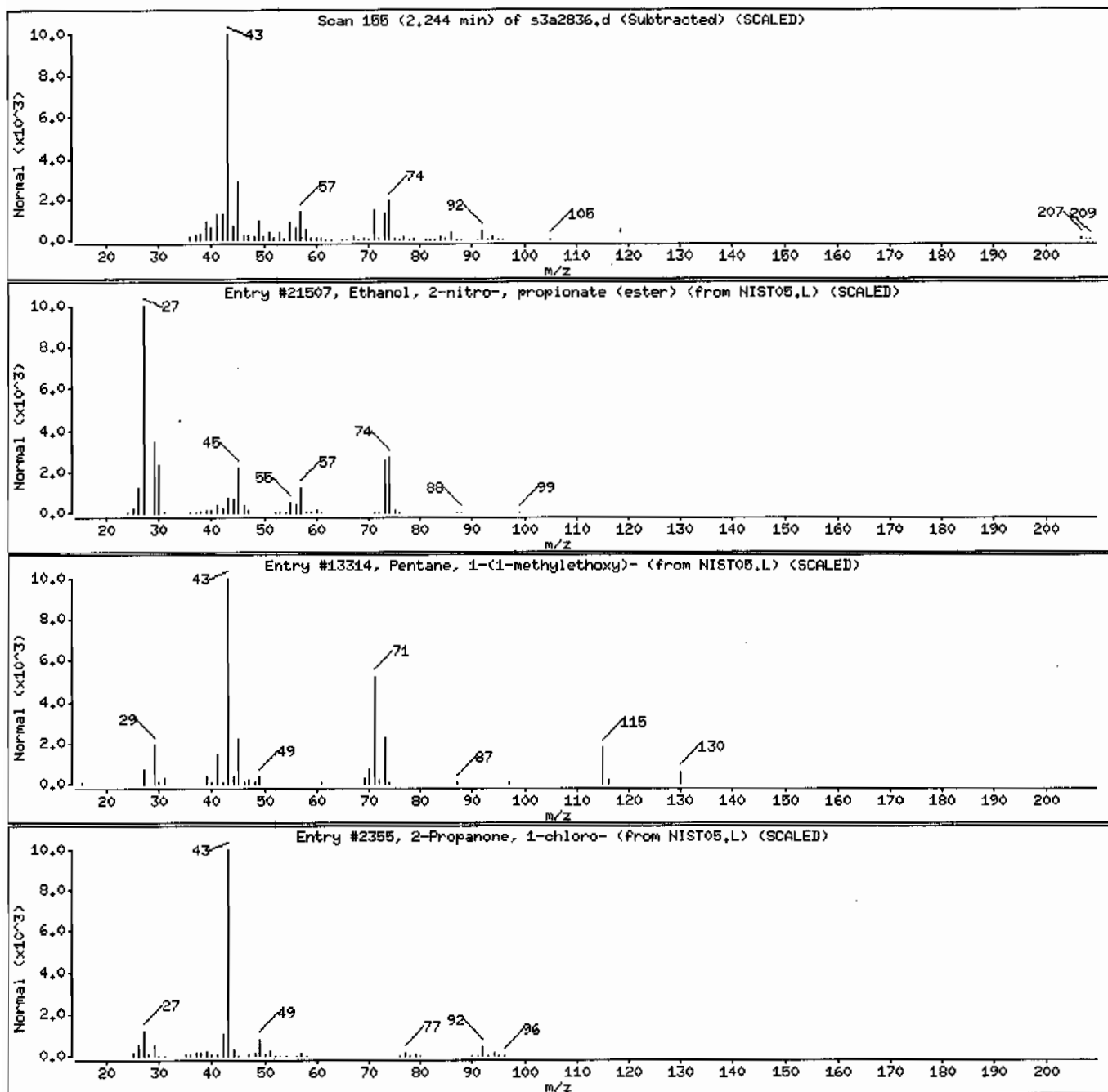
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match         | CAS Number | Library  | Entry | Quality | Formula | Weight |
|---------------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown                               |            |          |       |         |         |        |
| Ethanol, 2-nitro-, propionate (ester) | 5390-28-3  | NIST05.L | 21507 | 23      | C5H9NO4 | 147    |
| Pentane, 1-(1-methylethoxy)-          | 5756-37-6  | NIST05.L | 13314 | 16      | C8H18O  | 130    |
| 2-Propanone, 1-chloro-                | 78-95-5    | NIST05.L | 2355  | 11      | C3H5ClO | 92     |



Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 1245114008194487411ISVHF111LANL

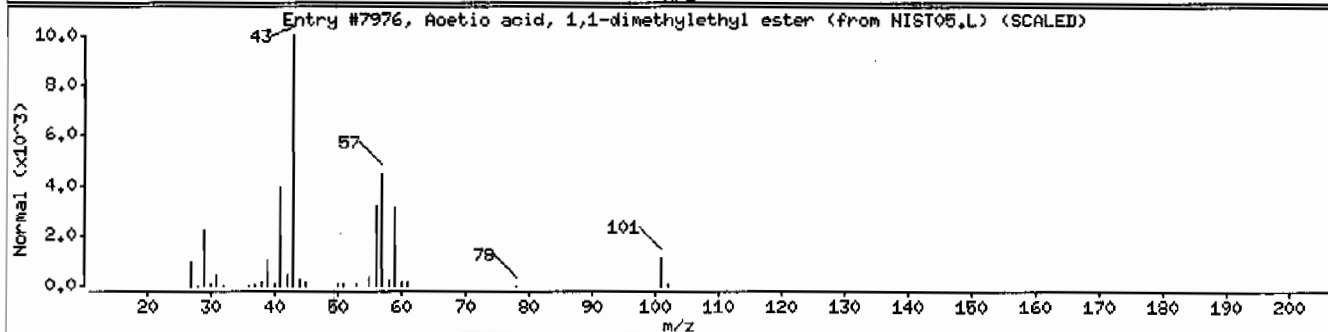
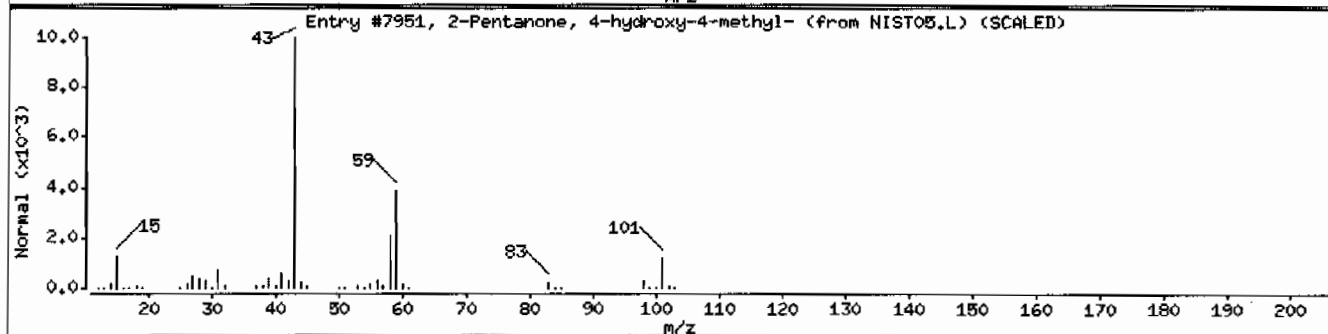
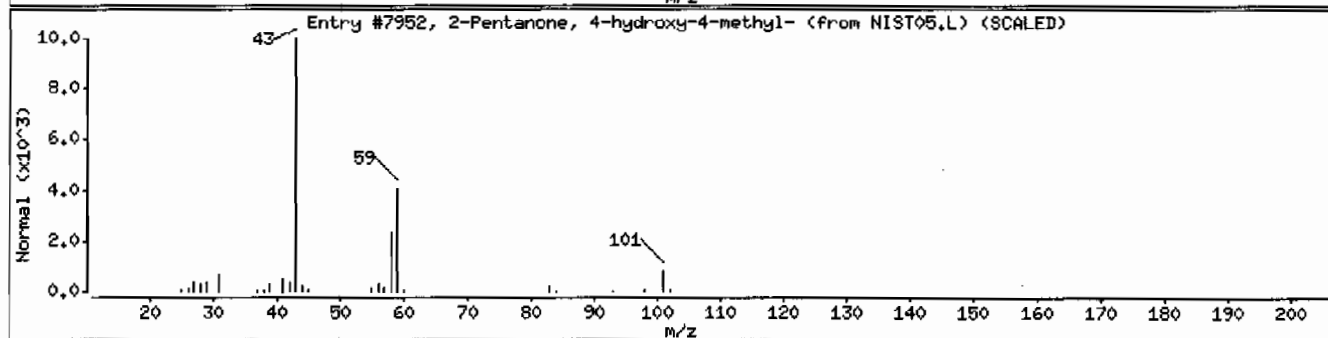
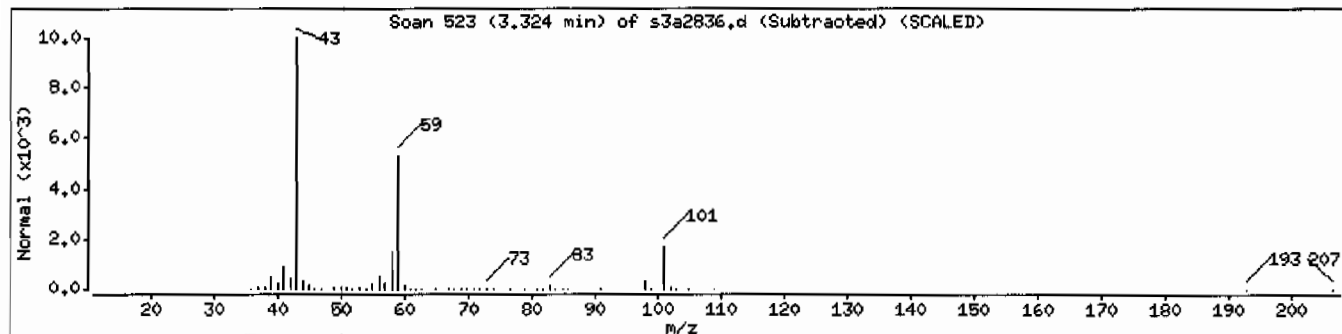
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match        | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--------------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown Aldol Condensate             |            |          |       |         |         |        |
| 2-Pentanone, 4-hydroxy-4-methyl-     | 123-42-2   | NIST05.L | 7952  | 50      | C6H12O2 | 116    |
| 2-Pentanone, 4-hydroxy-4-methyl-     | 123-42-2   | NIST05.L | 7951  | 45      | C6H12O2 | 116    |
| Acetic acid, 1,1-dimethylethyl ester | 540-88-5   | NIST05.L | 7976  | 28      | C6H12O2 | 116    |





Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 12451140081944974111SVMF111LANL

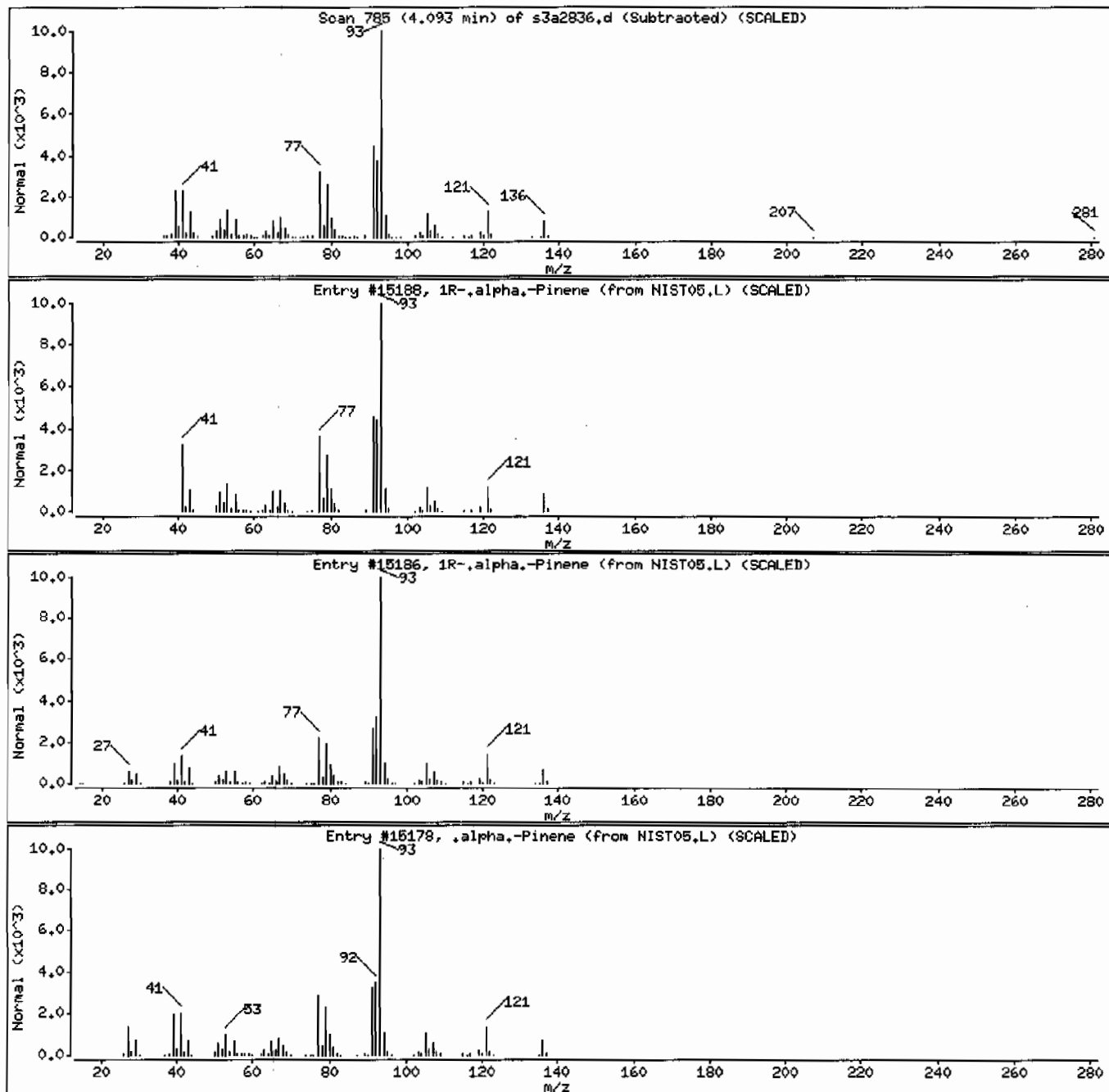
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| 1R-,alpha.-Pinene             | 7785-70-8  | NIST05.L | 15188 | 98      | C10H16  | 136    |
| 1R-,alpha.-Pinene             | 7785-70-8  | NIST05.L | 15186 | 96      | C10H16  | 136    |
| ,alpha.-Pinene                | 80-56-8    | NIST05.L | 15178 | 96      | C10H16  | 136    |



Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 1245114008194487411SVHF11ILANL

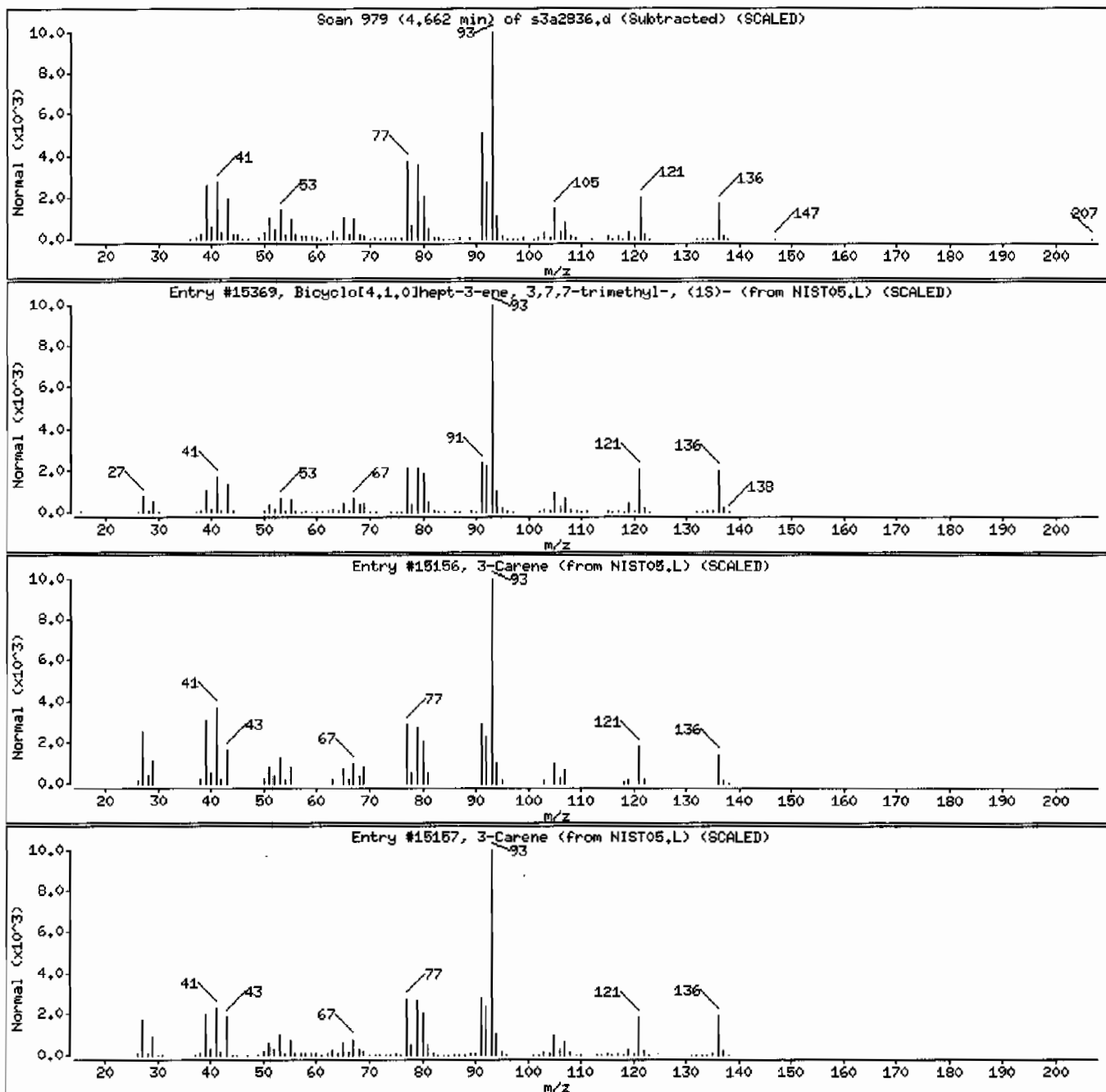
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match              | CAS Number | Library  | Entry | Quality | Formula                         | Weight |
|--|------------|----------|-------|---------|---------------------------------|--------|
| Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl- | 498-15-7   | NIST05.L | 15369 | 97      | C <sub>10</sub> H <sub>16</sub> | 136    |
| 3-Carene                                   | 13466-78-9 | NIST05.L | 15156 | 96      | C <sub>10</sub> H <sub>16</sub> | 136    |
| 3-Carene                                   | 13466-78-9 | NIST05.L | 15157 | 95      | C <sub>10</sub> H <sub>16</sub> | 136    |



Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 1245114008194487411SVMF11ILANL

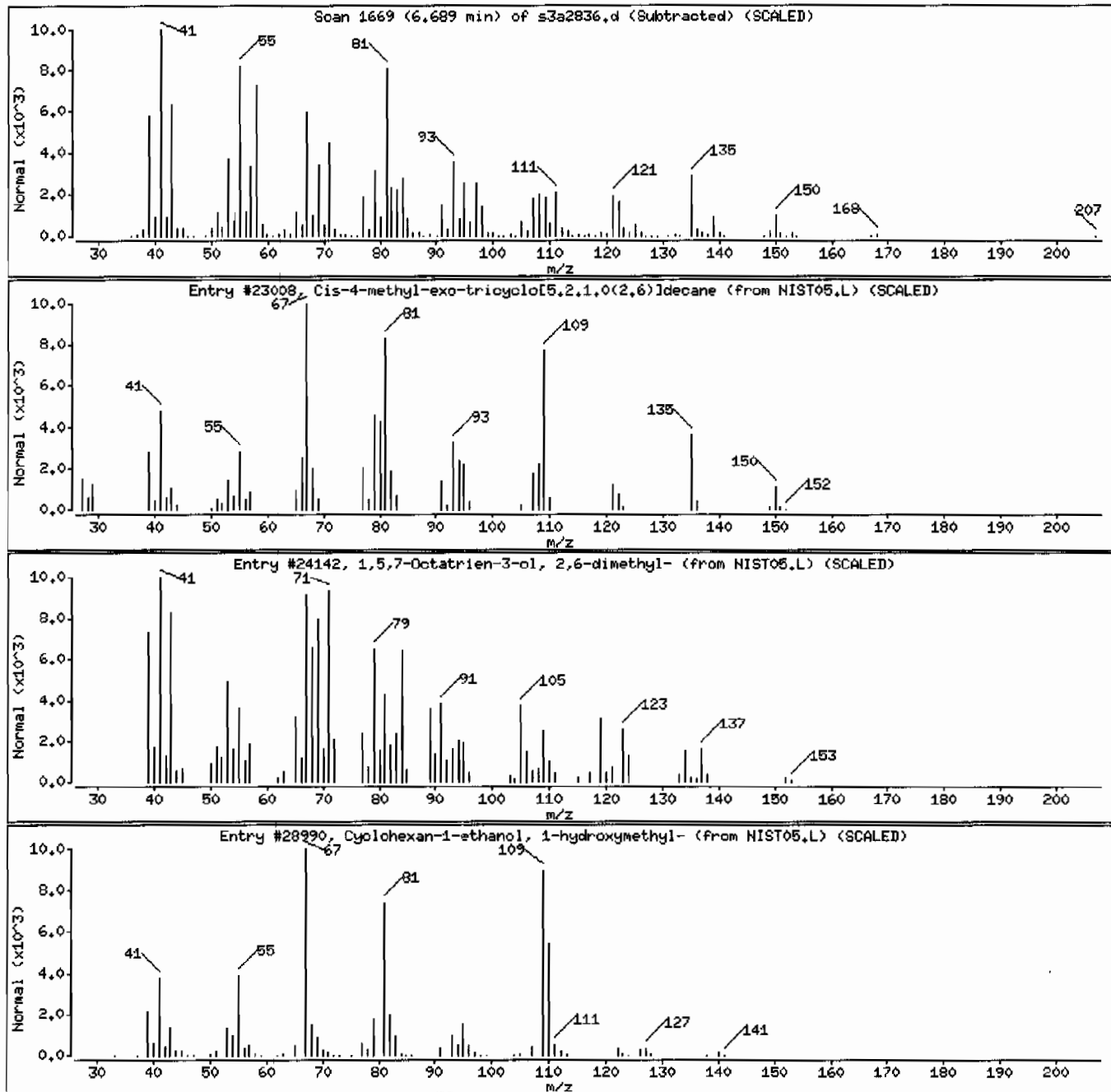
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula | Weight |
|--|--------------|----------|-------|---------|---------|--------|
| Unknown                                  |              |          |       |         |         |        |
| Cis-4-methyl-exo-tricyclo[5.2.1.0(2,6)]d | 1000215-29-2 | NIST05.L | 23008 | 55      | C11H18  | 150    |
| 1,5,7-Octatrien-3-ol, 2,6-dimethyl-      | 29414-56-0   | NIST05.L | 24142 | 35      | C10H16O | 152    |
| Cyclohexan-1-ethanol, 1-hydroxymethyl-   | 3187-28-8    | NIST05.L | 28990 | 27      | C9H18O2 | 158    |



Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 12451140081944874111SVHF111LANL

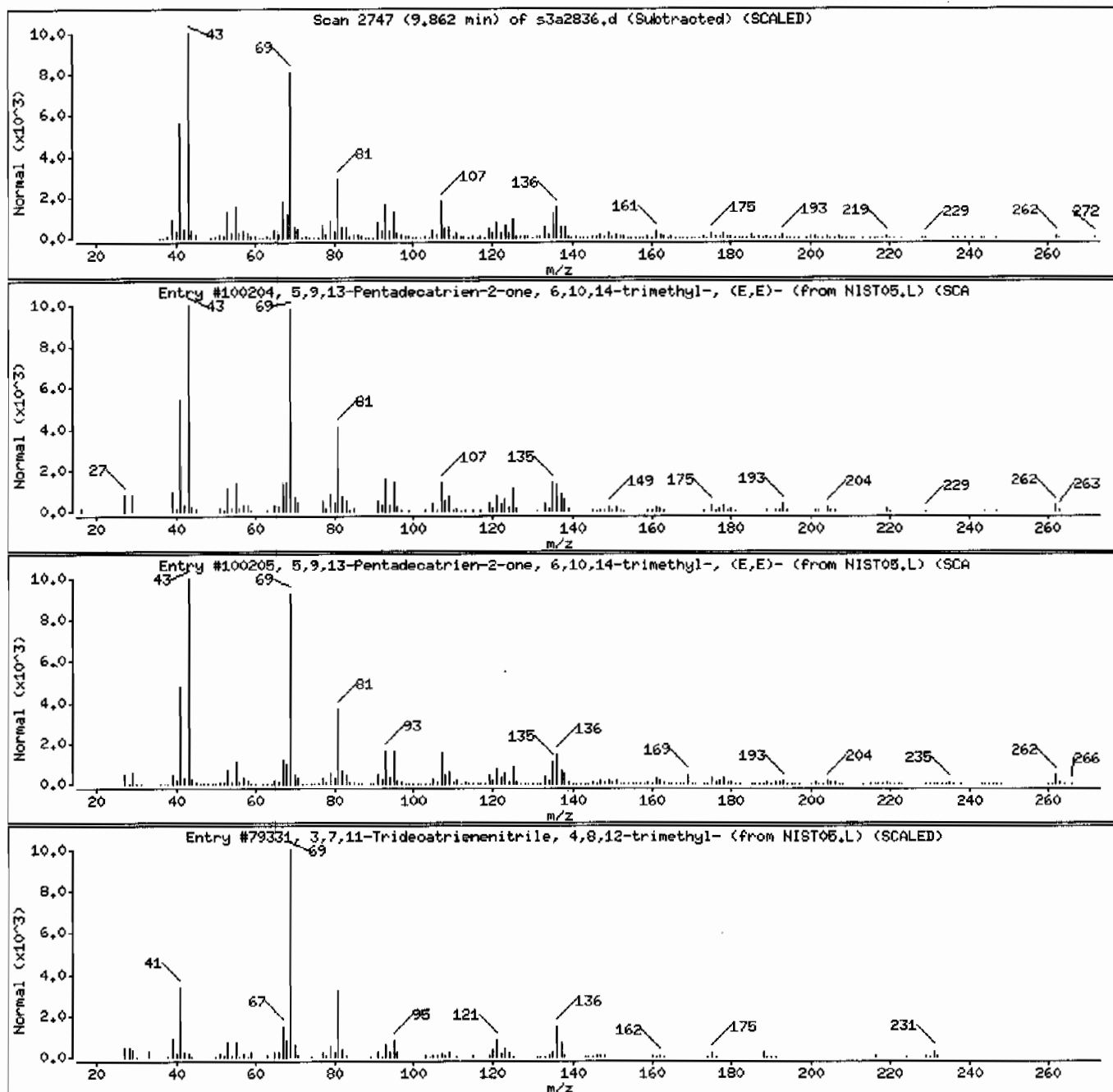
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula | Weight |
|--|------------|----------|--------|---------|---------|--------|
| 5,9,13-Pentadecatrien-2-one, 6,10,14-tri | 1117-52-8  | NIST05.L | 100204 | 91      | C18H30O | 262    |
| 5,9,13-Pentadecatrien-2-one, 6,10,14-tri | 1117-52-8  | NIST05.L | 100205 | 91      | C18H30O | 262    |
| 3,7,11-Tridecatrienitrile, 4,8,12-trim   | 6006-01-5  | NIST05.L | 79331  | 53      | C16H25N | 231    |



Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 12451140081944874111SVHF111LANL

Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

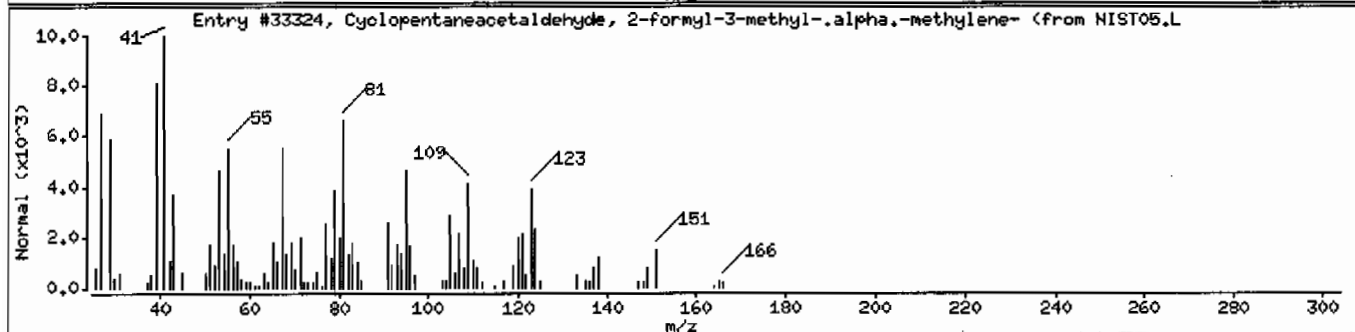
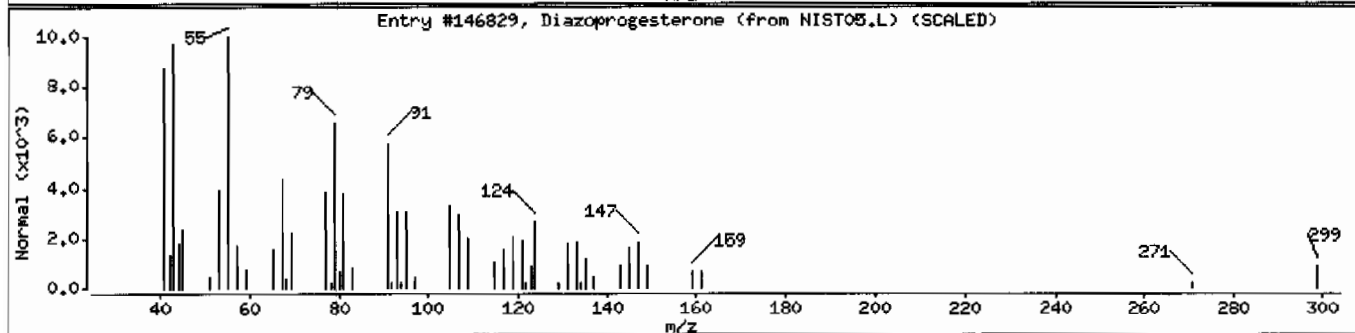
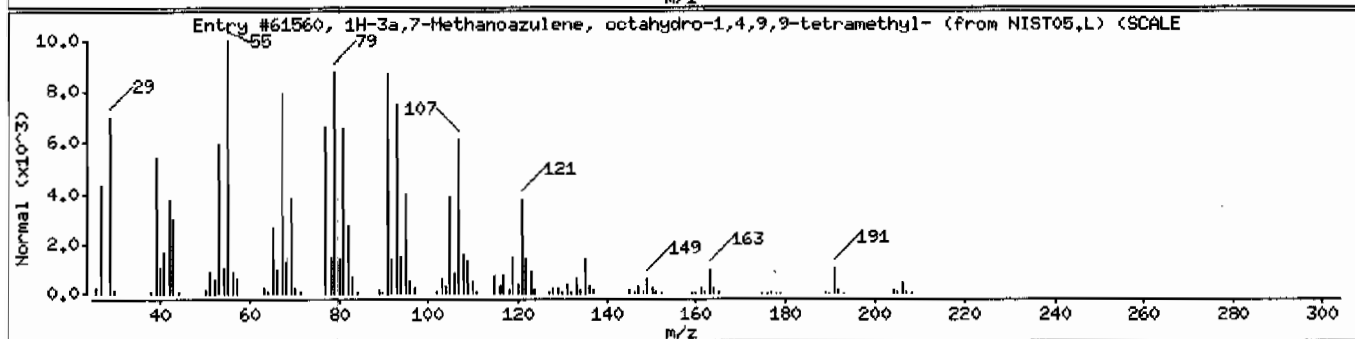
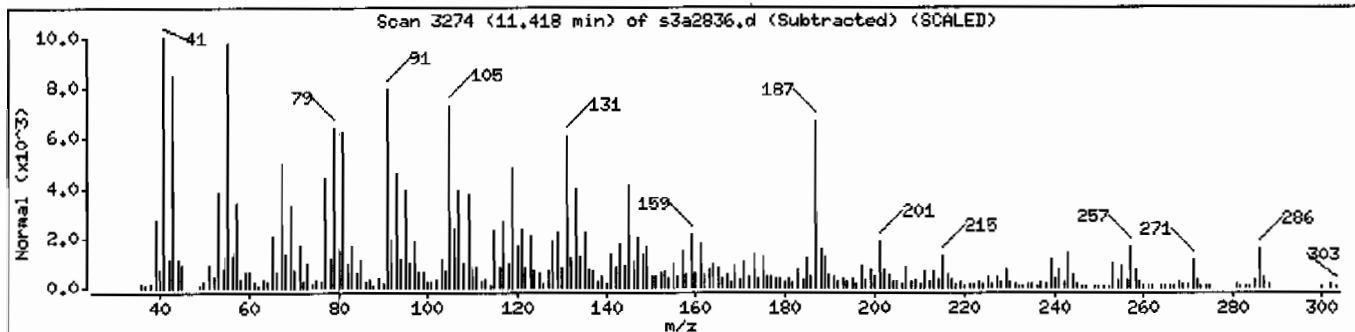
## Library Search Compound Match

Unknown

1H-3a,7-Methanoazulene, octahydro-1,4,9,  
Diazoprogerone

Cyclopentaneacetaldehyde, 2-formyl-3-met

| CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|--------------|----------|--------|---------|----------|--------|
| 25491-20-7   | NIST05.L | 61560  | 52      | C15H26   | 206    |
| 1000255-30-9 | NIST05.L | 146829 | 47      | C21H30N4 | 338    |
| 5951-57-5    | NIST05.L | 33324  | 38      | C10H14O2 | 166    |



Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 1245114008194487411|SVHF11|LANL

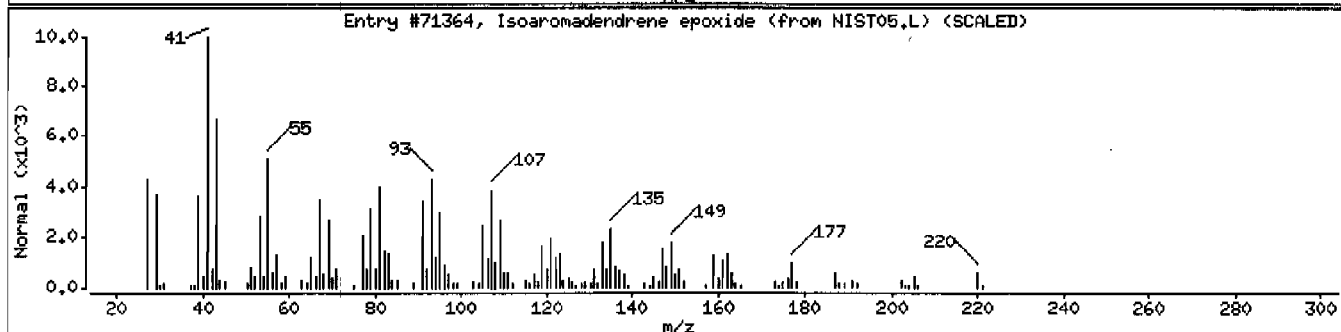
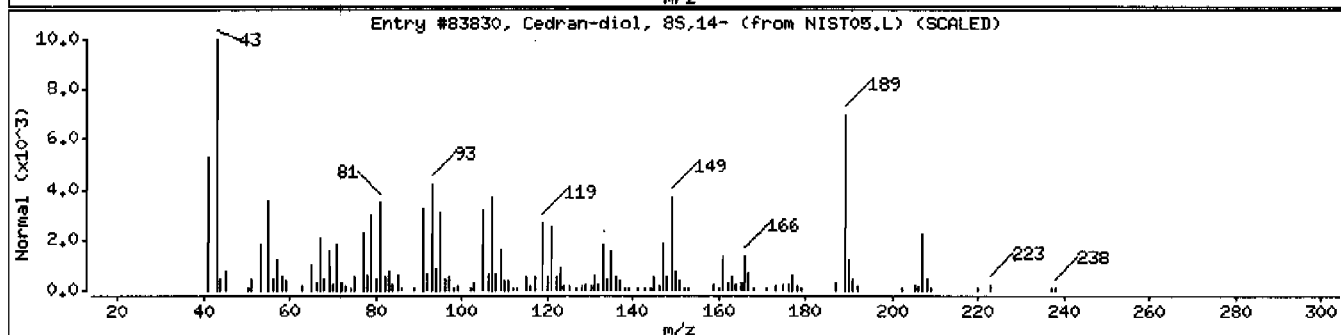
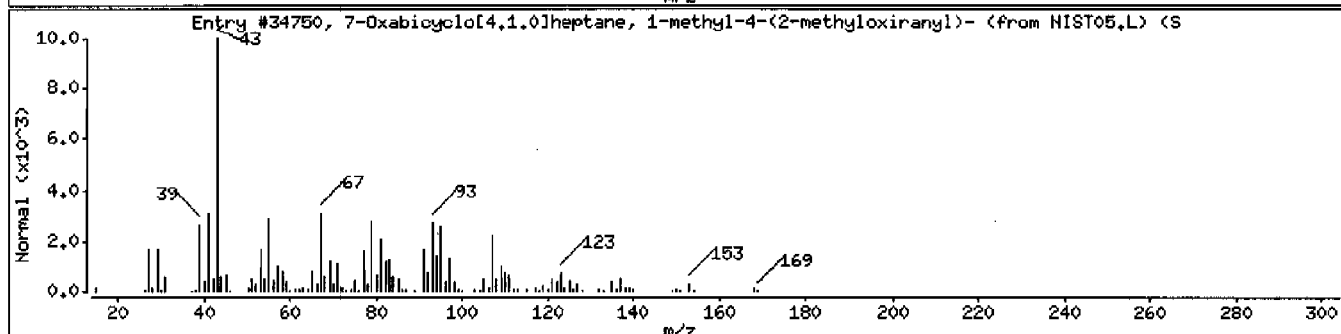
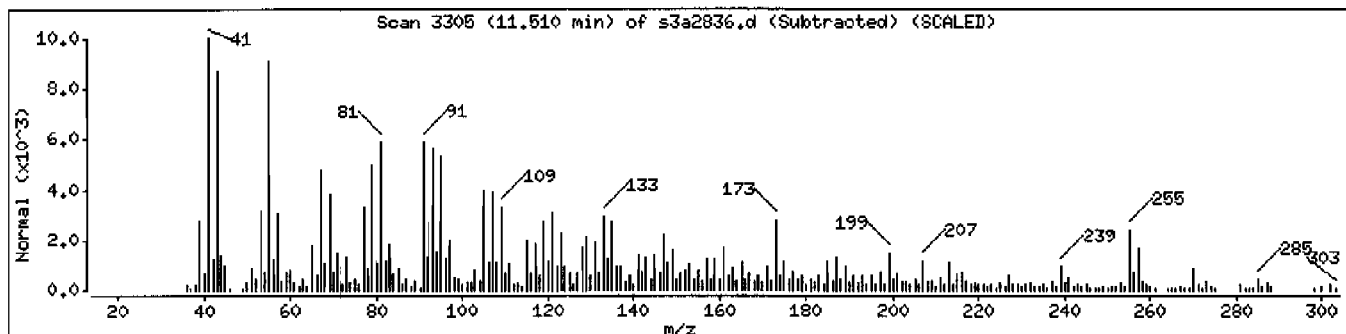
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula  | Weight |
|--|--------------|----------|-------|---------|----------|--------|
| Unknown                                  |              |          |       |         |          |        |
| 7-Oxabicyclo[4.1.0]heptane, 1-methyl-4-( | 96-08-2      | NIST05.L | 34750 | 42      | C10H16O2 | 168    |
| Cedran-diol, 8S,14-                      | 62600-05-9   | NIST05.L | 83830 | 30      | C15H26O2 | 238    |
| Isoaromadendrene epoxide                 | 1000159-36-6 | NIST05.L | 71364 | 25      | C15H24O  | 220    |



Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 1245114008194487411SVHF111LANL

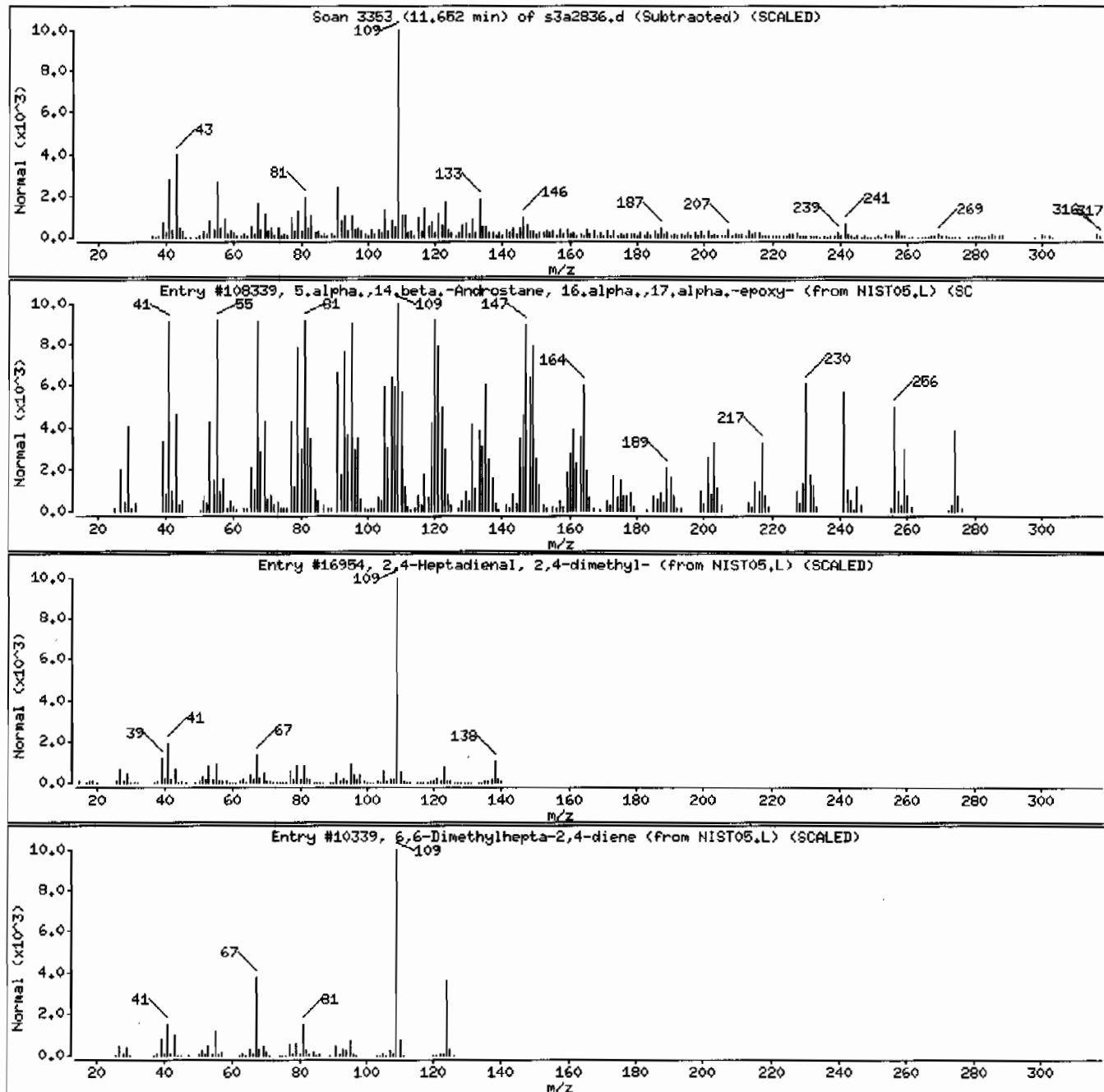
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula | Weight |
|--|--------------|----------|--------|---------|---------|--------|
| Unknown                                  |              |          |        |         |         |        |
| 5.alpha.,14.beta.-Androstane, 16.alpha., | 24174-25-2   | NIST05.L | 108339 | 78      | C19H30O | 274    |
| 2,4-Heptadienal, 2,4-dimethyl-           | 42452-48-2   | NIST05.L | 16954  | 47      | C9H14O  | 138    |
| 6,6-Dimethylhepta-2,4-diene              | 1000195-03-3 | NIST05.L | 10339  | 43      | C9H16   | 124    |



Date: 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 1245114008194487411SVHF11LANL

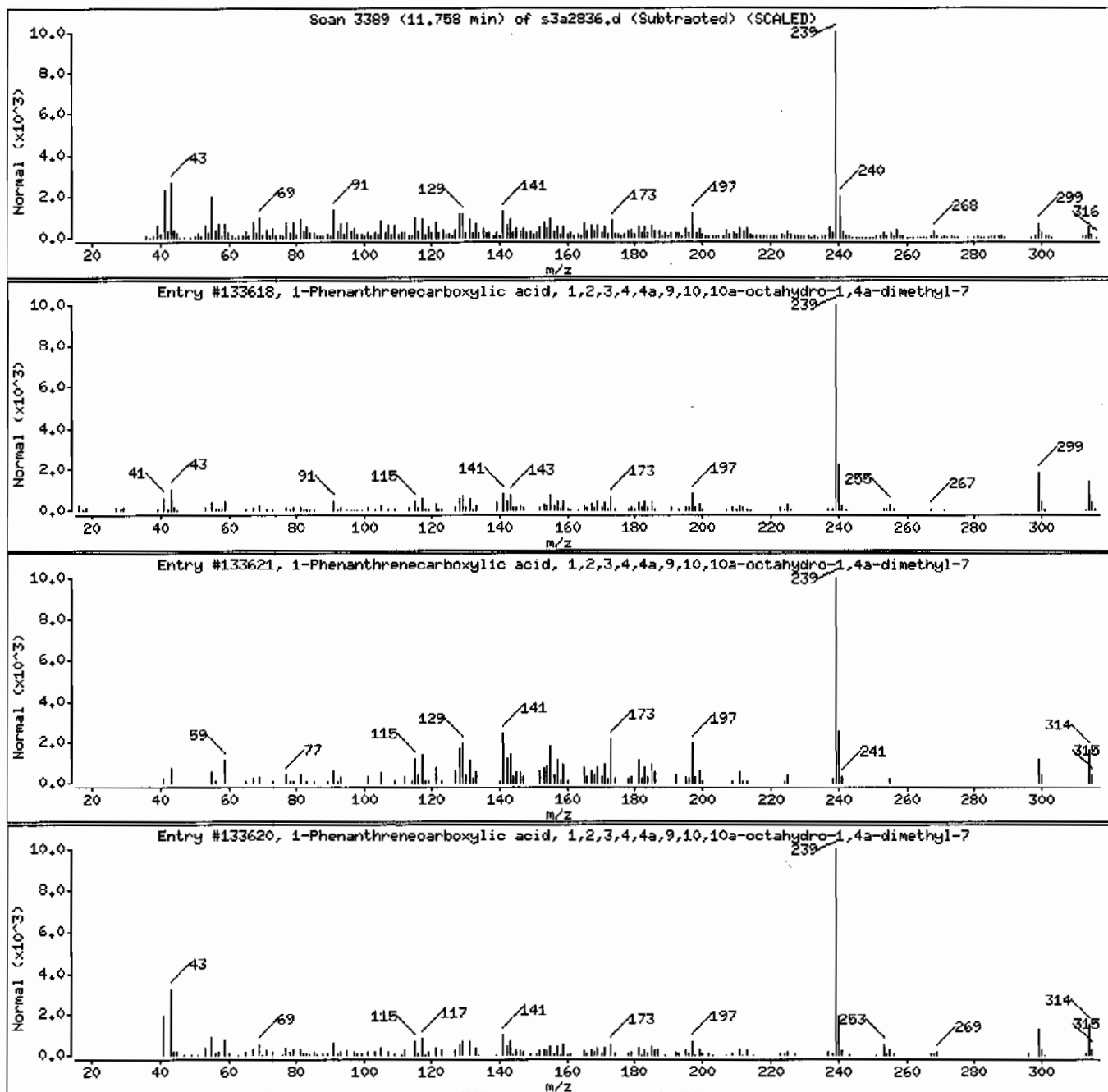
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133618 | 98      | C21H30O2 | 314    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133621 | 96      | C21H30O2 | 314    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133620 | 91      | C21H30O2 | 314    |





Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.1

Sample Info: 1245114008194487411(SVHF)1(LANL)

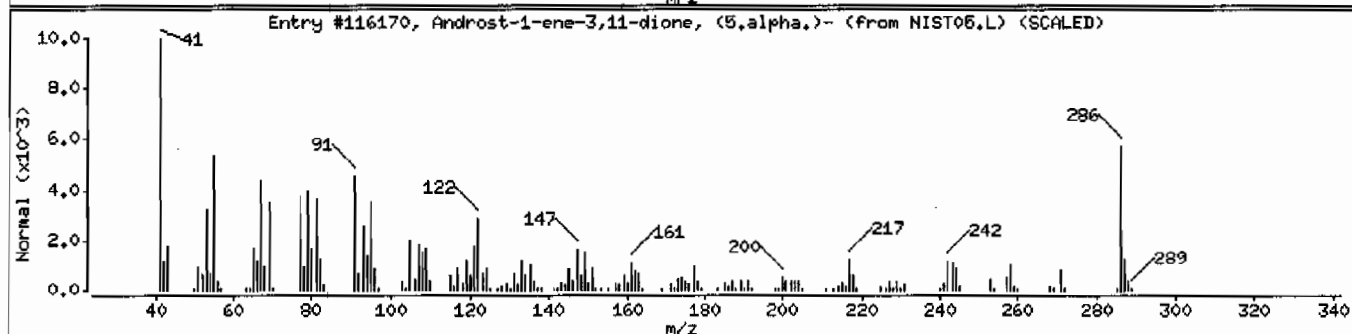
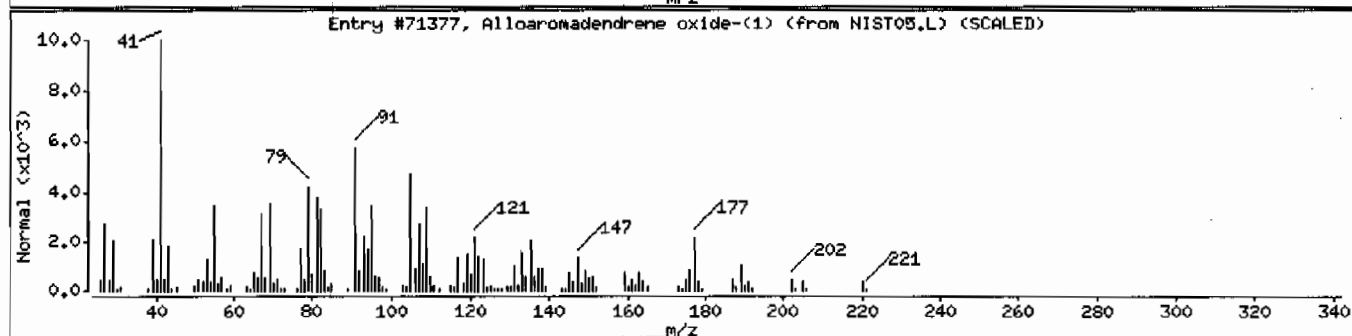
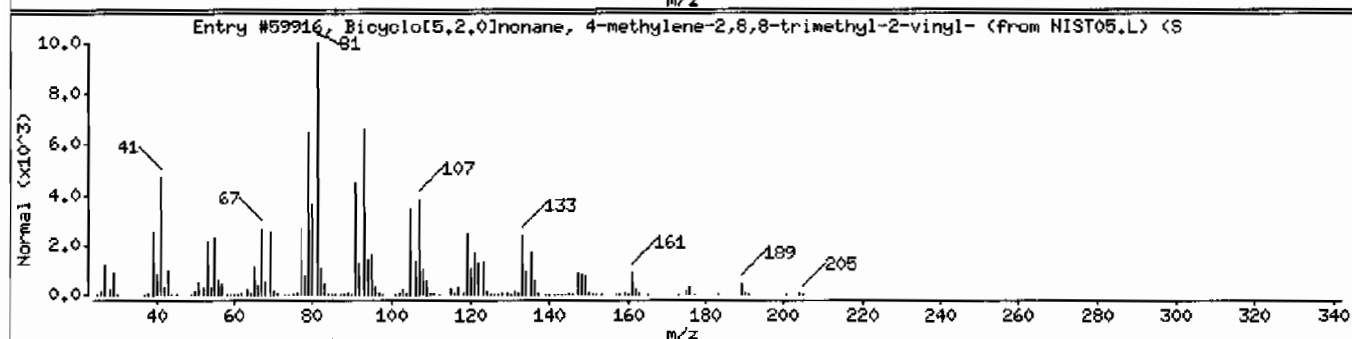
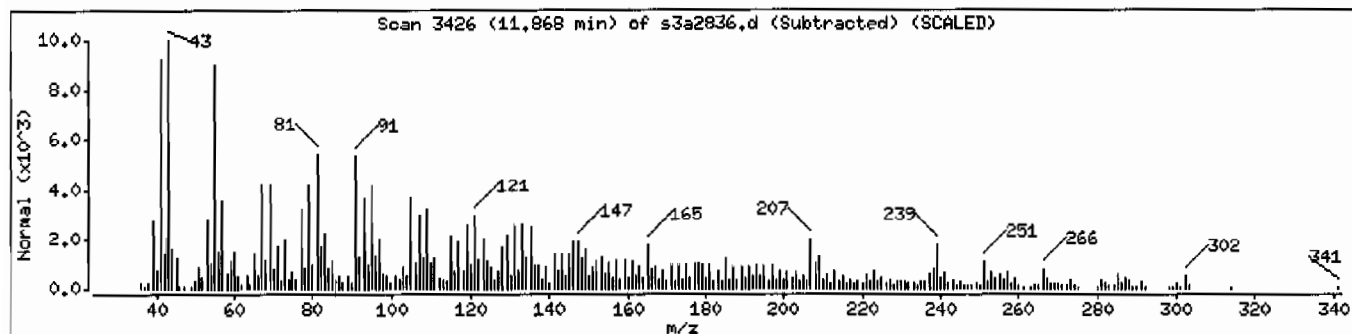
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|--|--------------|----------|--------|---------|----------|--------|
| Unknown                                  |              |          |        |         |          |        |
| Bicyclo[5.2.0]nonane, 4-methylene-2,8,8- | 1000159-38-2 | NIST05.L | 59916  | 53      | C15H24   | 204    |
| Alloaromadendrene oxide-(1)              | 1000156-12-8 | NIST05.L | 71377  | 45      | C15H24O  | 220    |
| Androst-1-ene-3,11-dione, (5.alpha.)-    | 54498-86-1   | NIST05.L | 116170 | 42      | C19H26O2 | 296    |



Date: 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: HSD3.i

Sample Info: 1245114008194487411SVHF111LANL

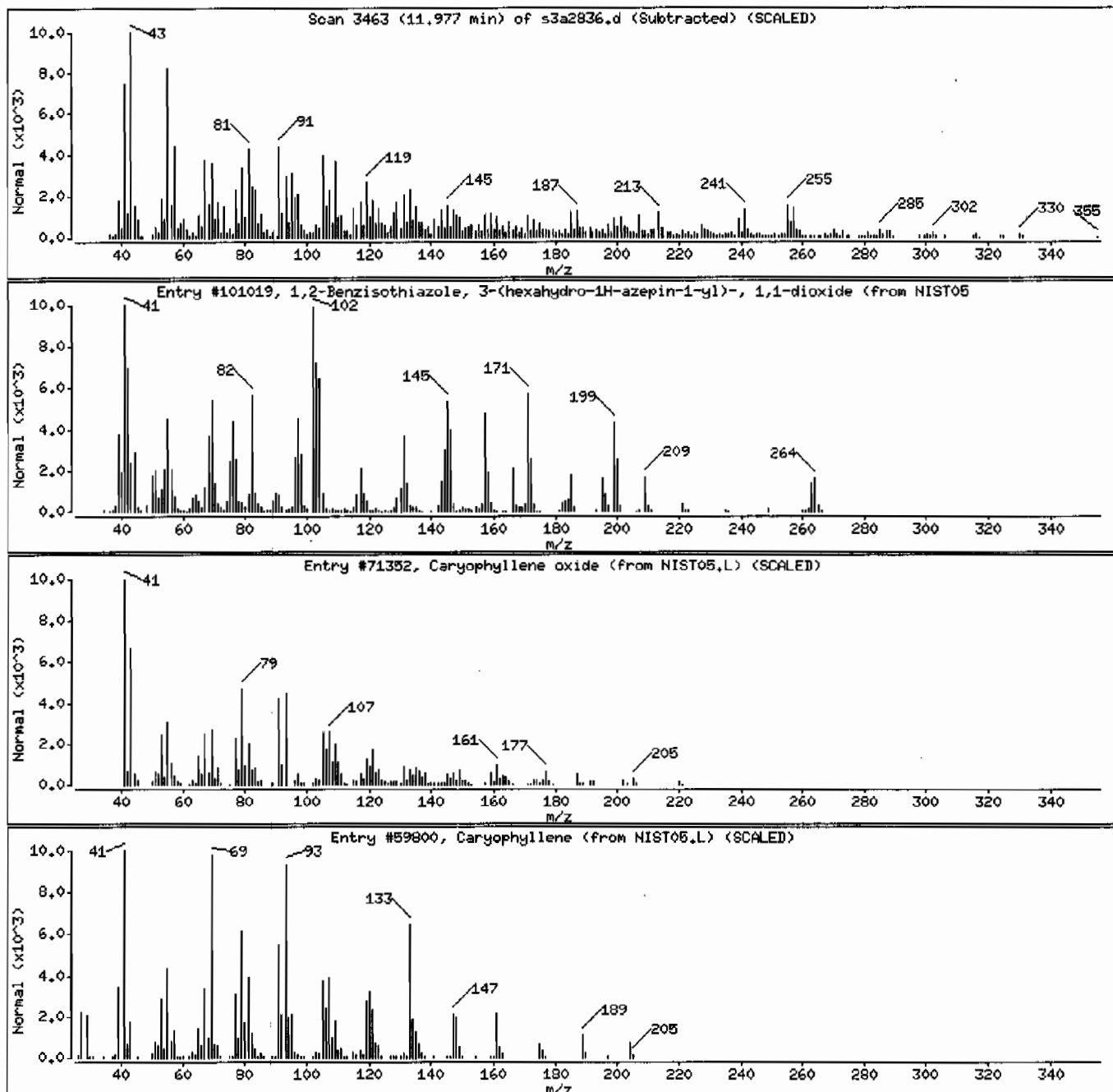
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number  | Library  | Entry  | Quality | Formula     | Weight |
|--|-------------|----------|--------|---------|-------------|--------|
| 1,2-Benzisothiazole, 3-(hexahydro-1H-aze | 309735-29-3 | NIST05.L | 101019 | 90      | C13H16N2O2S | 264    |
| Caryophyllene oxide                      | 1139-30-6   | NIST05.L | 71352  | 53      | C15H24O     | 220    |
| Caryophyllene                            | 87-44-5     | NIST05.L | 59800  | 53      | C15H24      | 204    |



Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: I245114008|944874|1|SVHF11|LANL

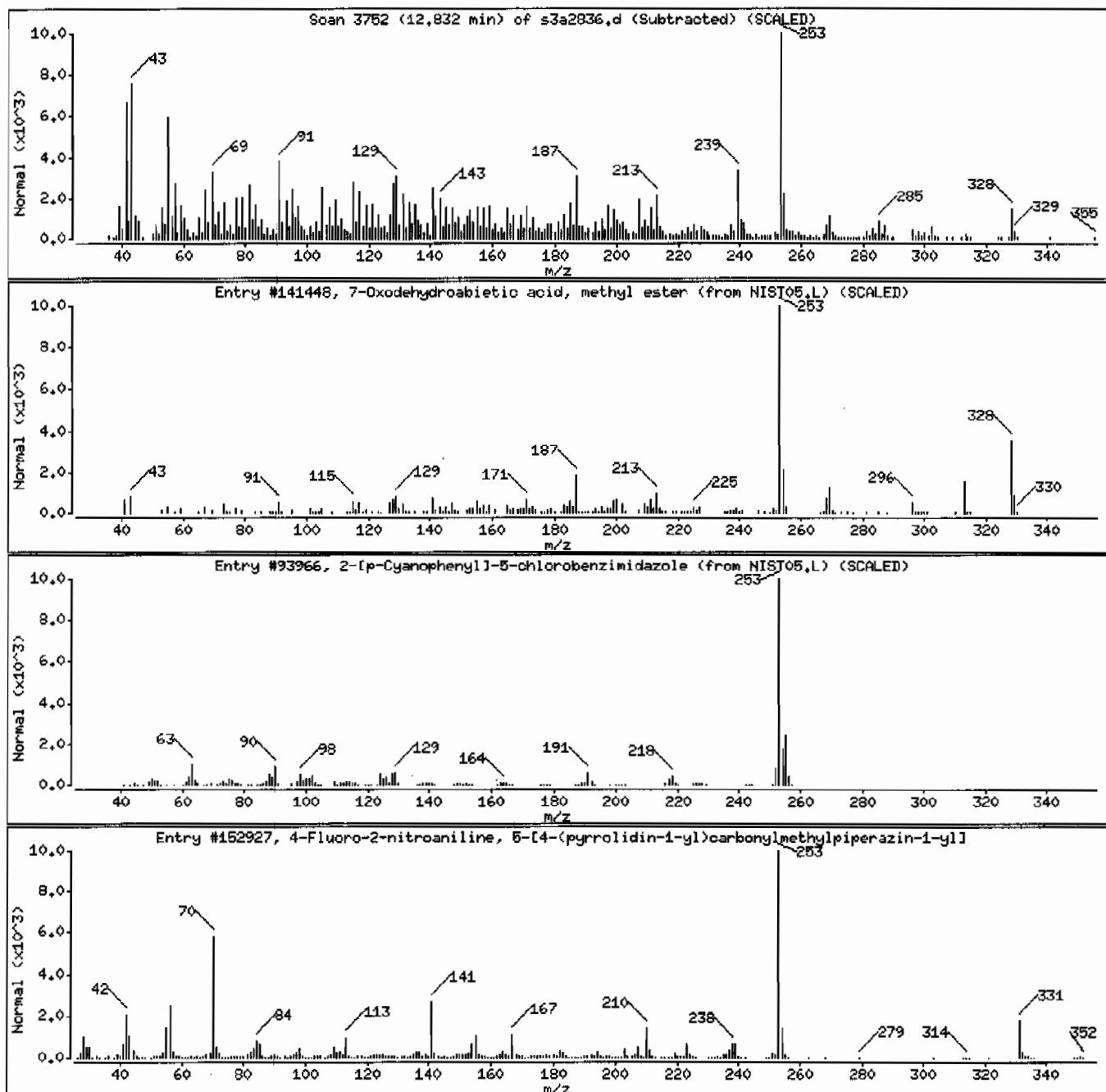
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5HS

Column diameter: 0.20

| Library Search Compound Match   | CAS Number   | Library  | Entry  | Quality | Formula     | Weight |
|---|--------------|----------|--------|---------|-------------|--------|
| Unknown   |              |          |        |         |             |        |
| 7-Oxodehydroabietic acid, methyl ester  | 110936-78-2  | NIST05.L | 141448 | 70      | C21H28O3    | 328    |
| 2-[p-Cyanophenyl]-5-chlorobenzimidazole                                       | 146132-86-7  | NIST05.L | 93966  | 38      | C14H8ClN3   | 253    |
| 4-Fluoro-2-nitroaniline, 5-[4-(pyrrolidin-1-yl)carbonylmethyl]piperazin-1-yl] | 1000217-24-8 | NIST05.L | 152927 | 35      | C16H22FN5O3 | 351    |



Date: 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 1245114008194487411SVHF11ILANL

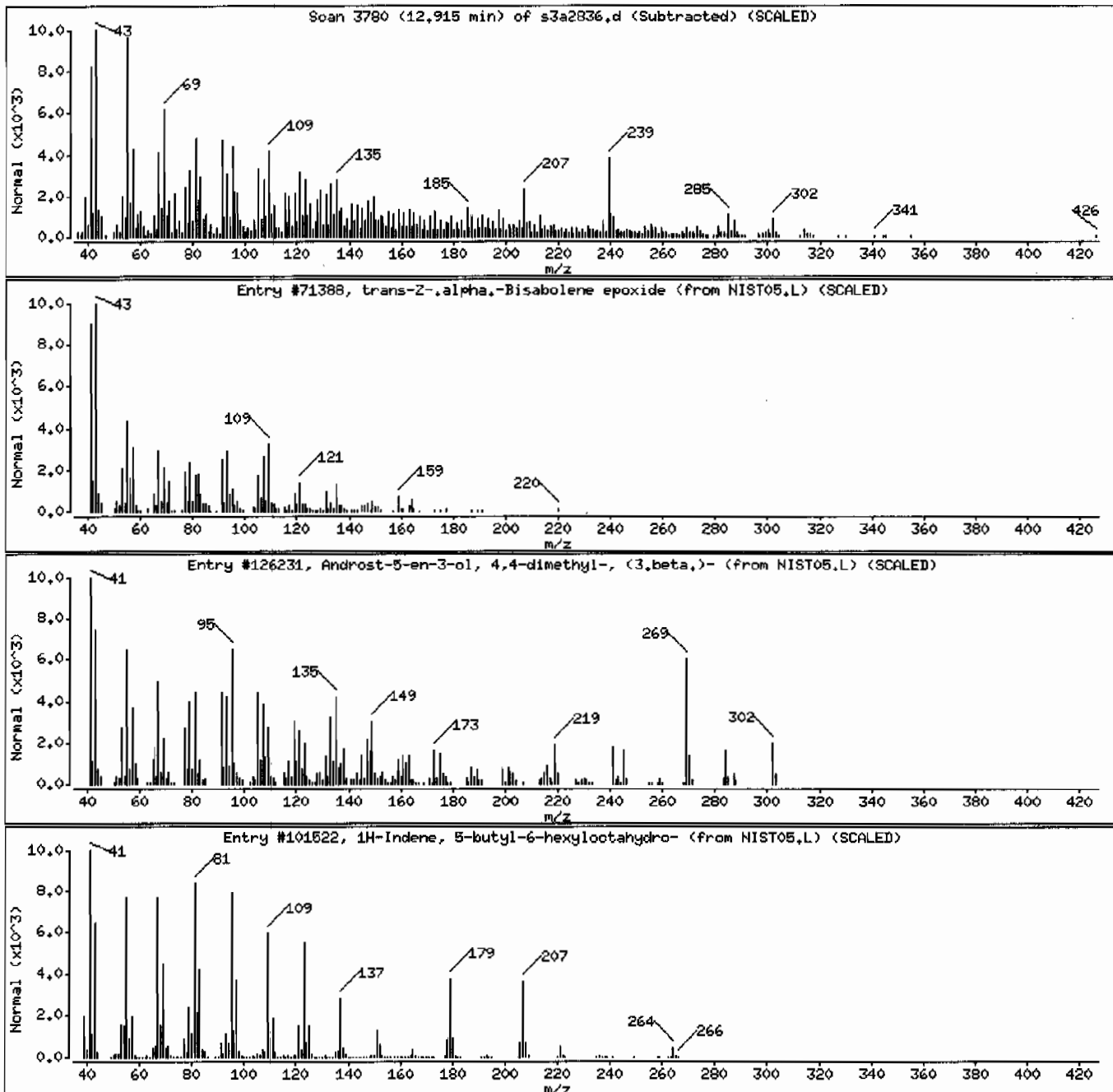
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match             | CAS Number   | Library  | Entry  | Quality | Formula | Weight |
|---|--------------|----------|--------|---------|---------|--------|
| Unknown                                   |              |          |        |         |         |        |
| trans-2-,alpha.-Bisabolene epoxide        | 1000131-71-1 | NIST05.L | 71388  | 35      | C15H24O | 220    |
| Androst-5-en-3-ol, 4,4-dimethyl-, (3,beta | 7673-17-8    | NIST05.L | 126231 | 30      | C21H34O | 302    |
| 1H-Indene, 5-butyl-6-hexyloctahydro-      | 55044-36-5   | NIST05.L | 101522 | 27      | C19H36  | 264    |



Date: 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 1245114008194487411SVHF11LANL

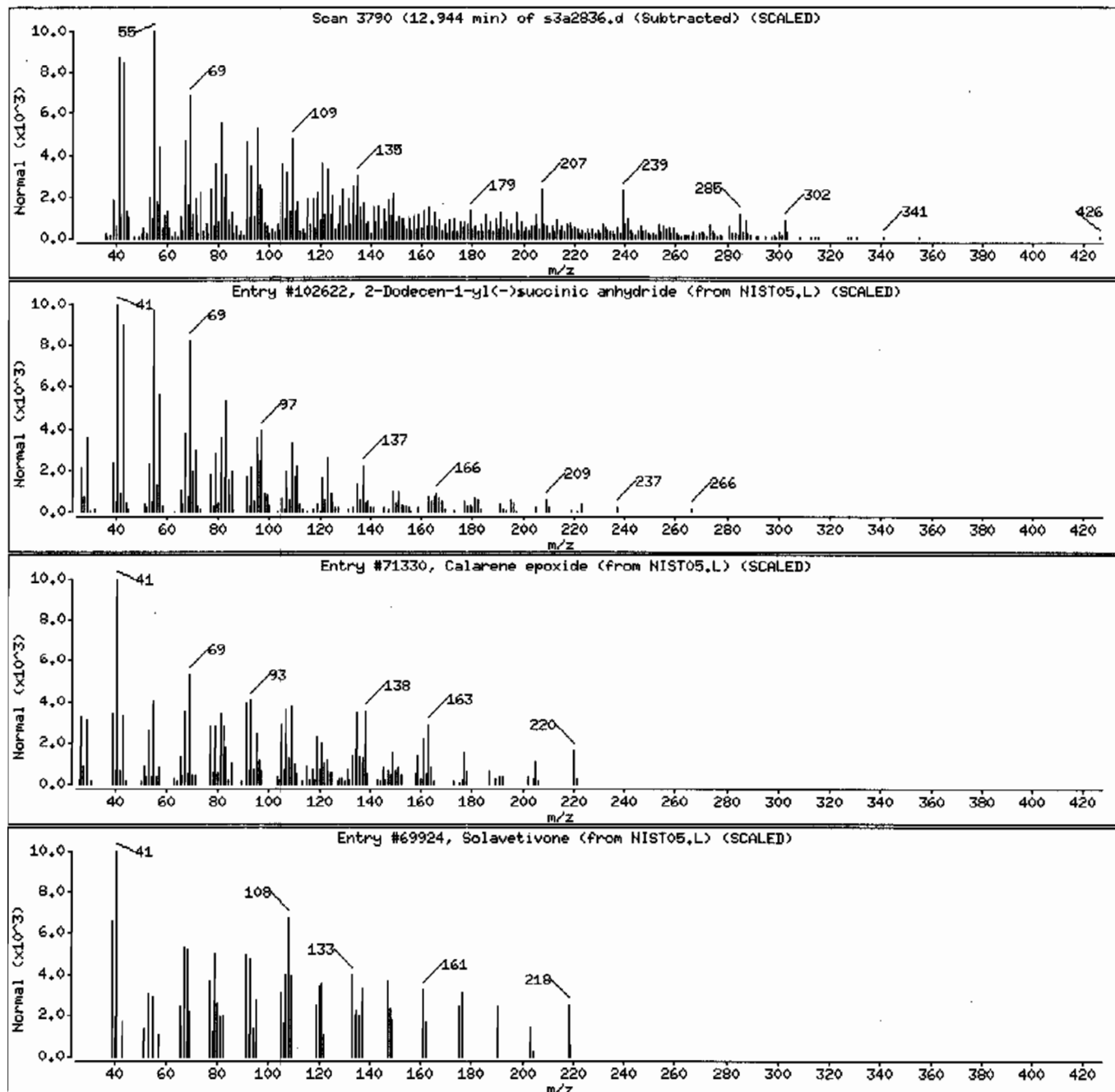
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match       | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|-------------------------------------|--------------|----------|--------|---------|----------|--------|
| Unknown                             |              |          |        |         |          |        |
| 2-Dodecen-1-yl(-)succinic anhydride | 19780-11-1   | NIST05.L | 102622 | 53      | C16H26O3 | 266    |
| Calarene epoxide                    | 1000151-46-0 | NIST05.L | 71330  | 44      | C15H24O  | 220    |
| Solavetivone                        | 54878-25-0   | NIST05.L | 69924  | 44      | C15H22O  | 218    |



Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 1245114008194487411|SVHF11|LANL

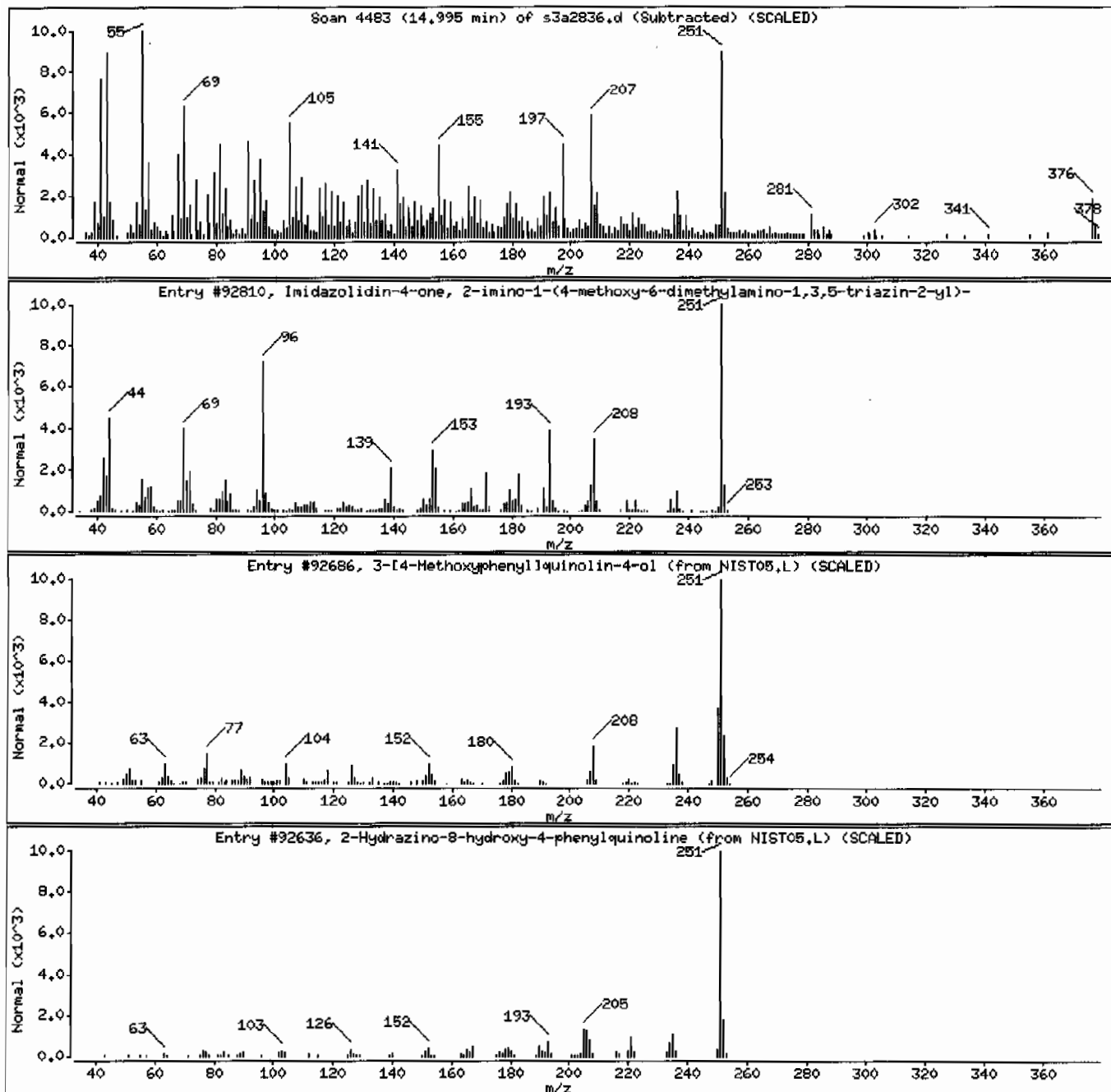
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula   | Weight |
|--|--------------|----------|-------|---------|-----------|--------|
| Unknown                                  |              |          |       |         |           |        |
| Imidazolidin-4-one, 2-imino-1-(4-methoxy | 1000293-93-4 | NIST05.L | 92810 | 47      | C9H13N7O2 | 251    |
| 3-[4-Methoxyphenyl]quinolin-4-ol         | 1000254-66-9 | NIST05.L | 92686 | 46      | C16H13NO2 | 251    |
| 2-Hydrazino-8-hydroxy-4-phenylquinoline  | 104926-85-4  | NIST05.L | 92636 | 42      | C15H13N3O | 251    |



Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 12451140081944874111SVHF111LANL

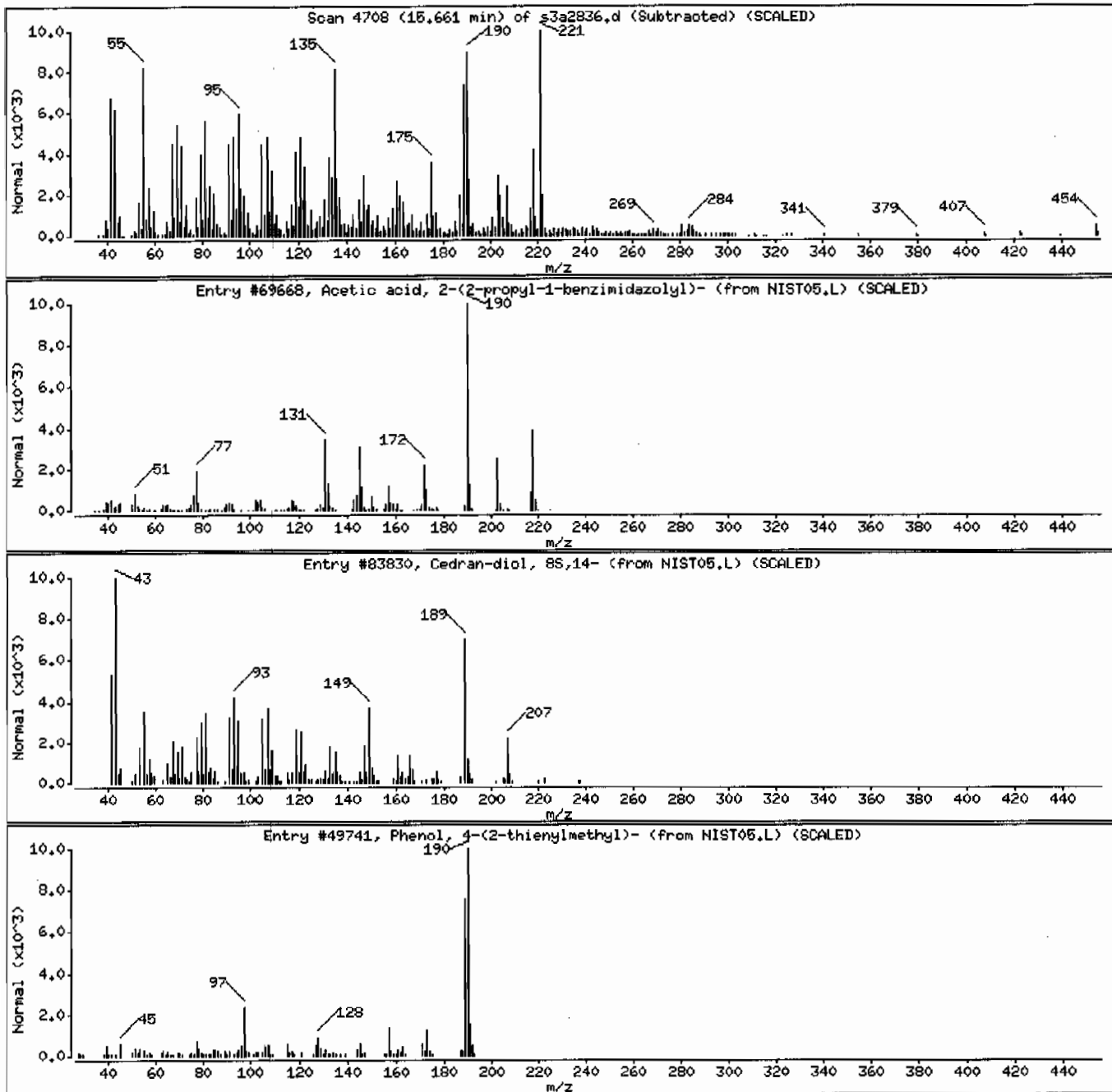
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match               | CAS Number  | Library  | Entry | Quality | Formula    | Weight |
|---|-------------|----------|-------|---------|------------|--------|
| Unknown                                     |             |          |       |         |            |        |
| Acetic acid, 2-(2-propyl-1-benzimidazolyl)- | 331736-92-6 | NIST05.L | 69668 | 45      | C12H14N2O2 | 218    |
| Cedran-diol, 8S,14-                         | 62600-05-9  | NIST05.L | 83830 | 38      | C15H26O2   | 238    |
| Phenol, 4-(2-thienylmethyl)-                | 91680-55-6  | NIST05.L | 49741 | 35      | C11H10OS   | 190    |



Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: HSD3.i

Sample Info: 1245114008194487411SVHF11LANL

Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

## Library Search Compound Match

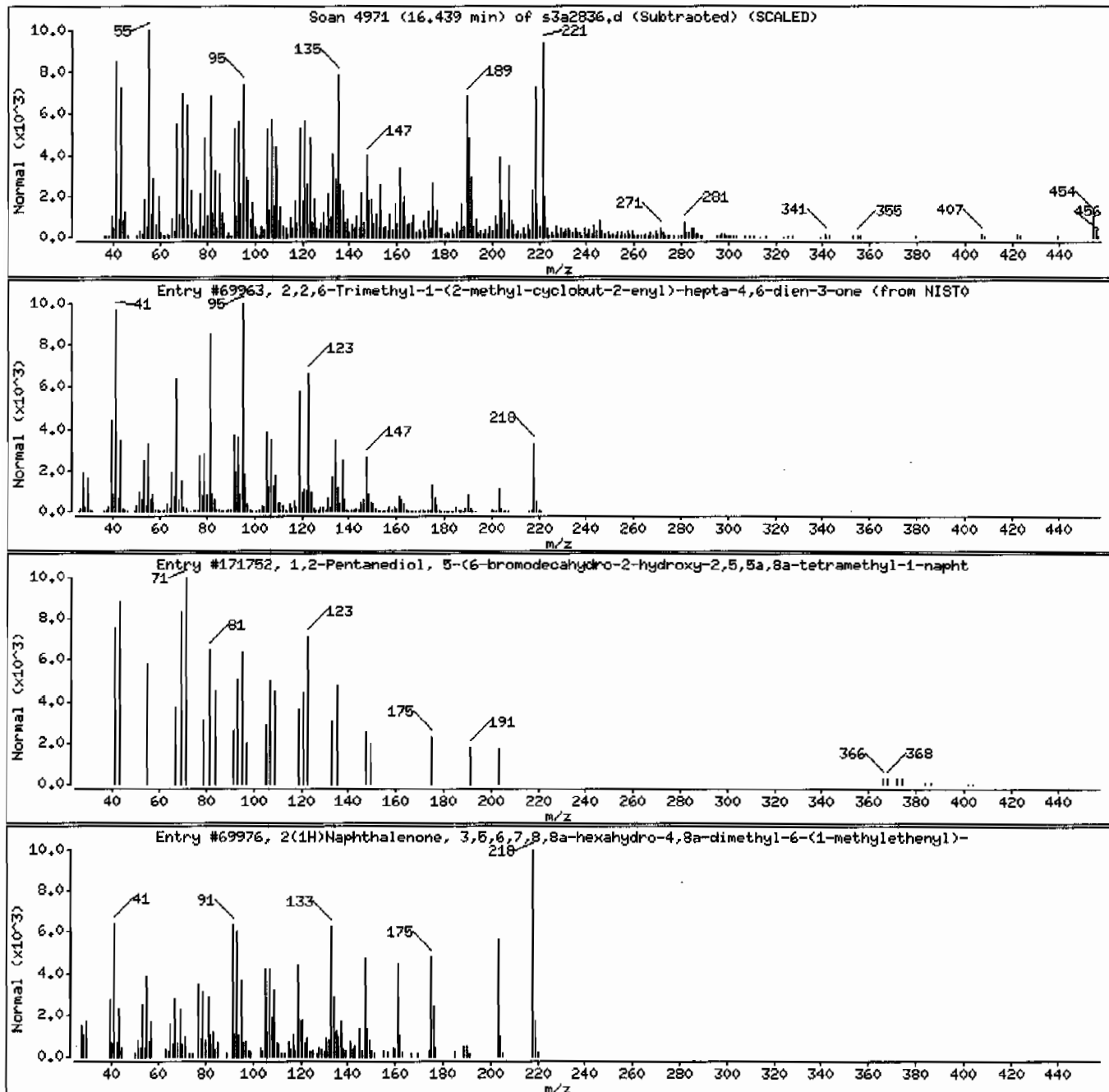
Unknown

2,2,6-Trimethyl-1-(2-methyl-cyclobut-2-yl)

| CAS Number   | Library  | Entry  | Quality | Formula    | Weight |
|--------------|----------|--------|---------|------------|--------|
| 1000188-72-8 | NIST05.L | 69963  | 38      | C15H22O    | 218    |
| 115346-29-7  | NIST05.L | 171752 | 38      | C20H35BrO3 | 402    |
| 1000188-66-5 | NIST05.L | 69976  | 35      | C15H22O    | 218    |

1,2-Pentanediol, 5-(6-bromodecahydro-2-h

2(1H)Naphthalenone, 3,5,6,7,8,8a-hexahyd





Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 1245114008194487411SVHF11ILANL

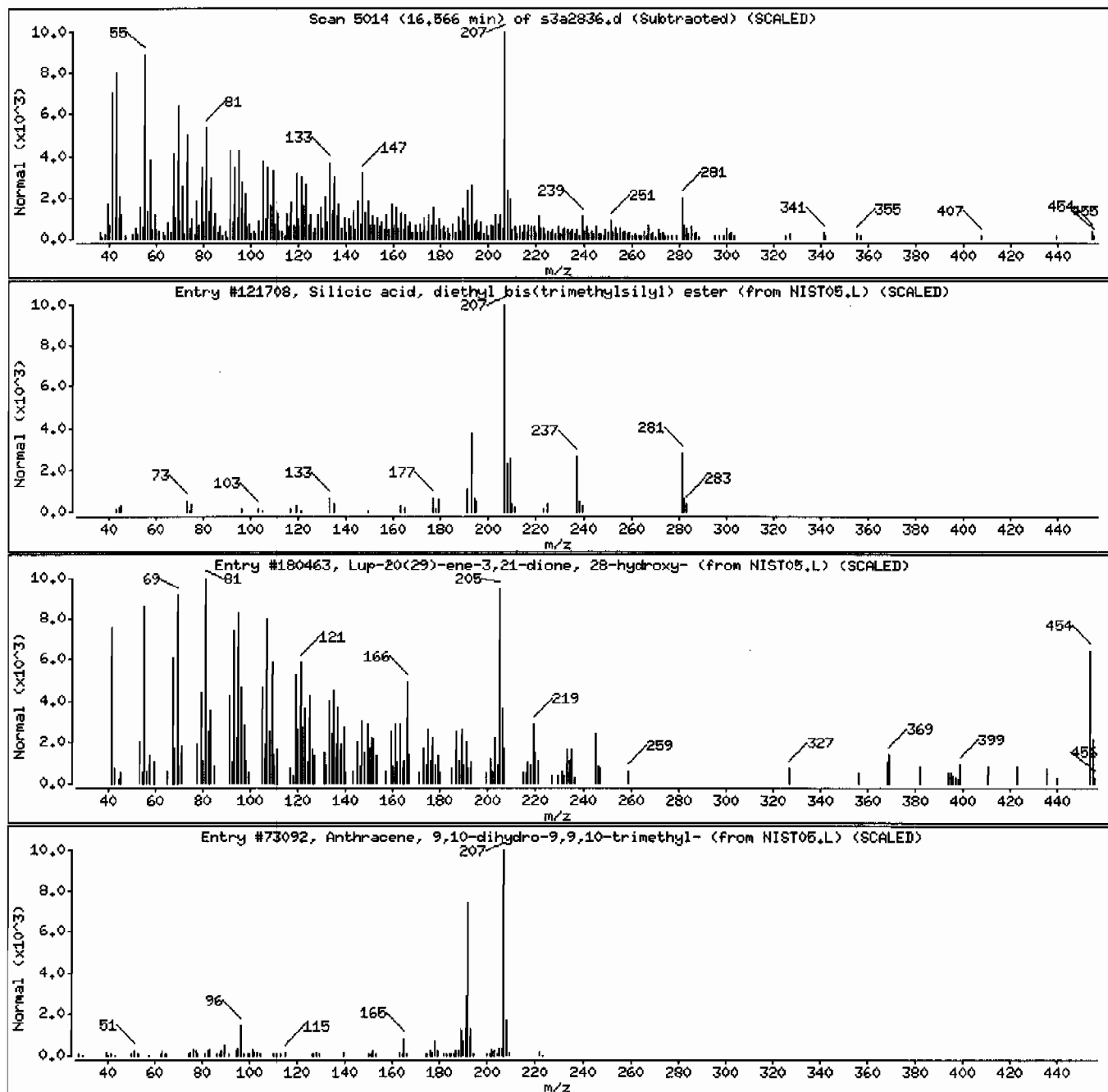
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match             | CAS Number | Library  | Entry  | Quality | Formula     | Weight |
|---|------------|----------|--------|---------|-------------|--------|
| Unknown                                   |            |          |        |         |             |        |
| Silicic acid, diethyl bis(trimethylsilyl) | 3555-45-1  | NIST05.L | 121708 | 49      | C10H28O4Si3 | 296    |
| Lup-20(29)-ene-3,21-dione, 28-hydroxy-    | 13952-73-3 | NIST05.L | 180463 | 41      | C30H46O3    | 454    |
| Anthracene, 9,10-dihydro-9,9,10-trimethy  | 14923-29-6 | NIST05.L | 73092  | 35      | C17H18      | 222    |



Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 1245114008194487411|SVMF11|LANL

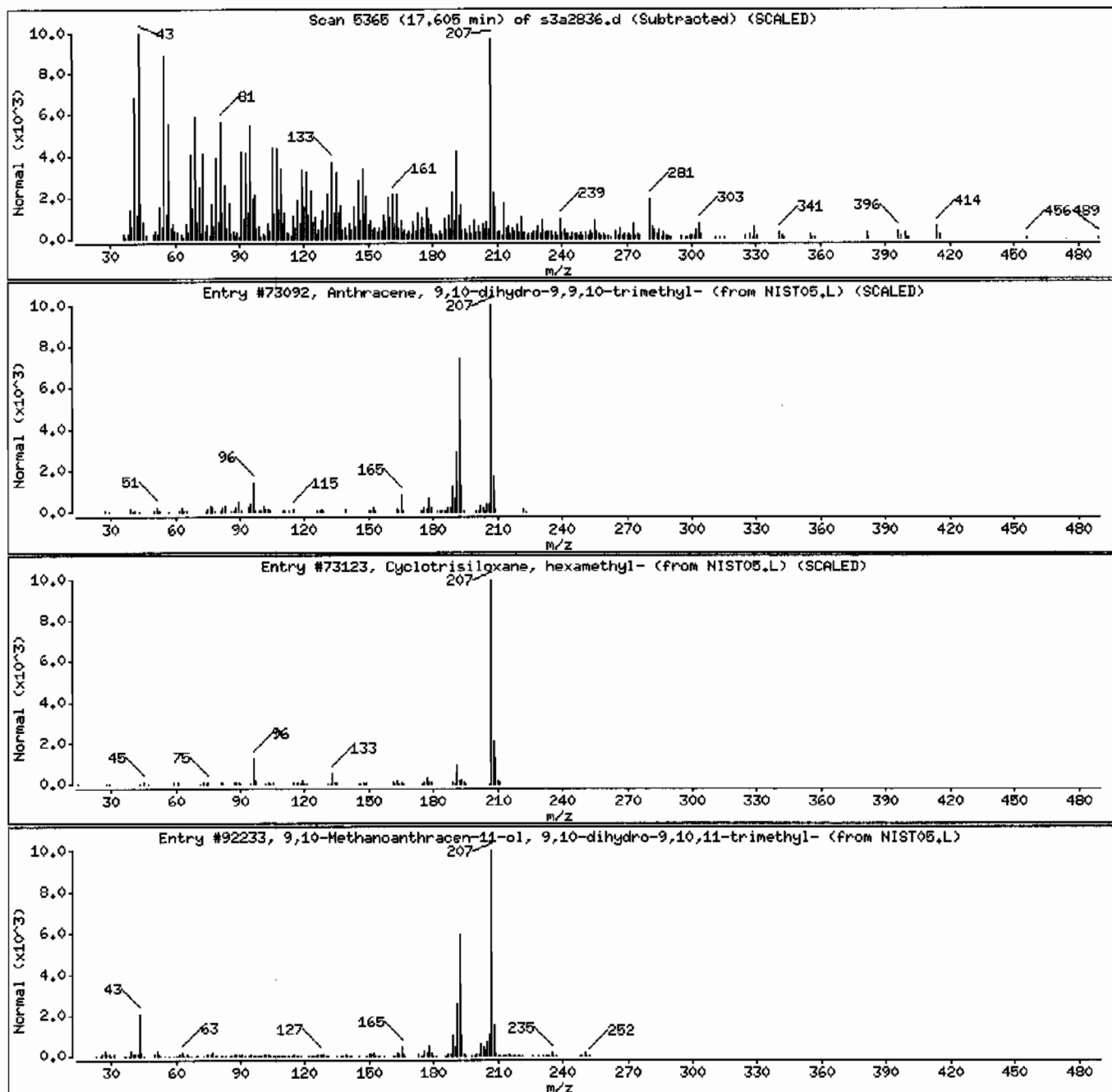
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match               | CAS Number  | Library  | Entry | Quality | Formula    | Weight |
|---|-------------|----------|-------|---------|------------|--------|
| Unknown                                     |             |          |       |         |            |        |
| Anthracene, 9,10-dihydro-9,9,10-trimethyl-  | 14923-29-6  | NIST05.L | 73092 | 46      | C17H18     | 222    |
| Cyclotrisiloxane, hexamethyl-               | 541-05-9    | NIST05.L | 73123 | 43      | C6H18O3Si3 | 222    |
| 9,10-Methanoanthracene-11-ol, 9,10-dihydro- | 126615-74-5 | NIST05.L | 92233 | 41      | C18H18O    | 250    |



Date : 29-JAN-2010 01:19

Client ID: RE15-10-8422

Instrument: MSD3.i

Sample Info: 1245114008194487411SVMF111LANL

Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

## Library Search Compound Match

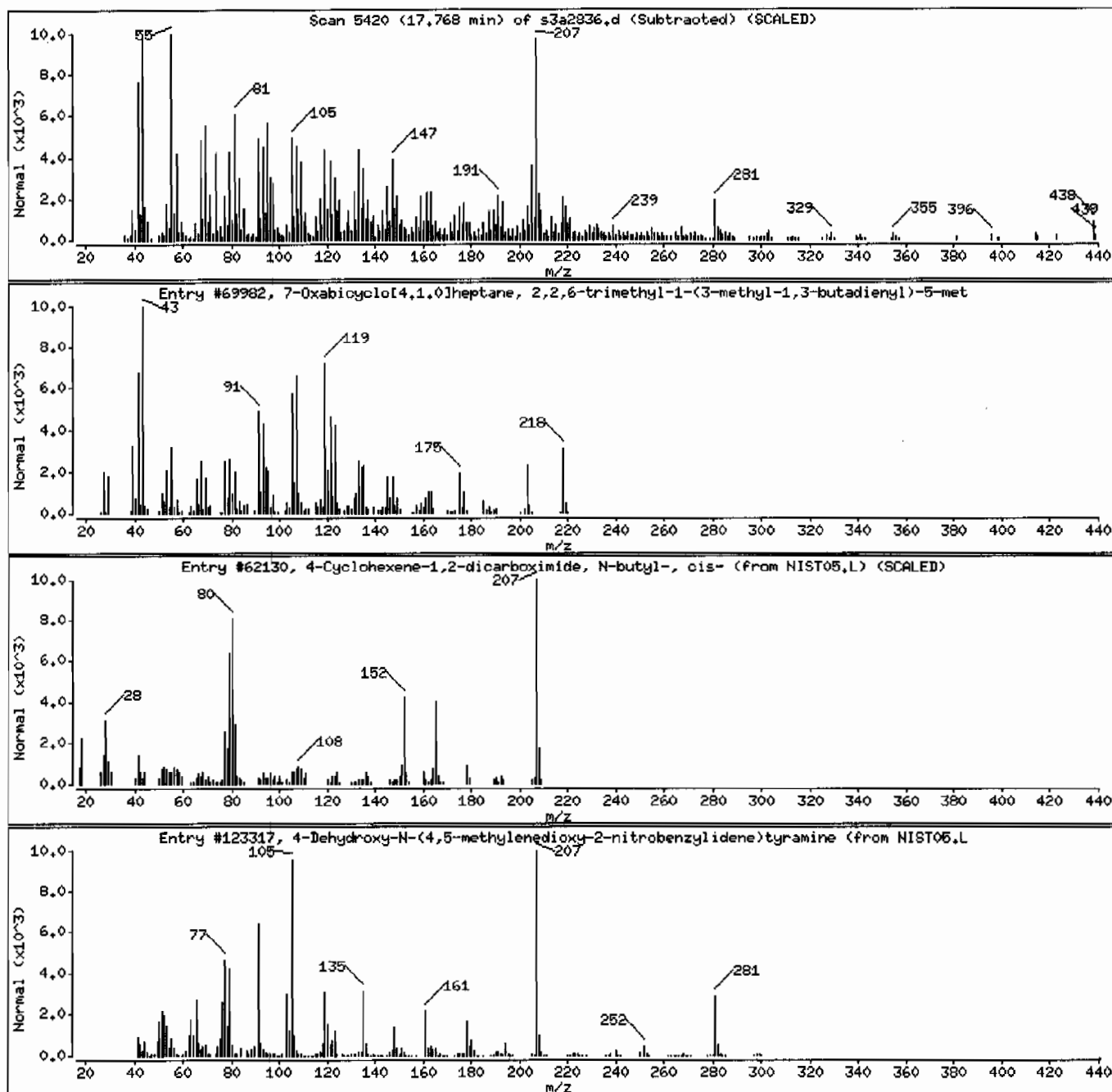
Unknown

7-Oxabicyclo[4,1,0]heptane, 2,2,6-trimet

| CAS Number   | Library  | Entry  | Quality | Formula    | Weight |
|--------------|----------|--------|---------|------------|--------|
| 70038-20-9   | NIST05.L | 69982  | 78      | C15H22O    | 218    |
| 28916-00-9   | NIST05.L | 62130  | 44      | C12H17NO2  | 207    |
| 1000111-66-9 | NIST05.L | 123317 | 30      | C16H14N2O4 | 298    |

4-Cyclohexene-1,2-dicarboximide, N-butyl

4-Dehydroxy-N-(4,5-methylenedioxy-2-nitr



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114010

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.02 g  
Column: J&W DB-5MS

Matrix: R  
% Moisture: 9.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8423  
Batch ID: 944874  
Run Date: 01/27/2010 20:10  
Prep Date: 01/25/2010 21:06  
Data File: s3a2727.d

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 368    | ug/kg | 73.5    | 368     |
| 108-95-2   | Phenol                        | U         | 368    | ug/kg | 73.5    | 368     |
| 95-57-8    | 2-Chlorophenol                | U         | 368    | ug/kg | 73.5    | 368     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 368    | ug/kg | 73.5    | 368     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 368    | ug/kg | 73.5    | 368     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 368    | ug/kg | 73.5    | 368     |
| 83-32-9    | Acenaphthene                  | U         | 36.8   | ug/kg | 12.1    | 36.8    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 368    | ug/kg | 36.8    | 368     |
| 100-02-7   | 4-Nitrophenol                 | U         | 368    | ug/kg | 121     | 368     |
| 87-86-5    | Pentachlorophenol             | U         | 368    | ug/kg | 91.9    | 368     |
| 129-00-0   | Pyrene                        |           | 38.4   | ug/kg | 11.0    | 36.8    |
| 110-86-1   | Pyridine                      | U         | 368    | ug/kg | 73.5    | 368     |
| 62-53-3    | Aniline                       | U         | 368    | ug/kg | 110     | 368     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 368    | ug/kg | 73.5    | 368     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 368    | ug/kg | 73.5    | 368     |
| 100-51-6   | Benzyl alcohol                | U         | 368    | ug/kg | 110     | 368     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 368    | ug/kg | 73.5    | 368     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 368    | ug/kg | 73.5    | 368     |
| 95-48-7    | o-Cresol                      | U         | 368    | ug/kg | 73.5    | 368     |
| 65794-96-9 | m,p-Cresols                   | U         | 368    | ug/kg | 110     | 368     |
| 67-72-1    | Hexachlorocthane              | U         | 368    | ug/kg | 73.5    | 368     |
| 98-95-3    | Nitrobenzene                  | U         | 368    | ug/kg | 73.5    | 368     |
| 78-59-1    | Isophorone                    | U         | 368    | ug/kg | 73.5    | 368     |
| 88-75-5    | 2-Nitrophenol                 | U         | 368    | ug/kg | 73.5    | 368     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 368    | ug/kg | 129     | 368     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 368    | ug/kg | 73.5    | 368     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 368    | ug/kg | 73.5    | 368     |
| 65-85-0    | Benzoic acid                  | U         | 735    | ug/kg | 184     | 735     |
| 91-20-3    | Naphthalene                   | U         | 36.8   | ug/kg | 11.0    | 36.8    |
| 106-47-8   | 4-Chloroaniline               | U         | 368    | ug/kg | 73.5    | 368     |
| 87-68-3    | Hexachlorobutadiene           | U         | 368    | ug/kg | 73.5    | 368     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 36.8   | ug/kg | 7.35    | 36.8    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 368    | ug/kg | 73.5    | 368     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 368    | ug/kg | 73.5    | 368     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 368    | ug/kg | 73.5    | 368     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 36.8   | ug/kg | 12.1    | 36.8    |
| 88-74-4    | 2-Nitroaniline                | U         | 368    | ug/kg | 73.5    | 368     |
|            | <i>o</i> -Nitroaniline        |           |        |       |         |         |
| 99-09-2    | 3-Nitroaniline                | U         | 368    | ug/kg | 73.5    | 368     |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1324  
Lab Sample ID: 245114010

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.02 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8423  
Batch ID: 944874  
Run Date: 01/27/2010 20:10  
Prep Date: 01/25/2010 21:06  
Data File: s3a2727.d

| CAS No.   | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|----------------------------|-----------|--------|-------|---------|---------|
|           | <i>m</i> -Nitroaniline     |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate          | U         | 368    | ug/kg | 73.5    | 368     |
| 606-20-2  | 2,6-Dinitrotoluene         | U         | 368    | ug/kg | 36.8    | 368     |
| 208-96-8  | Acenaphthylene             | U         | 36.8   | ug/kg | 11.0    | 36.8    |
| 51-28-5   | 2,4-Dinitrophenol          | U         | 735    | ug/kg | 140     | 735     |
| 132-64-9  | Dibenzofuran               | U         | 368    | ug/kg | 73.5    | 368     |
| 84-66-2   | Diethylphthalate           | U         | 368    | ug/kg | 73.5    | 368     |
| 86-73-7   | Fluorene                   | U         | 36.8   | ug/kg | 11.0    | 36.8    |
| 7005-72-3 | 4-Chlorophenylphenylether  | U         | 368    | ug/kg | 73.5    | 368     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol | U         | 368    | ug/kg | 73.5    | 368     |
| 100-01-6  | 4-Nitroaniline             | U         | 368    | ug/kg | 110     | 368     |
|           | <i>p</i> -Nitroaniline     |           |        |       |         |         |
| 122-39-4  | Diphenylamine              | U         | 368    | ug/kg | 73.5    | 368     |
| 122-66-7  | Azobenzene                 | U         | 368    | ug/kg | 73.5    | 368     |
|           | 1,2-Diphenylhydrazine      |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether   | U         | 368    | ug/kg | 73.5    | 368     |
| 118-74-1  | Hexachlorobenzene          | U         | 368    | ug/kg | 73.5    | 368     |
| 85-01-8   | Phenanthrene               | J         | 14.9   | ug/kg | 11.0    | 36.8    |
| 120-12-7  | Anthracene                 | U         | 36.8   | ug/kg | 7.35    | 36.8    |
| 84-74-2   | Di-n-butylphthalate        | J         | 244    | ug/kg | 73.5    | 368     |
| 206-44-0  | Fluoranthene               | J         | 18.2   | ug/kg | 11.0    | 36.8    |
| 85-68-7   | Butylbenzylphthalate       | U         | 368    | ug/kg | 73.5    | 368     |
| 56-55-3   | Benzo(a)anthracene         | J         | 14.4   | ug/kg | 11.0    | 36.8    |
| 91-94-1   | 3,3'-Dichlorobenzidine     | U         | 368    | ug/kg | 110     | 368     |
| 218-01-9  | Chrysene                   | J         | 12.4   | ug/kg | 11.0    | 36.8    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | U         | 368    | ug/kg | 73.5    | 368     |
| 117-84-0  | Di-n-octylphthalate        | U         | 368    | ug/kg | 73.5    | 368     |
| 205-99-2  | Benzo(b)fluoranthene       | U         | 36.8   | ug/kg | 11.0    | 36.8    |
| 207-08-9  | Benzo(k)fluoranthene       | U         | 36.8   | ug/kg | 11.0    | 36.8    |
| 50-32-8   | Benzo(a)pyrene             | J         | 12.8   | ug/kg | 11.0    | 36.8    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene     | U         | 36.8   | ug/kg | 11.0    | 36.8    |
| 53-70-3   | Dibenzo(a,h)anthracene     | U         | 36.8   | ug/kg | 11.0    | 36.8    |
| 191-24-2  | Benzo(ghi)perylene         | U         | 36.8   | ug/kg | 11.0    | 36.8    |
| 120-82-1  | 1,2,4-Trichlorobenzene     | U         | 368    | ug/kg | 73.5    | 368     |

## Tentatively Identified Compound Summary

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.11 | 3700      | ug/kg |     | J    |
|         | Unknown                               | 2.29 | 247       | ug/kg |     | J    |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1324  
Lab Sample ID: 245114010

Client ID: RE15-10-8423  
Batch ID: 944874  
Run Date: 01/27/2010 20:10  
Prep Date: 01/25/2010 21:06  
Data File: s3a2727.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.02 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.  | Parmname                                 | Qualifier | Result    | Units | MDL/LOD | PQL/LOQ |
|--|--|-----------|-----------|-------|---------|---------|
| <b>Tentatively Identified Compound Summary</b> |  |           |           |       |         |         |
| CAS No.  | Tentatively Identified Compound (TIC)    | RT        | Estimated | Units | Fit     | Qual    |
|  | Unknown Aldol Condensate                 | 3.4       | 192       | ug/kg |         | JA      |
| 3387-41-5                                      | Bicyclo[3.1.0]hexane, 4-methylene-1-(1-m | 4.48      | 277       | ug/kg | 83      | NJ      |
| 127-91-3                                       | .beta.-Pinene                            | 4.55      | 206       | ug/kg | 97      | NJ      |
| 498-15-7                                       | Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy | 4.76      | 1300      | ug/kg | 97      | NJ      |
| 138-86-3                                       | Limonene                                 | 4.9       | 251       | ug/kg | 95      | NJ      |
| 1117-52-8                                      | 5,9,13-Pentadecatien-2-one, 6,10,14-tri  | 9.96      | 262       | ug/kg | 83      | NJ      |
|  | Unknown                                  | 11.09     | 164       | ug/kg |         | J       |
| 118-65-0                                       | Bicyclo[7.2.0]undec-4-ene, 4,11,11-trime | 11.46     | 537       | ug/kg | 92      | NJ      |
|  | Unknown                                  | 11.53     | 485       | ug/kg |         | J       |
| 1686-62-0                                      | 1-Phenanthrenecarboxylic acid, 7-ethenyl | 11.75     | 506       | ug/kg | 95      | NJ      |
|  | Unknown                                  | 11.79     | 180       | ug/kg |         | J       |
| 1235-74-1                                      | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.87     | 427       | ug/kg | 98      | NJ      |
| 17974-57-1                                     | (3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1 | 11.9      | 378       | ug/kg | 90      | NJ      |
|  | Unknown                                  | 12.1      | 191       | ug/kg |         | J       |
|  | Unknown                                  | 12.11     | 249       | ug/kg |         | J       |
|  | Unknown                                  | 12.36     | 309       | ug/kg |         | J       |
|  | Unknown                                  | 12.78     | 227       | ug/kg |         | J       |
| 309735-29-3                                    | 1,2-Benzisothiazole, 3-(hexahydro-1H-aze | 13.34     | 269       | ug/kg | 91      | NJ      |
|  | Unknown                                  | 15.09     | 491       | ug/kg |         | J       |
|  | Unknown                                  | 15.19     | 560       | ug/kg |         | J       |
|  | Unknown                                  | 15.82     | 630       | ug/kg |         | J       |
|  | Unknown                                  | 15.89     | 520       | ug/kg |         | J       |
|  | Unknown                                  | 15.98     | 1330      | ug/kg |         | J       |
|  | Unknown                                  | 16.84     | 557       | ug/kg |         | J       |
|  | Unknown                                  | 17.17     | 620       | ug/kg |         | J       |
| 83-47-6  | .gamma.-Sitosterol                       | 17.67     | 2010      | ug/kg | 97      | NJ      |
| 1058-61-3                                      | Stigmast-4-en-3-one                      | 18.81     | 1310      | ug/kg | 89      | NJ      |

Report Date: 28-Jan-2010 09:23

## GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2727.d

Lab Smp Id: 245114010

Client Smp ID: RE15-10-8423

Inj Date : 27-JAN-2010 20:10

Operator : JLD1

Inst ID: MSD3.i

Smp Info : |245114010|944874|1|SVMF|1|LANL

Misc Info : |MSD8270\_S|WBN100107-02|

Comment : Column: J&amp;W DB-5MS, 25 m x 0.20 mm x 0.33 micron film

Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m

Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD

Cal Date : 21-JAN-2010 21:36

Cal File: s3a2130.d

Als bottle: 27

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1324.sub

Target Version: 3.50

Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.02000  | weight of sample          |
| M    | 9.36140   | % moisture                |

Cpnd Variable

Local Compound Variable

| Compounds                   | QUANT SIG |        |        |         | RESPONSE | CONCENTRATIONS |         |
|-----------------------------|-----------|--------|--------|---------|----------|----------------|---------|
|                             | MASS      | RT     | EXP RT | REL RT  |          | ON-COLUMN      | FINAL   |
|                             |           |        |        |         |          | (ng/ul)        | (ug/Kg) |
| * 10 1,4-Dichlorobenzene-d4 | 152       | 4.819  | 4.817  | (1.000) | 225865   | 40.0000        |         |
| * 29 Naphthalene-d8         | 136       | 6.099  | 6.100  | (1.000) | 896817   | 40.0000        |         |
| * 46 Acenaphthene-d10       | 164       | 7.976  | 7.973  | (1.000) | 514542   | 40.0000        |         |
| * 67 Phenanthrene-d10       | 188       | 9.591  | 9.588  | (1.000) | 826591   | 40.0000        |         |
| * 91 Chrysene-d12           | 240       | 12.619 | 12.610 | (1.000) | 485708   | 40.0000        |         |
| * 98 Perylene-d12           | 264       | 14.963 | 14.945 | (1.000) | 216837   | 40.0000        |         |
| \$ 3 2-Fluorophenol         | 112       | 3.645  | 3.633  | (0.756) | 386246   | 65.7183        | 2420    |
| \$ 5 Phenol-d5              | 99        | 4.428  | 4.418  | (0.919) | 480936   | 65.1101        | 2390    |
| \$ 20 Nitrobenzene-d5       | 82        | 5.356  | 5.357  | (0.878) | 232024   | 35.0242        | 1290    |
| \$ 39 2-Fluorobiphenyl      | 172       | 7.229  | 7.227  | (0.906) | 496166   | 37.3062        | 1370    |
| \$ 60 2,4,6-Tribromophenol  | 329       | 8.832  | 8.825  | (1.107) | 126219   | 85.5693        | 3140    |
| \$ 81 p-Terphenyl-d14       | 244       | 11.303 | 11.297 | (0.896) | 485006   | 58.0956        | 2140    |

| Compounds              | QUANT SIG |        |        |         |          | CONCENTRATIONS       |                  |
|------------------------|-----------|--------|--------|---------|----------|----------------------|------------------|
|                        | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/Kg) |
| =====                  | =====     | ==     | =====  | =====   | =====    | =====                | =====            |
| 79 Pyrene              | 202       | 11.161 | 11.156 | (0.884) | 14552    | 1.04583              | 38.4             |
| 68 Phenanthrene        | 178       | 9.615  | 9.615  | (1.002) | 7345     | 0.40426              | 14.8 (a)         |
| 72 Di-n-butylphthalate | 149       | 10.175 | 10.173 | (1.061) | 145693   | 6.64125              | 244 (a)          |
| 76 Fluoranthene        | 202       | 10.910 | 10.906 | (1.137) | 8171     | 0.49424              | 18.2 (a)         |
| 89 Benzo(a)anthracene  | 228       | 12.604 | 12.592 | (0.999) | 4363     | 0.39231              | 14.4 (a)         |
| 92 Chrysene            | 228       | 12.654 | 12.646 | (1.003) | 3538     | 0.33821              | 12.4 (a)         |
| 97 Benzo(a)pyrene      | 252       | 14.860 | 14.845 | (0.993) | 1548     | 0.34911              | 12.8 (a)         |

#### QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).



## ION RATIO REPORT

## SV REPORT

Data file: s3a2727.d

Report Date: 01/28/2010 08:39

Lab. ID: 245114010

SampleType: SAMPLE

Injection Date: 27-JAN-2010 20:10

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245114010|944874|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1324

Sample Matrix: SOIL

| MASS                      | RESPONSE | RT             | EXPECT RT | TARGET RANGE | RATIO | QUAL |
|---------------------------|----------|----------------|-----------|--------------|-------|------|
| =====                     |          |                |           |              |       |      |
| 4 Aniline                 |          | CAS#: 62-53-3  |           |              |       |      |
| 66                        | 27200    | 4.43           | 4.50      | 80-120       | 100   | (T)  |
| 93                        | 14594    | 4.48           | 4.50      | 205-265      | 54    | (Q)  |
| -----                     |          |                |           |              |       |      |
| 6 Phenol                  |          | CAS#: 108-95-2 |           |              |       |      |
| 94                        | 20726    | 4.18           | 4.43      | 80-120       | 100   | (T)  |
| 66                        | 4508     | 4.18           | 4.43      | 18- 78       | 22    | (T)  |
| 65                        | 17776    | 4.18           | 4.43      | 5- 65        | 86    | (QT) |
| -----                     |          |                |           |              |       |      |
| 17 N-Nitrosodipropylamine |          | CAS#: 621-64-7 |           |              |       |      |
| 70                        | 33094    | 5.36           | 5.19      | 80-120       | 100   | (T)  |
| 42                        | 22671    | 5.36           | 5.19      | 43-103       | 69    | (T)  |
| -----                     |          |                |           |              |       |      |
| 40 2-Chloronaphthalene    |          | CAS#: 91-58-7  |           |              |       |      |
| 162                       | 23795    | 7.57           | 7.37      | 80-120       | 100   | (T)  |
| 164                       | 1557     | 7.57           | 7.37      | 2- 62        | 7     | (T)  |
| 127                       | 2279     | 7.57           | 7.37      | 9- 69        | 10    | (T)  |
| -----                     |          |                |           |              |       |      |
| 42 o-Nitroaniline         |          | CAS#: 88-74-4  |           |              |       |      |
| 65                        | 37643    | 7.57           | 7.47      | 80-120       | 100   | (T)  |
| 92                        | 36706    | 7.57           | 7.47      | 33- 93       | 98    | (QT) |
| 138                       | 6389     | 7.57           | 7.47      | 72-132       | 17    | (QT) |
| -----                     |          |                |           |              |       |      |
| 41 m-Nitroaniline         |          | CAS#: 99-09-2  |           |              |       |      |
| 138                       | 101      | 7.96           | 7.92      | 80-120       | 100   | ( )  |
| 92                        | 1871     | 7.95           | 7.92      | 79-139       | 1844  | (Q)  |
| 108                       | 790      | 7.95           | 7.92      | 0- 40        | 779   | (Q)  |
| -----                     |          |                |           |              |       |      |

| MASS                      | RESPONSE | RT    | EXPECT RT | TARGET RANGE   | RATIO | QUAL |
|---------------------------|----------|-------|-----------|----------------|-------|------|
| <hr/>                     |          |       |           |                |       |      |
| 44 2,6-Dinitrotoluene     |          |       |           | CAS#: 606-20-2 |       |      |
| 165                       | 67404    | 7.98  | 7.73      | 80-120         | 100   | (T)  |
| 63                        | 926      | 7.98  | 7.73      | 35- 95         | 1     | (QT) |
| <hr/>                     |          |       |           |                |       |      |
| 50 2,4-Dinitrotoluene     |          |       |           | CAS#: 121-14-2 |       |      |
| 165                       | 67404    | 7.98  | 8.16      | 80-120         | 100   | (T)  |
| 89                        | 1167     | 7.98  | 8.16      | 42-102         | 2     | (QT) |
| 63                        | 926      | 7.98  | 8.16      | 20- 80         | 1     | (QT) |
| <hr/>                     |          |       |           |                |       |      |
| 56 p-Nitroaniline         |          |       |           | CAS#: 100-01-6 |       |      |
| 138                       | 246      | 8.56  | 8.58      | 80-120         | 100   | ( )  |
| 108                       | 1224     | 8.56  | 8.58      | 41-101         | 498   | (Q)  |
| 92                        | 273      | 8.57  | 8.58      | 17- 77         | 111   | (Q)  |
| <hr/>                     |          |       |           |                |       |      |
| 68 Phenanthrene           |          |       |           | CAS#: 85-01-8  |       |      |
| 178                       | 7345     | 9.61  | 9.61      | 80-120         | 100   | ( )  |
| 179                       | 1171     | 9.62  | 9.61      | 0- 45          | 16    | ( )  |
| 176                       | 1498     | 9.62  | 9.61      | 0- 49          | 20    | ( )  |
| <hr/>                     |          |       |           |                |       |      |
| 69 Anthracene             |          |       |           | CAS#: 120-12-7 |       |      |
| 178                       | 7345     | 9.61  | 9.67      | 80-120         | 100   | ( )  |
| 179                       | 1171     | 9.62  | 9.67      | 0- 45          | 16    | ( )  |
| 176                       | 1498     | 9.62  | 9.67      | 0- 48          | 20    | ( )  |
| <hr/>                     |          |       |           |                |       |      |
| 72 Di-n-butylphthalate    |          |       |           | CAS#: 84-74-2  |       |      |
| 149                       | 145693   | 10.17 | 10.17     | 80-120         | 100   | ( )  |
| 150                       | 13279    | 10.17 | 10.17     | 0- 39          | 9     | ( )  |
| 104                       | 7727     | 10.17 | 10.17     | 0- 36          | 5     | ( )  |
| <hr/>                     |          |       |           |                |       |      |
| 76 Fluoranthene           |          |       |           | CAS#: 206-44-0 |       |      |
| 202                       | 8171     | 10.91 | 10.91     | 80-120         | 100   | ( )  |
| 203                       | 1390     | 10.91 | 10.91     | 0- 47          | 17    | ( )  |
| 101                       | 1168     | 10.91 | 10.90     | 0- 43          | 14    | ( )  |
| <hr/>                     |          |       |           |                |       |      |
| 79 Pyrene                 |          |       |           | CAS#: 129-00-0 |       |      |
| 202                       | 14552    | 11.16 | 11.16     | 80-120         | 100   | ( )  |
| 200                       | 3348     | 11.16 | 11.16     | 0- 51          | 23    | ( )  |
| 101                       | 2220     | 11.16 | 11.16     | 0- 46          | 15    | ( )  |
| <hr/>                     |          |       |           |                |       |      |
| 89 Benzo(a)anthracene     |          |       |           | CAS#: 56-55-3  |       |      |
| 228                       | 4363     | 12.60 | 12.59     | 80-120         | 100   | ( )  |
| 226                       | 1206     | 12.60 | 12.59     | 0- 56          | 28    | ( )  |
| 229                       | 1006     | 12.61 | 12.59     | 0- 50          | 23    | ( )  |
| <hr/>                     |          |       |           |                |       |      |
| 90 3,3'-Dichlorobenzidine |          |       |           | CAS#: 91-94-1  |       |      |
| 252                       | 145      | 12.53 | 12.53     | 80-120         | 100   | ( )  |
| 254                       | 390      | 12.51 | 12.53     | 35- 95         | 269   | (Q)  |
| 126                       | 105      | 12.57 | 12.53     | 0- 45          | 72    | (Q)  |
| <hr/>                     |          |       |           |                |       |      |

| MASS                    | RESPONSE | RT             | EXPECT RT | TARGET RANGE | RATIO | QUAL |
|-------------------------|----------|----------------|-----------|--------------|-------|------|
| =====                   |          |                |           |              |       |      |
| 92 Chrysene             |          | CAS#: 218-01-9 |           |              |       |      |
| 228                     | 3538     | 12.65          | 12.65     | 80-120       | 100   | ( )  |
| 229                     | 544      | 12.65          | 12.65     | 0- 50        | 15    | ( )  |
| 226                     | 1308     | 12.65          | 12.65     | 0- 59        | 37    | ( )  |
| -----                   |          |                |           |              |       |      |
| 95 Benzo(b)fluoranthene |          | CAS#: 205-99-2 |           |              |       |      |
| 252                     | 2114     | 14.29          | 14.27     | 80-120       | 100   | ( )  |
| 253                     | 184      | 14.29          | 14.27     | 0- 52        | 9     | ( )  |
| 125                     | 162      | 14.30          | 14.27     | 0- 43        | 8     | ( )  |
| -----                   |          |                |           |              |       |      |
| 96 Benzo(k)fluoranthene |          | CAS#: 207-08-9 |           |              |       |      |
| 252                     | 2114     | 14.29          | 14.32     | 80-120       | 100   | ( )  |
| 253                     | 234      | 14.28          | 14.32     | 0- 52        | 11    | ( )  |
| 125                     | 162      | 14.30          | 14.31     | 0- 43        | 8     | ( )  |
| -----                   |          |                |           |              |       |      |
| 97 Benzo(a)pyrene       |          | CAS#: 50-32-8  |           |              |       |      |
| 252                     | 1548     | 14.86          | 14.84     | 80-120       | 100   | ( )  |
| 253                     | 391      | 14.87          | 14.84     | 0- 52        | 25    | ( )  |
| 125                     | 296      | 14.86          | 14.84     | 0- 47        | 19    | ( )  |
| -----                   |          |                |           |              |       |      |

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2727.d  
Lab Smp Id: 245114010 Client Smp ID: RE15-10-8423  
Inj Date : 27-JAN-2010 20:10  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |245114010|944874|1|SVMF|1|LANL  
Misc Info : |MSD8270 S|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m  
Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 27  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1324.sub  
Target Version: 3.50  
Processing Host: hpclp1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.02000  | weight of sample          |
| M    | 9.36140   | % moisture                |

Cpnd Variable

Local Compound Variable

| ISTD                        | RT     | AREA    | AMOUNT |
|-----------------------------|--------|---------|--------|
| =====                       | =====  | =====   | =====  |
| * 10 1,4-Dichlorobenzene-d4 | 4.819  | 1451060 | 40.000 |
| * 67 Phenanthrene-d10       | 9.591  | 2121274 | 40.000 |
| * 91 Chrysene-d12           | 12.619 | 1643638 | 40.000 |
| * 98 Perylene-d12           | 14.963 | 599990  | 40.000 |

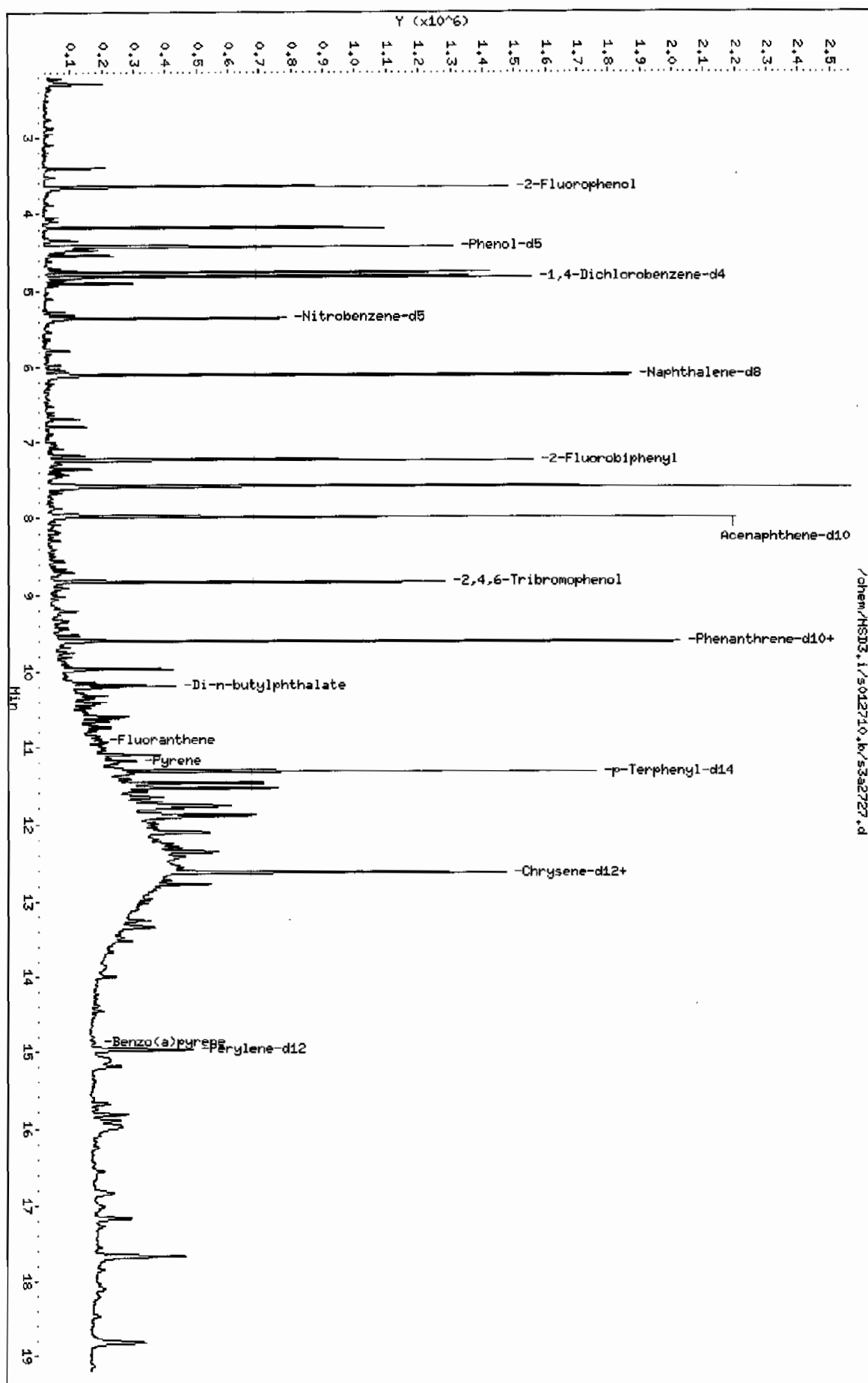
| CONCENTRATIONS |       |               |              |       | QUANT   |           |        |
|----------------|-------|---------------|--------------|-------|---------|-----------|--------|
| RT             | AREA  | ON-COL(ng/ul) | FINAL(ug/Kg) | QUAL  | LIBRARY | LIB ENTRY | CPND # |
| =====          | ===== | =====         | =====        | ===== | =====   | =====     | =====  |

| CONCENTRATIONS                           |         |               |              | QUANT             |          |           |        |
|--|---------|---------------|--------------|-------------------|----------|-----------|--------|
| RT                                       | AREA    | ON-COL(ng/ul) | FINAL(ug/Kg) | QUAL              | LIBRARY  | LTB ENTRY | CPND # |
| =====                                    | =====   | =====         | =====        | =====             | =====    | =====     | =====  |
| Unknown                                  |         |               |              | CAS #:            |          |           |        |
| 2.109                                    | 3653866 | 100.722670    | 3700         | 0                 |          | 0         | 10     |
| Unknown                                  |         |               |              | CAS #:            |          |           |        |
| 2.291                                    | 243534  | 6.71327357    | 247          | 0                 |          | 0         | 10     |
| Unknown Aldol Condensate                 |         |               |              | CAS #:            |          |           |        |
| 3.399                                    | 189895  | 5.23465779    | 192          | 0                 |          | 0         | 10     |
| Bicyclo[3.1.0]hexane, 4-methylene-1-(1-m |         |               |              | CAS #: 3387-41-5  |          |           |        |
| 4.478                                    | 273136  | 7.52927268    | 277          | 83                | NIST05.L | 15373     | 10     |
| .beta.-Pinene                            |         |               |              | CAS #: 127-91-3   |          |           |        |
| 4.546                                    | 203148  | 5.59999199    | 206          | 97                | NIST05.L | 15171     | 10     |
| Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy |         |               |              | CAS #: 498-15-7   |          |           |        |
| 4.757                                    | 1286975 | 35.4768251    | 1300         | 97                | NIST05.L | 15369     | 10     |
| Limonene                                 |         |               |              | CAS #: 138-86-3   |          |           |        |
| 4.904                                    | 247931  | 6.83447843    | 251          | 95                | NIST05.L | 15154     | 10     |
| 5,9,13-Pentadecatrien-2-one, 6,10,14-tri |         |               |              | CAS #: 1117-52-8  |          |           |        |
| 9.960                                    | 378123  | 7.13011460    | 262          | 83                | NIST05.L | 100205    | 67     |
| Unknown                                  |         |               |              | CAS #:            |          |           |        |
| 11.087                                   | 237046  | 4.46987048    | 164          | 0                 |          | 0         | 67     |
| Bicyclo[7.2.0]undec-4-ene, 4,11,11-trime |         |               |              | CAS #: 118-65-0   |          |           |        |
| 11.459                                   | 600086  | 14.6038359    | 537          | 92                | NIST05.L | 59970     | 91     |
| Unknown                                  |         |               |              | CAS #:            |          |           |        |
| 11.527                                   | 542038  | 13.1911843    | 485          | 0                 |          | 0         | 91     |
| 1-Phenanthrenecarboxylic acid, 7-ethenyl |         |               |              | CAS #: 1686-62-0  |          |           |        |
| 11.755                                   | 565722  | 13.7675584    | 506          | 95                | NIST05.L | 134785    | 91     |
| Unknown                                  |         |               |              | CAS #:            |          |           |        |
| 11.787                                   | 201415  | 4.90169826    | 180          | 0                 |          | 0         | 91     |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 |         |               |              | CAS #: 1235-74-1  |          |           |        |
| 11.870                                   | 476952  | 11.6072200    | 426          | 98                | NIST05.L | 133618    | 91     |
| (3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1 |         |               |              | CAS #: 17974-57-1 |          |           |        |
| 11.900                                   | 423188  | 10.2988187    | 378          | 90                | NIST05.L | 97615     | 91     |

| RT                                       | CONCENTRATIONS |               |              | QUAL | QUANT              |           | CPND # |
|--|----------------|---------------|--------------|------|--------------------|-----------|--------|
|  | AREA           | ON-COL(ng/ul) | FINAL(ug/Kg) |      | LIBRARY            | LIB ENTRY |        |
| Unknown                                  |                |               |              |      | CAS #:             |           |        |
| 12.095                                   | 213992         | 5.20777051    | 191          | 0    |                    | 0         | 91     |
| Unknown                                  |                |               |              |      | CAS #:             |           |        |
| 12.107                                   | 278353         | 6.77405778    | 249          | 0    |                    | 0         | 91     |
| Unknown                                  |                |               |              |      | CAS #:             |           |        |
| 12.358                                   | 345725         | 8.41365052    | 309          | 0    |                    | 0         | 91     |
| Unknown                                  |                |               |              |      | CAS #:             |           |        |
| 12.775                                   | 253410         | 6.16703827    | 227          | 0    |                    | 0         | 91     |
| 1,2-Benzisothiazole, 3-(hexahydro-1H-aze |                |               |              |      | CAS #: 309735-29-3 |           |        |
| 13.340                                   | 300689         | 7.31763829    | 269          | 91   | NIST05.L           | 101019    | 91     |
| Unknown                                  |                |               |              |      | CAS #:             |           |        |
| 15.091                                   | 200283         | 13.3524027    | 491          | 0    |                    | 0         | 98     |
| Unknown                                  |                |               |              |      | CAS #:             |           |        |
| 15.185                                   | 228715         | 15.2479105    | 560          | 0    |                    | 0         | 98     |
| Unknown                                  |                |               |              |      | CAS #:             |           |        |
| 15.815                                   | 257275         | 17.1519370    | 630          | 0    |                    | 0         | 98     |
| Unknown                                  |                |               |              |      | CAS #:             |           |        |
| 15.895                                   | 212050         | 14.1368615    | 520          | 0    |                    | 0         | 98     |
| Unknown                                  |                |               |              |      | CAS #:             |           |        |
| 15.978                                   | 543174         | 36.2121606    | 1330         | 0    |                    | 0         | 98     |
| Unknown                                  |                |               |              |      | CAS #:             |           |        |
| 16.838                                   | 227246         | 15.1499749    | 557          | 0    |                    | 0         | 98     |
| Unknown                                  |                |               |              |      | CAS #:             |           |        |
| 17.173                                   | 253105         | 16.8739055    | 620          | 0    |                    | 0         | 98     |
| .gamma.-Sitosterol                       |                |               |              |      | CAS #: 83-47-6     |           |        |
| 17.667                                   | 819693         | 54.6470174    | 2010         | 97   | NIST05.L           | 174402    | 98     |
| Stigmast-4-en-3-one                      |                |               |              |      | CAS #: 1058-61-3   |           |        |
| 18.809                                   | 533486         | 35.5662933    | 1310         | 89   | NIST05.L           | 173936    | 98     |

Data File: /chem/HSD3.i/s012710.k/s3a2727.d  
 Date: 27-JAN-2010 20:10  
 Client ID: RE15-10-8423  
 Sample Info: 1245114010194487411SVNF111LNL  
 Volume Injected (uL): 0.5  
 Column phase: JMW DB-SHS

Instrument: HSD3.i  
 Operator: JMJ  
 Column diameter: 0.20



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944874111SVHF111LANL

Volume Injected (uL): 0.5

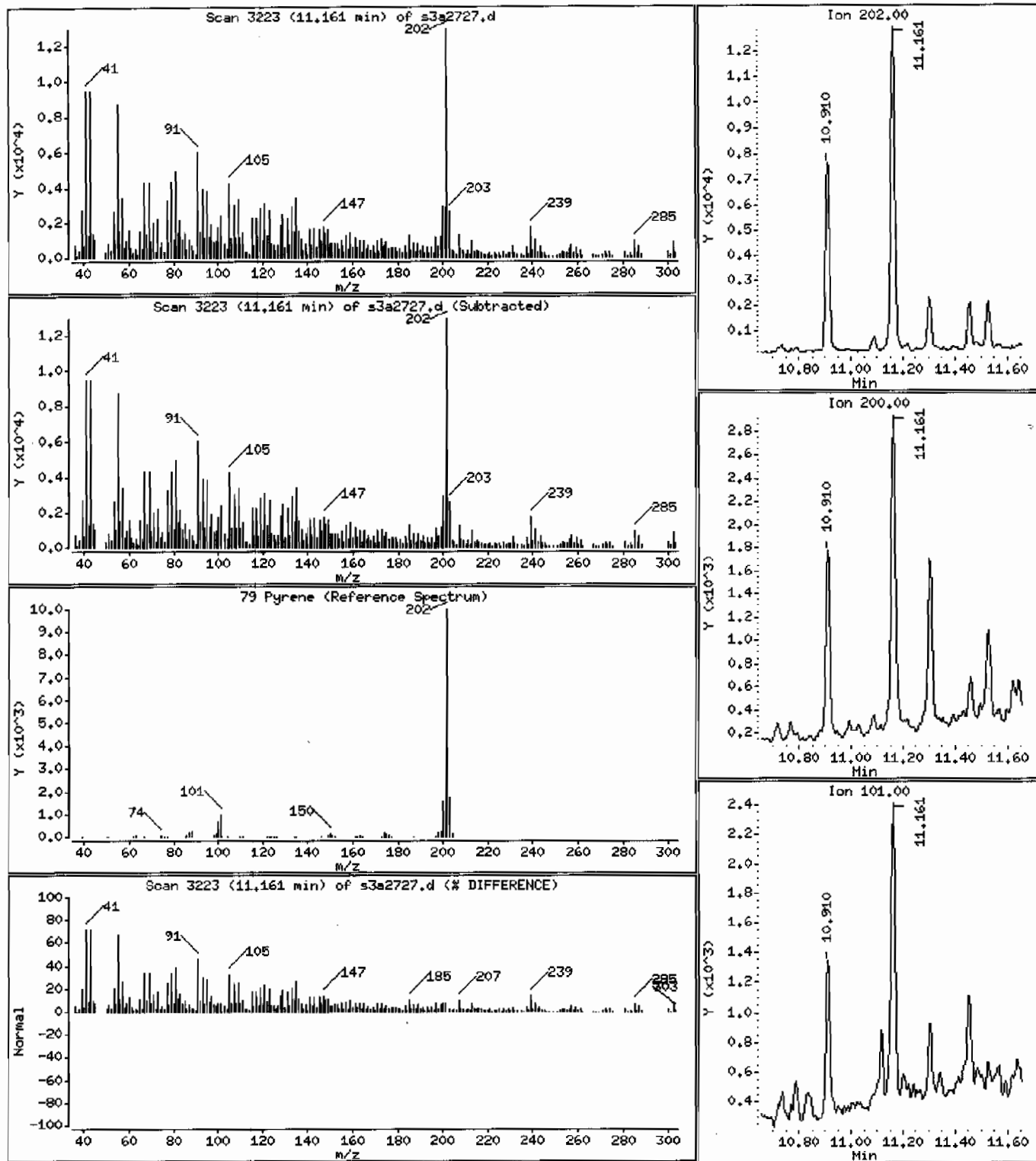
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 38.4 ug/Kg





Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411ISVMF11ILANL

Volume Injected (uL): 0.5

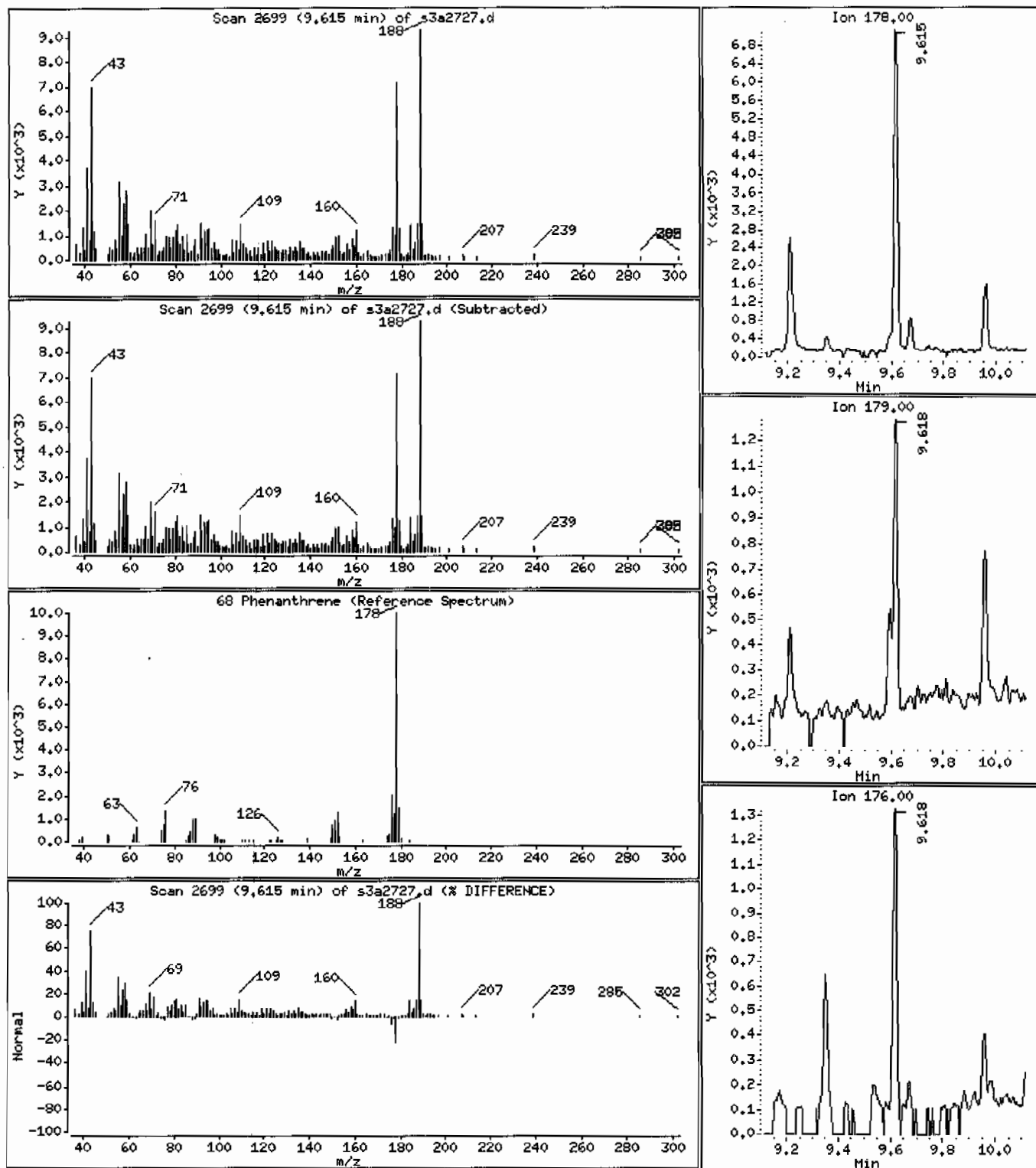
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 14.8 ug/Kg



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411|SVHF11|LANL

Volume Injected (uL): 0.5

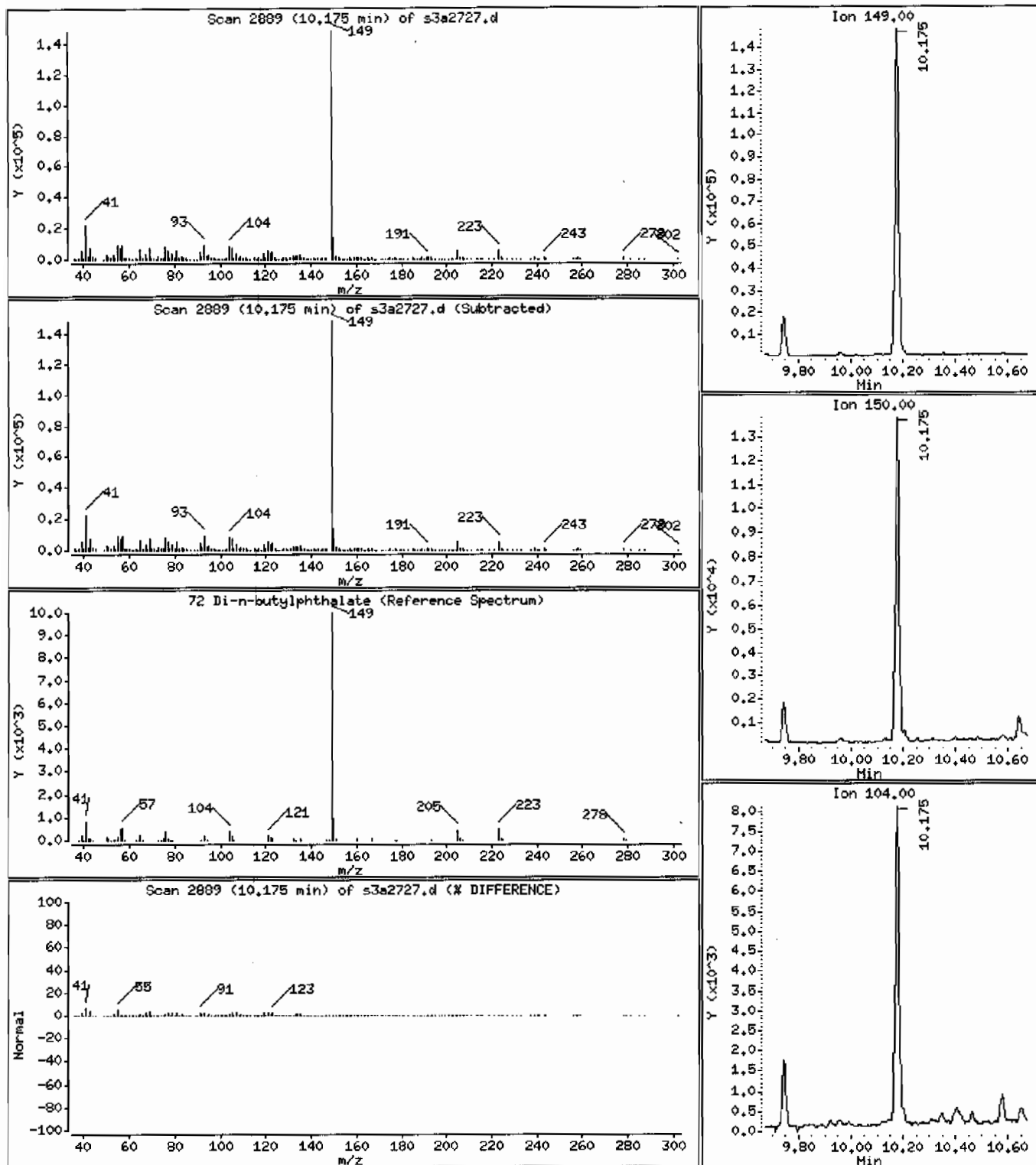
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

72 Di-n-butylphthalate

Concentration: 244 ug/Kg



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944874111SVHF111LANL

Volume Injected (uL): 0.5

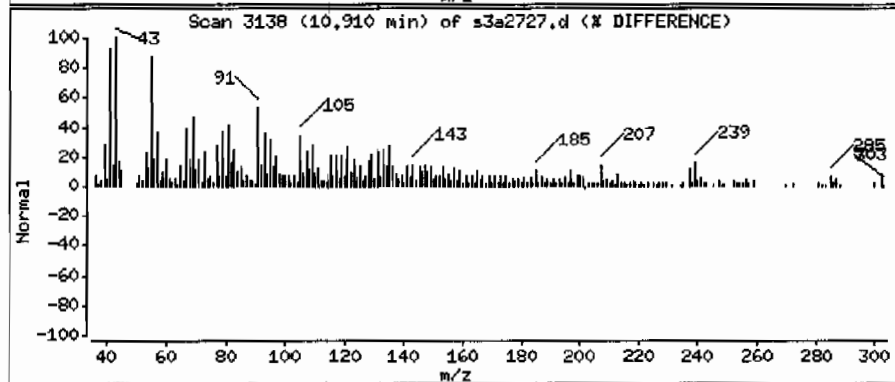
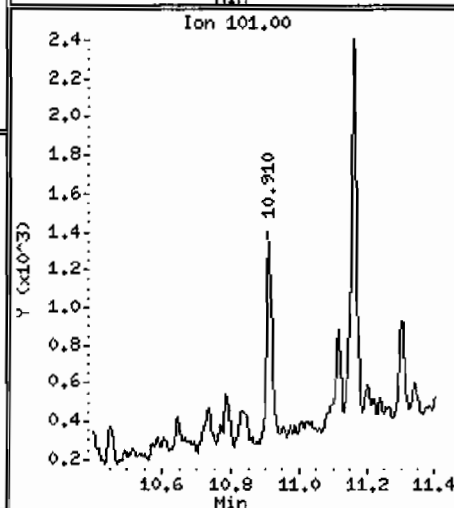
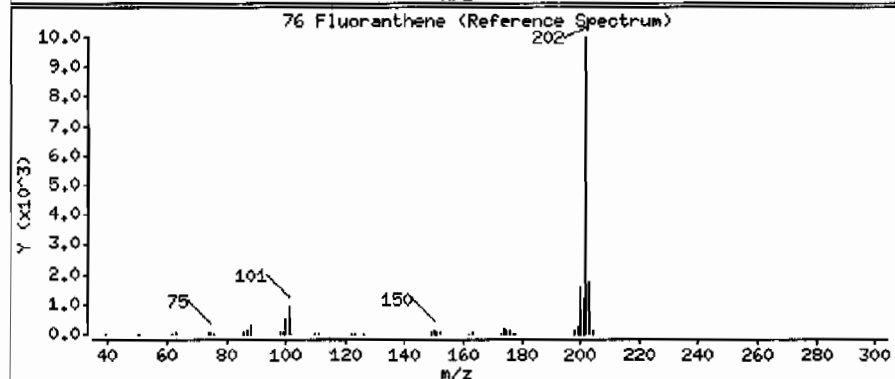
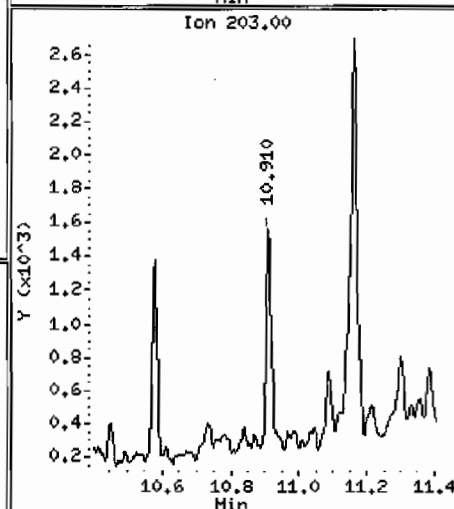
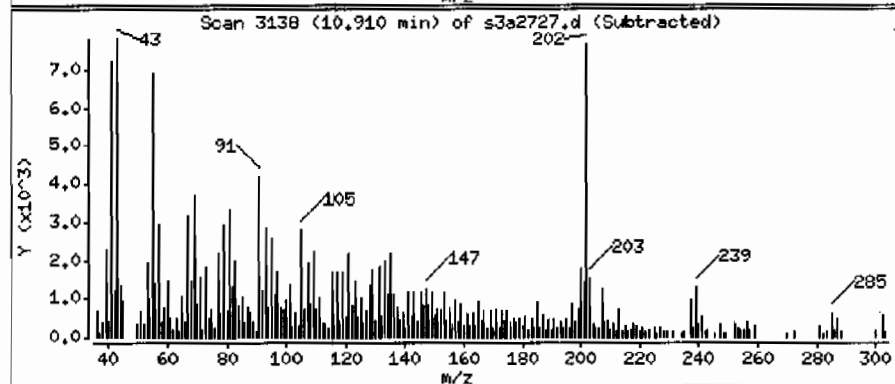
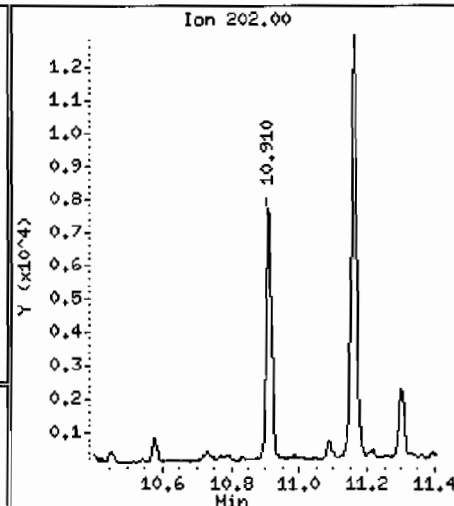
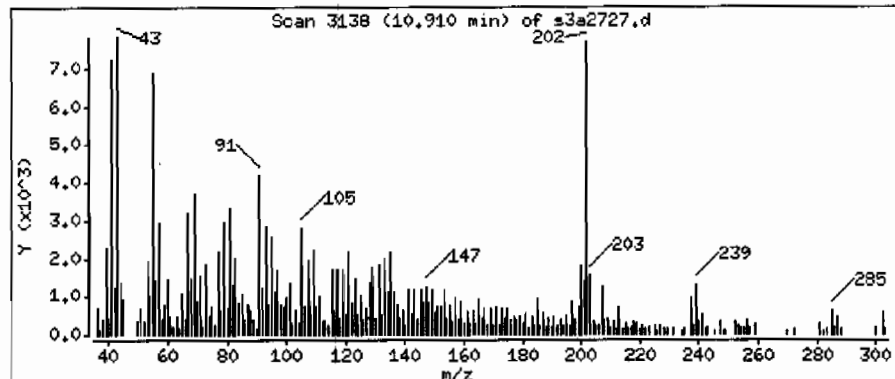
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 18.2 ug/Kg



Date: 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.1

Sample Info: 1245114010194487411SVHF111LANL

Volume Injected (uL): 0.5

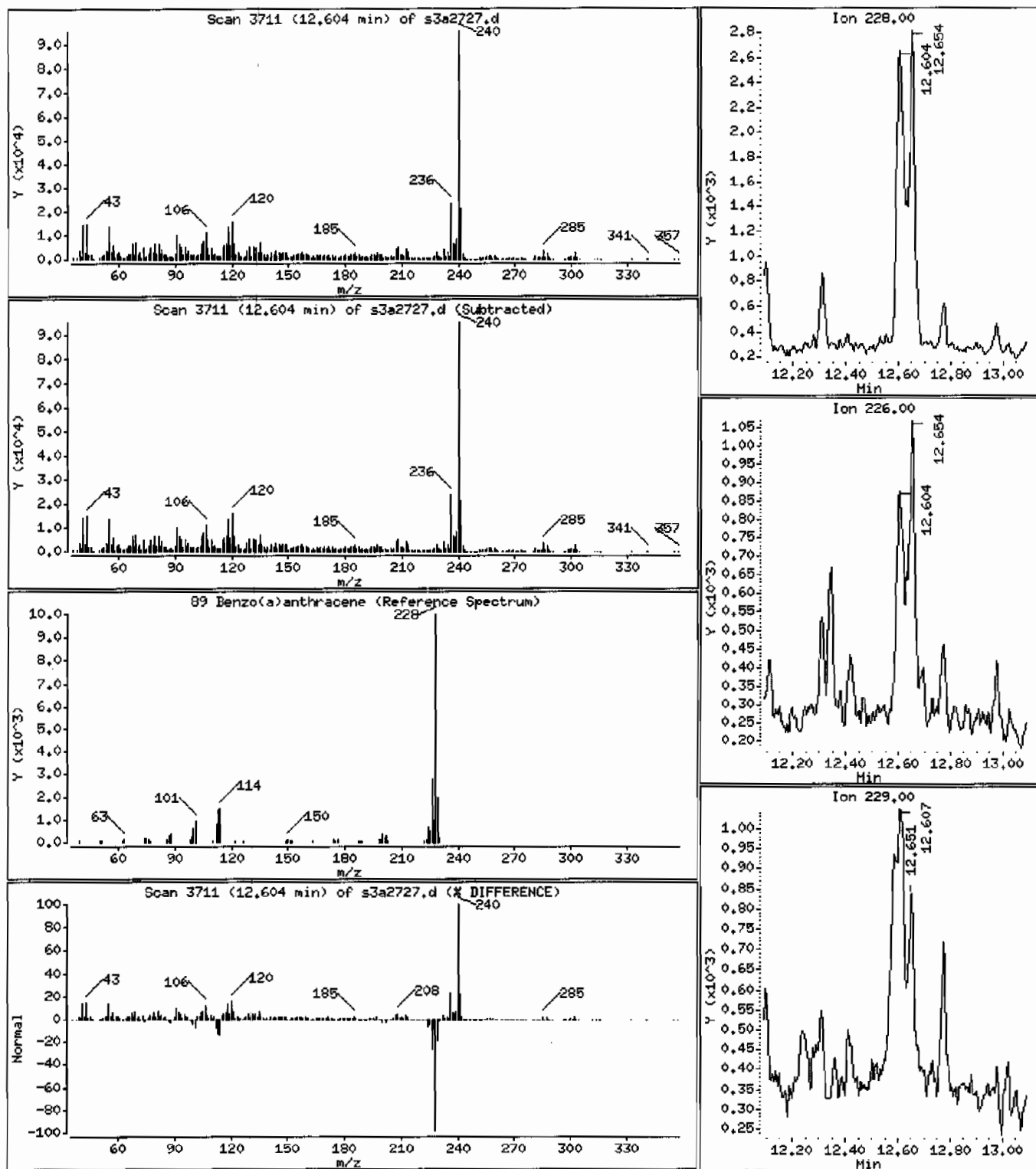
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 14.4 ug/Kg



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944874111SVHF111LANL

Volume Injected (uL): 0.5

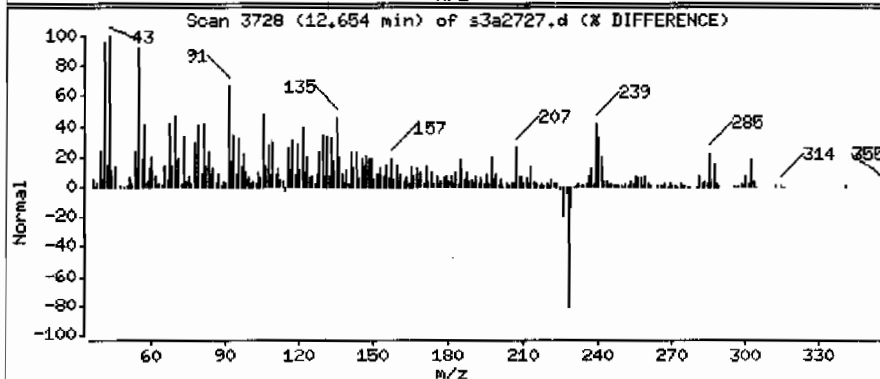
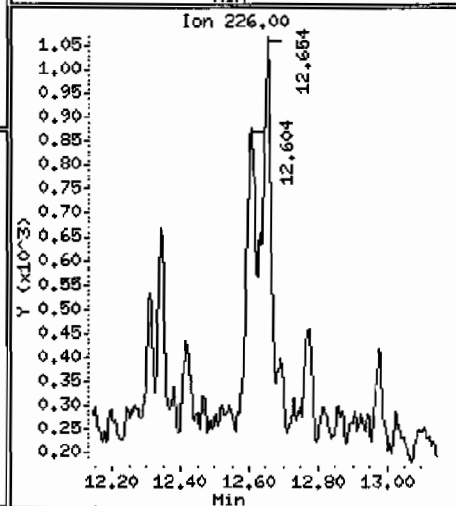
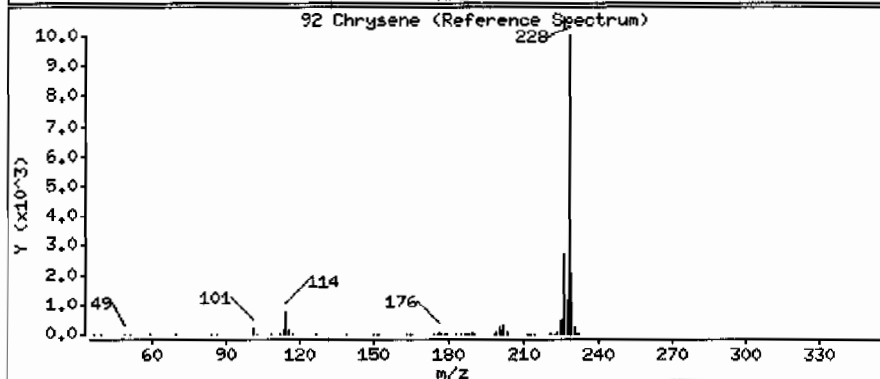
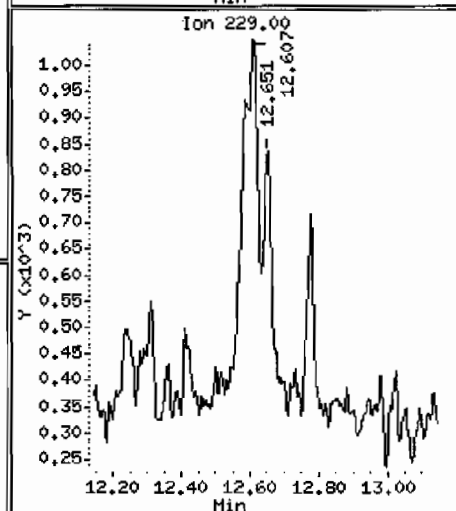
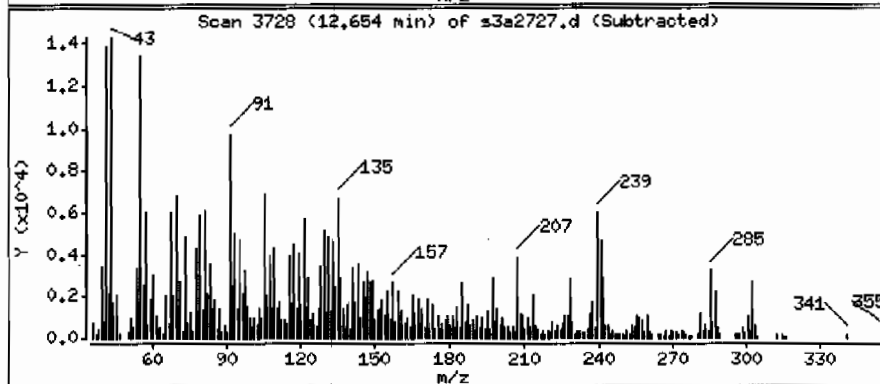
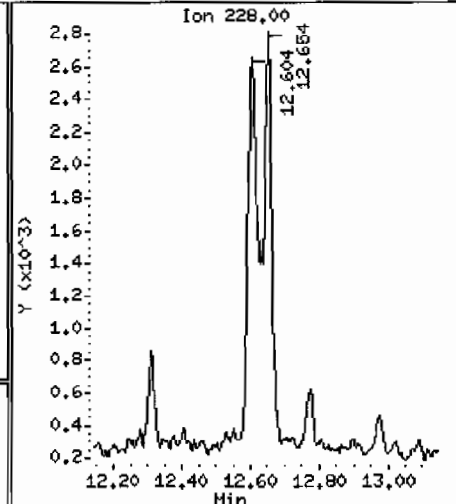
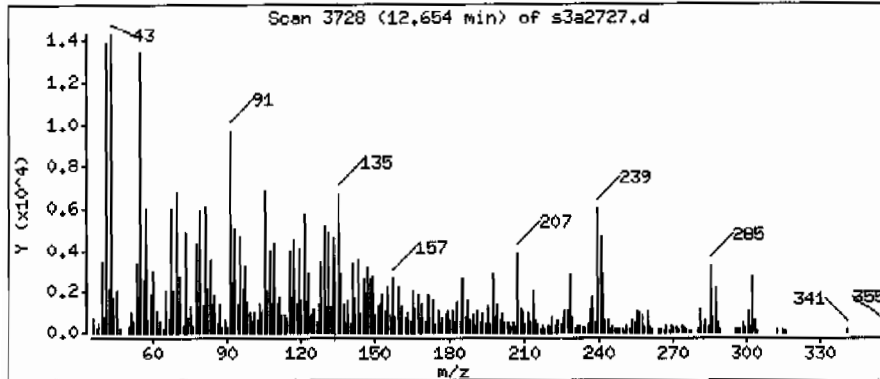
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 12.4 ug/Kg



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411|SVHF11|LANL

Volume Injected (uL): 0.5

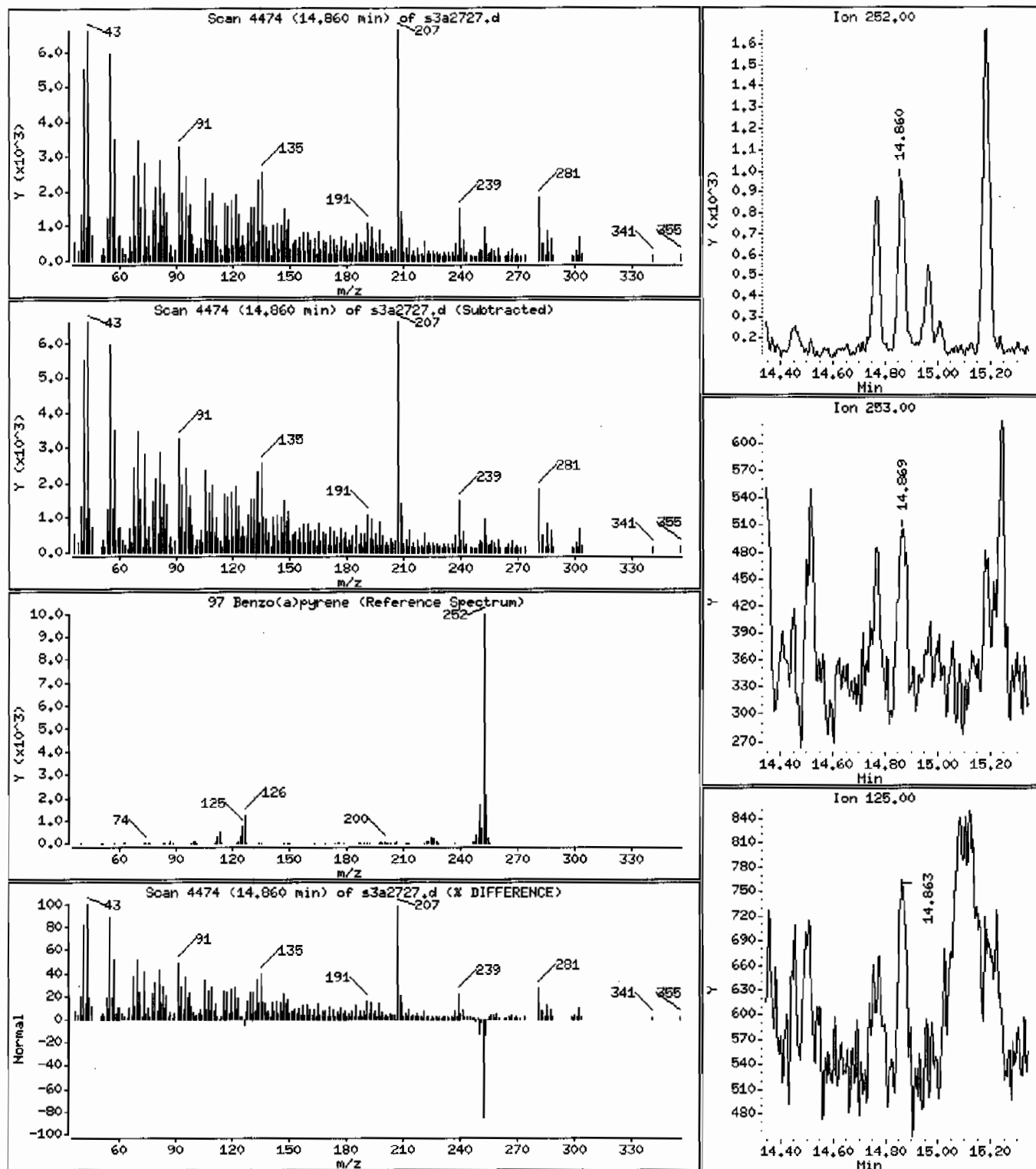
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 12.8 ug/Kg



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944874111SVMF111LANL

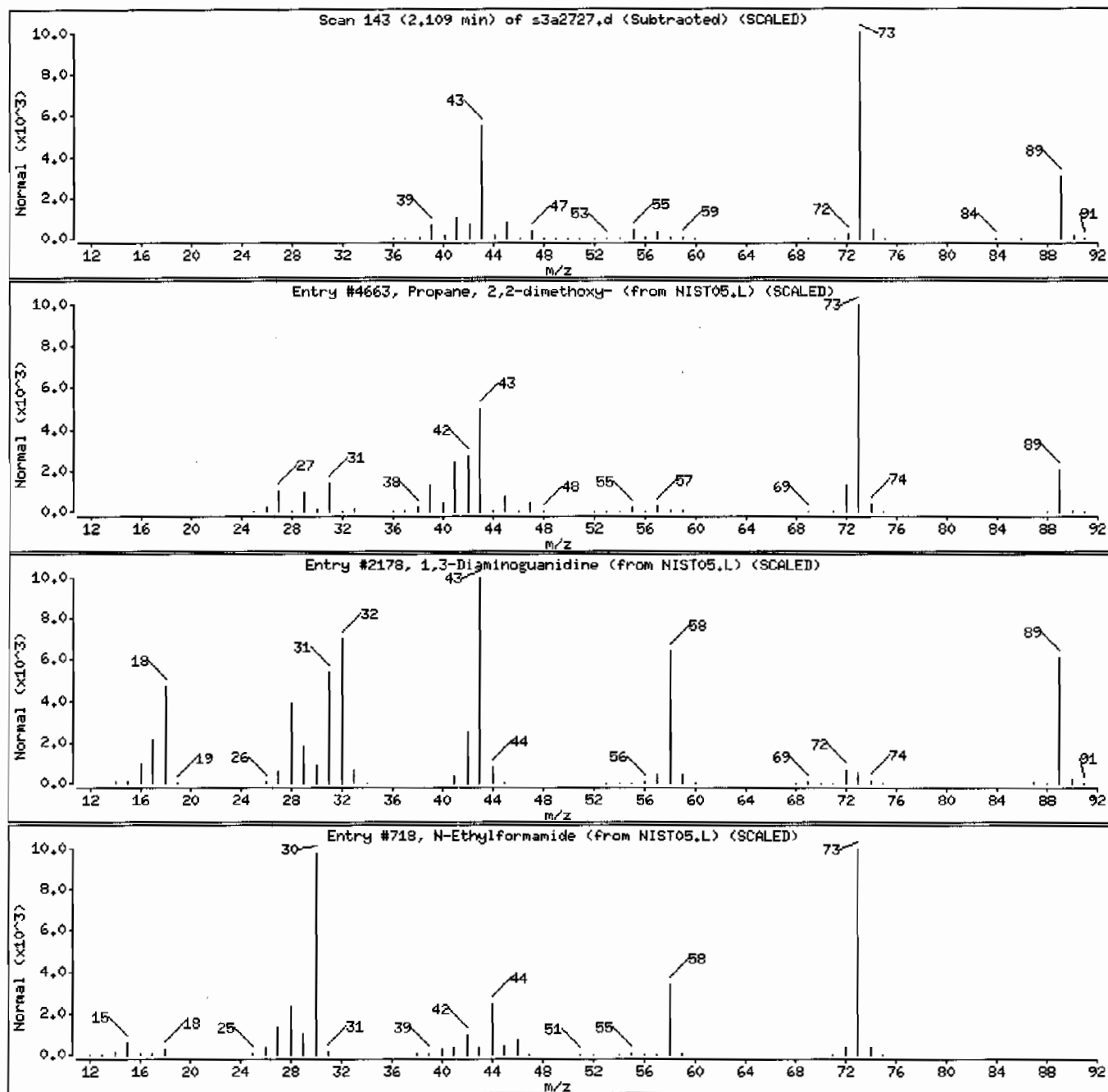
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown                       |            |          |       |         |         |        |
| Propane, 2,2-dimethoxy-       | 77-76-9    | NIST05.L | 4663  | 56      | C5H12O2 | 104    |
| 1,3-Diaminoguanidine          | 4364-78-7  | NIST05.L | 2178  | 9       | CH7N5   | 89     |
| N-Ethylformamide              | 627-45-2   | NIST05.L | 718   | 9       | C3H7NO  | 73     |



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.1

Sample Info: 1245114010194487411SVHF111LANL

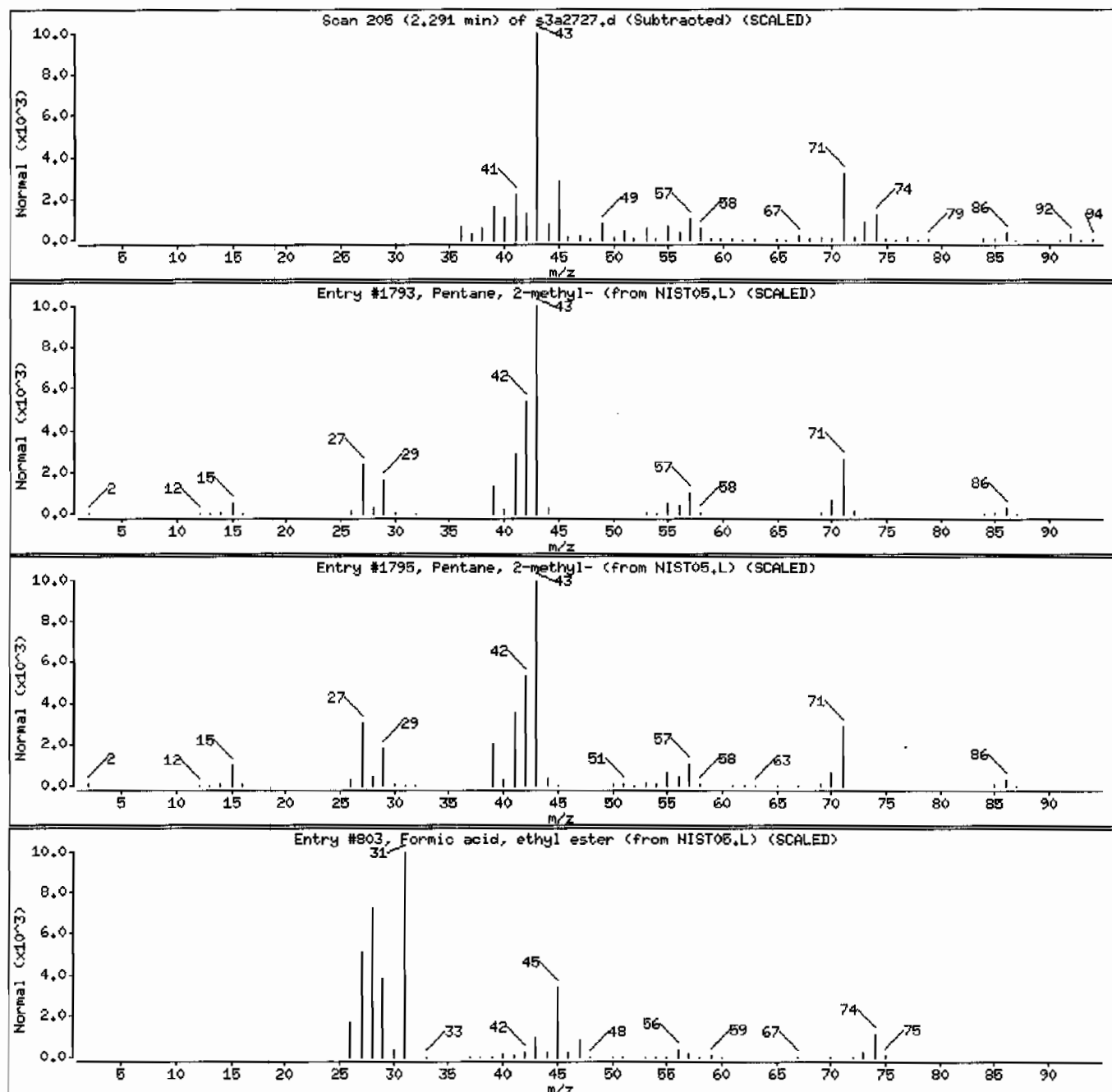
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown                       |            |          |       |         |         |        |
| Pentane, 2-methyl-            | 107-83-5   | NIST05.L | 1793  | 27      | C6H14   | 86     |
| Pentane, 2-methyl-            | 107-83-5   | NIST05.L | 1795  | 12      | C6H14   | 86     |
| Formic acid, ethyl ester      | 109-94-4   | NIST05.L | 803   | 12      | C3H6O2  | 74     |





Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVHF111LANL

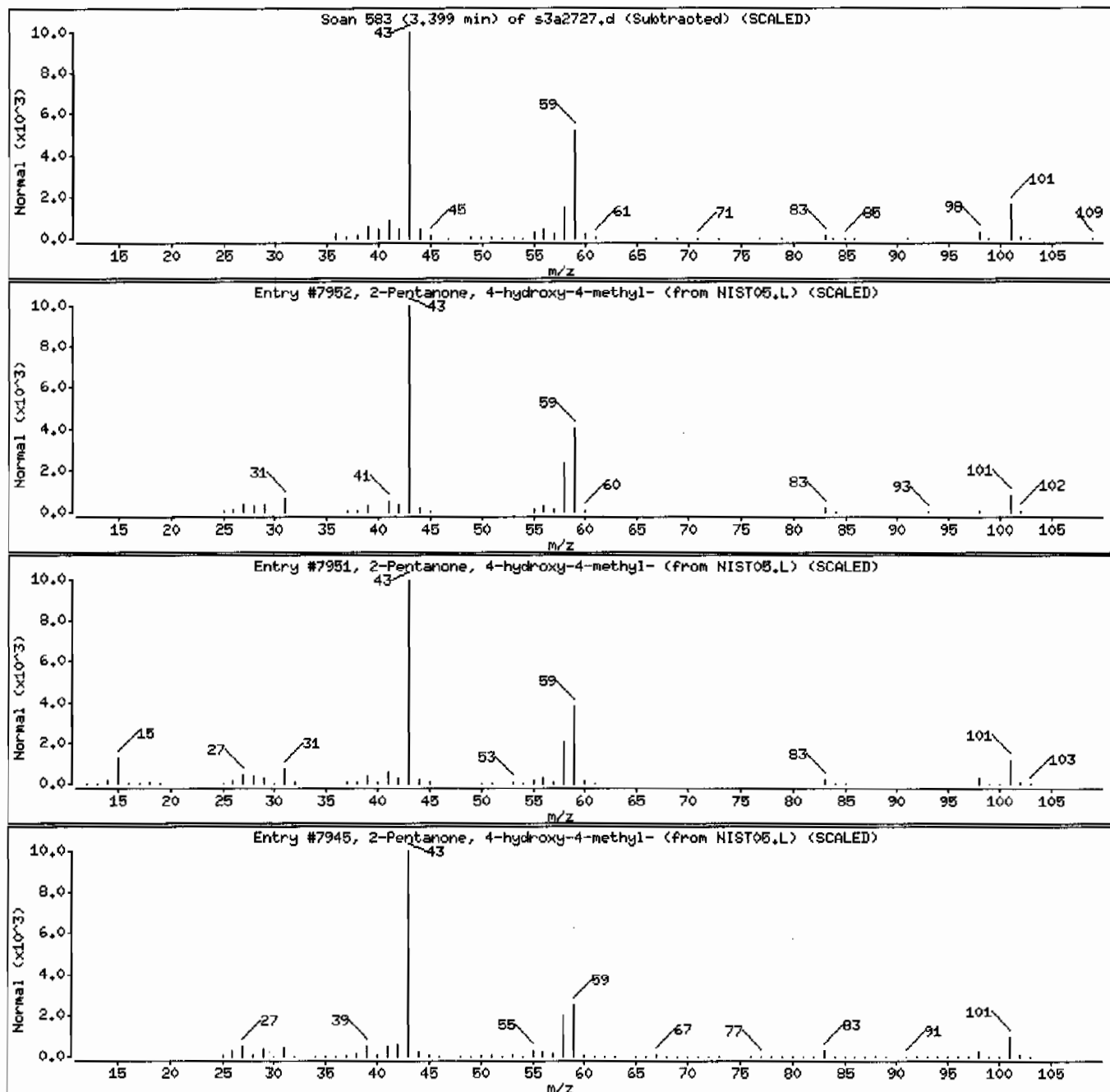
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match    | CAS Number | Library  | Entry | Quality | Formula | Weight |
|----------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown Aldol Condensate         |            |          |       |         |         |        |
| 2-Pentanone, 4-hydroxy-4-methyl- | 123-42-2   | NIST05.L | 7952  | 50      | C6H12O2 | 116    |
| 2-Pentanone, 4-hydroxy-4-methyl- | 123-42-2   | NIST05.L | 7951  | 42      | C6H12O2 | 116    |
| 2-Pentanone, 4-hydroxy-4-methyl- | 123-42-2   | NIST05.L | 7945  | 40      | C6H12O2 | 116    |



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944874111SVHF111LANL

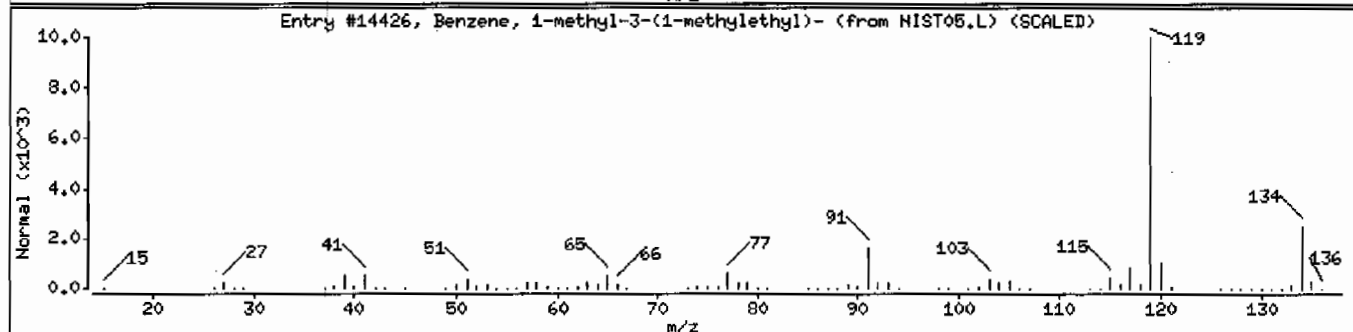
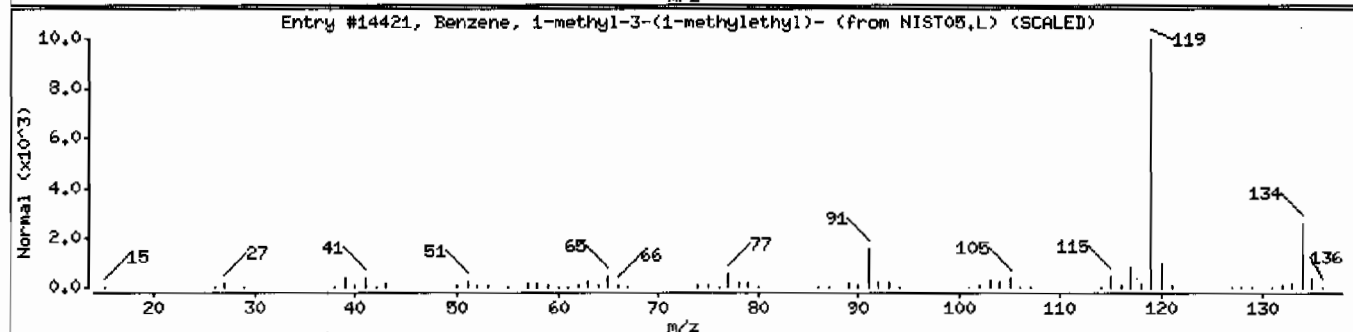
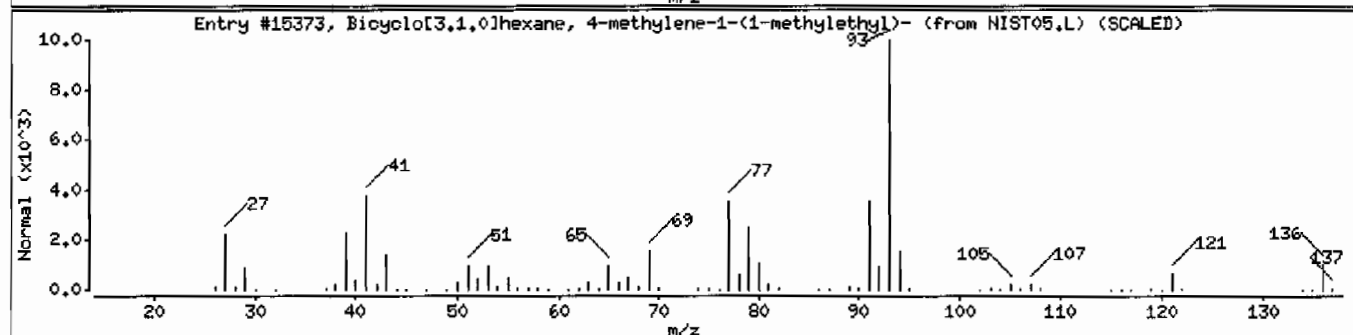
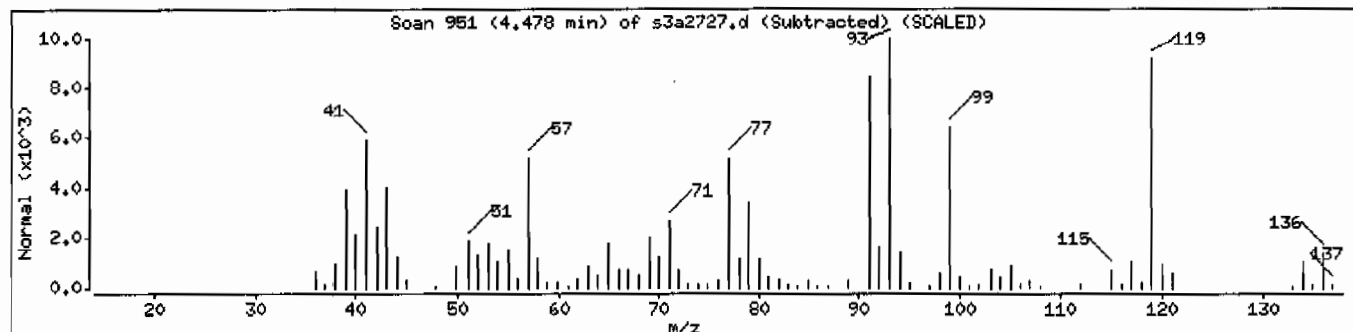
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--|------------|----------|-------|---------|---------|--------|
| Bicyclo[3.1.0]hexane, 4-methylene-1-(1-m | 3387-41-5  | NIST05.L | 15373 | 83      | C10H16  | 136    |
| Benzene, 1-methyl-3-(1-methylethyl)-     | 535-77-3   | NIST05.L | 14421 | 64      | C10H14  | 134    |
| Benzene, 1-methyl-3-(1-methylethyl)-     | 535-77-3   | NIST05.L | 14426 | 50      | C10H14  | 134    |



Date: 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944874111SVMF111LANL

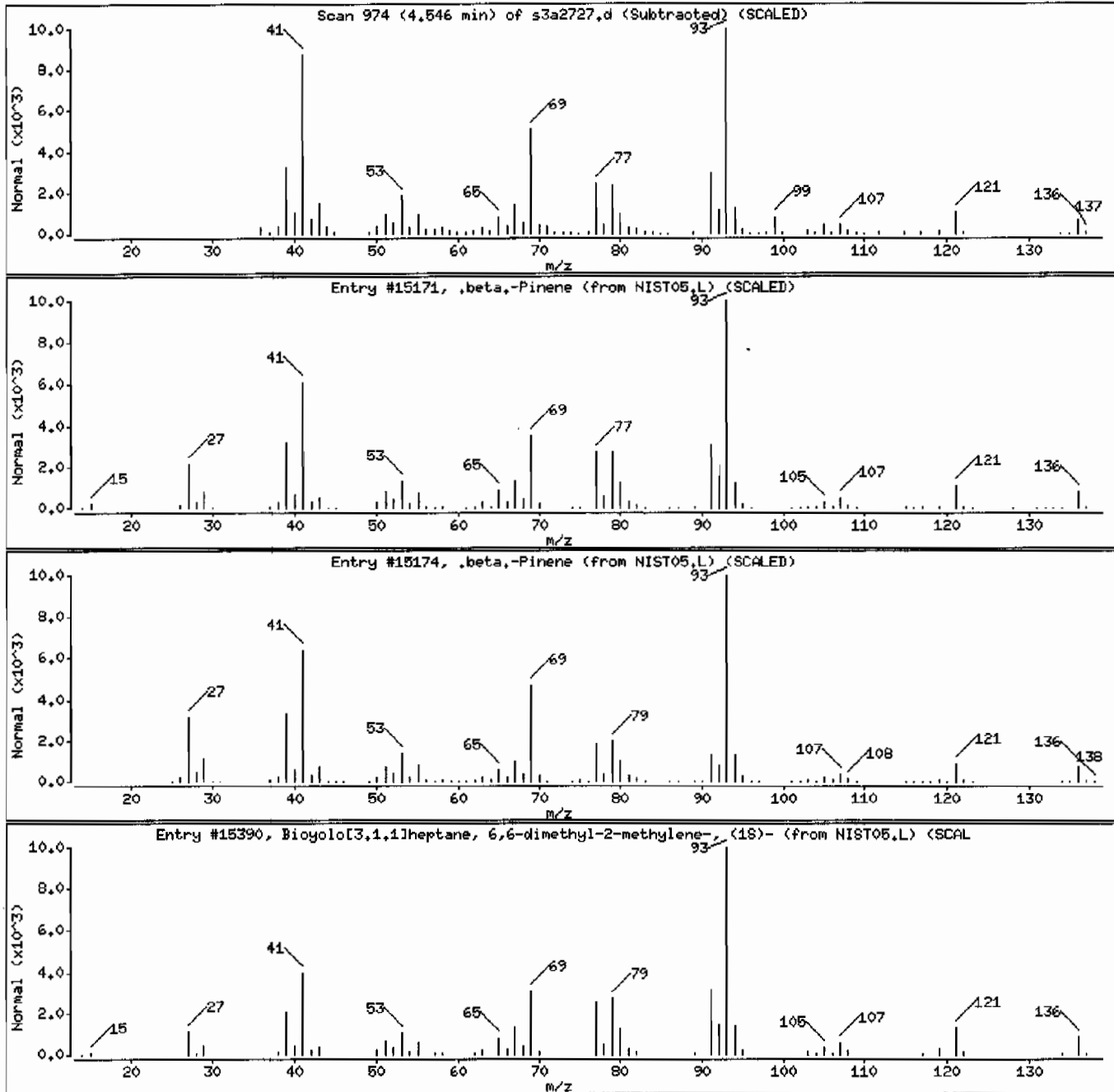
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--|------------|----------|-------|---------|---------|--------|
| .beta.-Pinene                            | 127-91-3   | NIST05.L | 15171 | 97      | C10H16  | 136    |
| .beta.-Pinene                            | 127-91-3   | NIST05.L | 15174 | 97      | C10H16  | 136    |
| Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me | 18172-67-3 | NIST05.L | 15390 | 91      | C10H16  | 136    |



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.1

Sample Info: 1245114010194487411SVHF111LANL

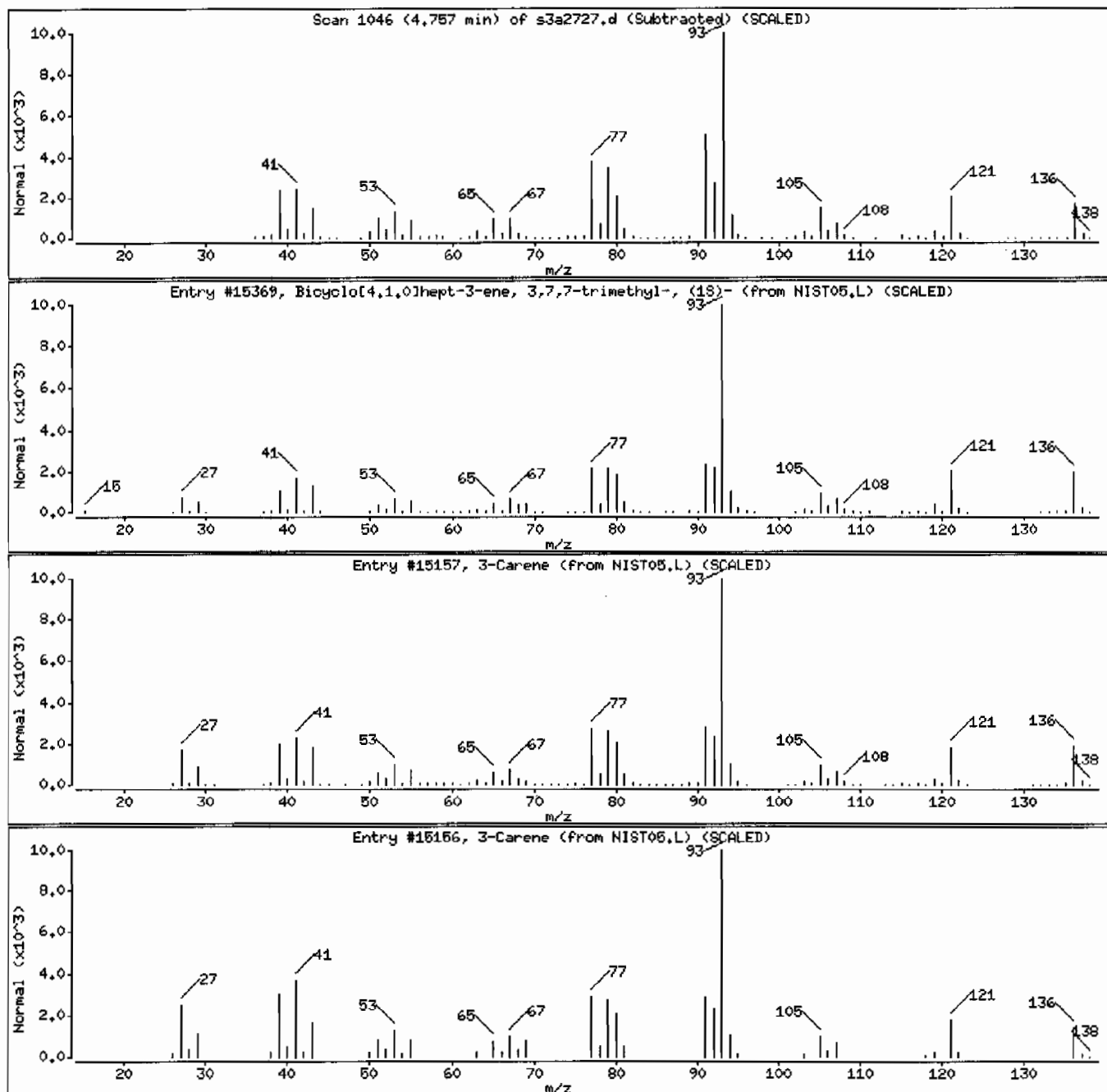
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match              | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--|------------|----------|-------|---------|---------|--------|
| Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl- | 498-15-7   | NIST05.L | 15369 | 97      | C10H16  | 136    |
| 3-Carene                                   | 13466-78-9 | NIST05.L | 15157 | 97      | C10H16  | 136    |
| 3-Carene                                   | 13466-78-9 | NIST05.L | 15156 | 96      | C10H16  | 136    |



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944874111SVHF111LANL

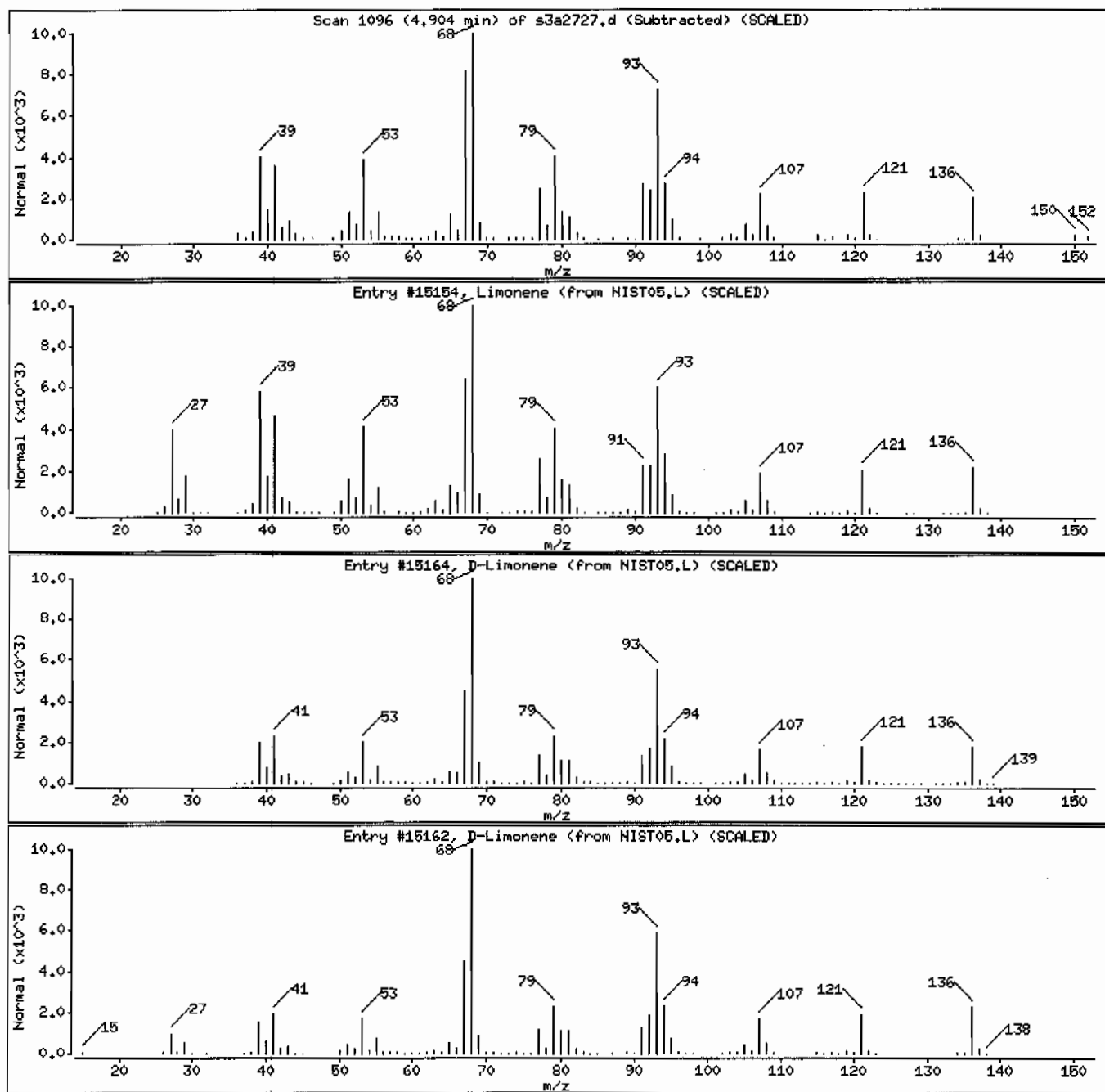
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Limonene                      | 138-86-3   | NIST05.L | 15154 | 95      | C10H16  | 136    |
| D-Limonene                    | 5989-27-5  | NIST05.L | 15164 | 91      | C10H16  | 136    |
| D-Limonene                    | 5989-27-5  | NIST05.L | 15162 | 90      | C10H16  | 136    |



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944874111SVHF111LANL

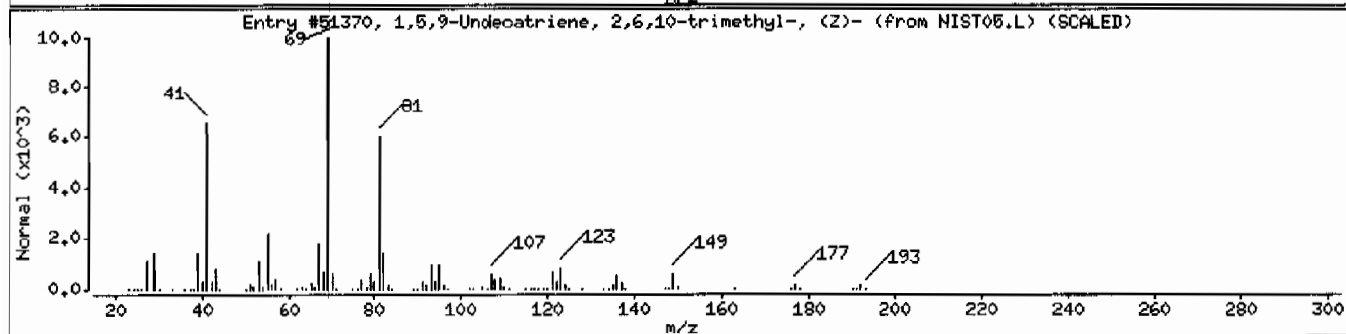
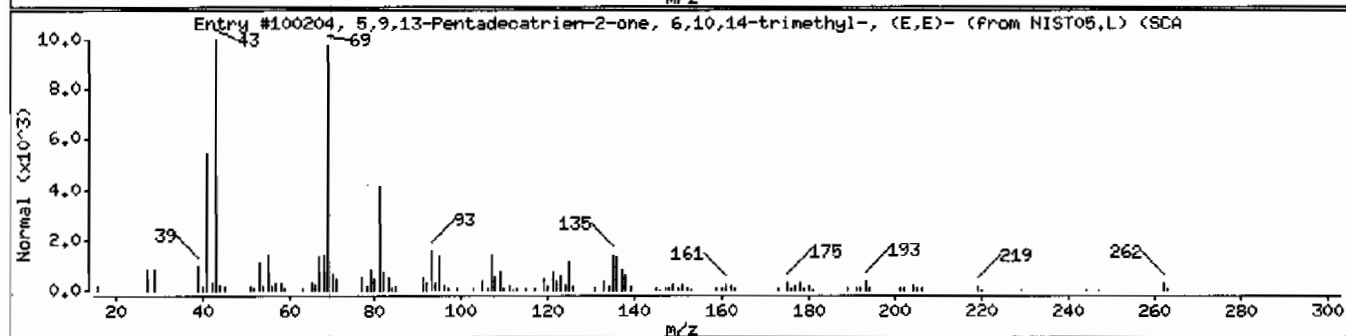
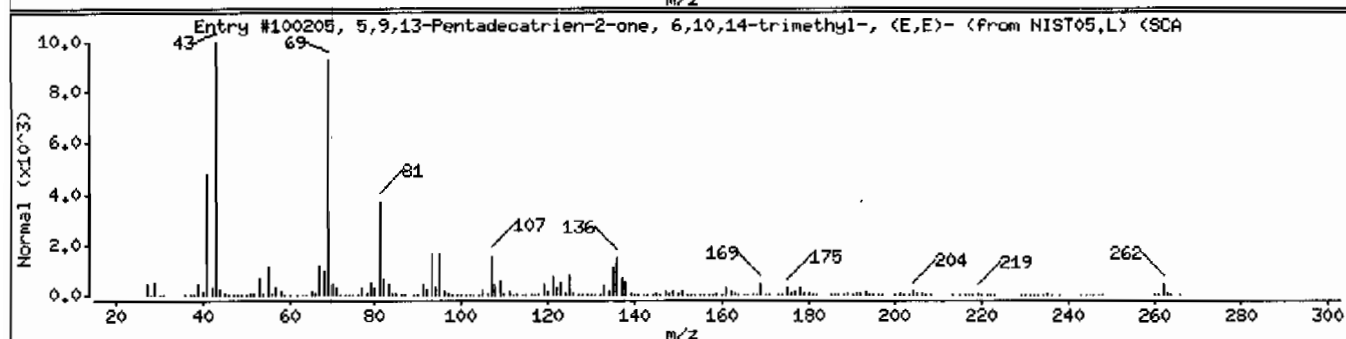
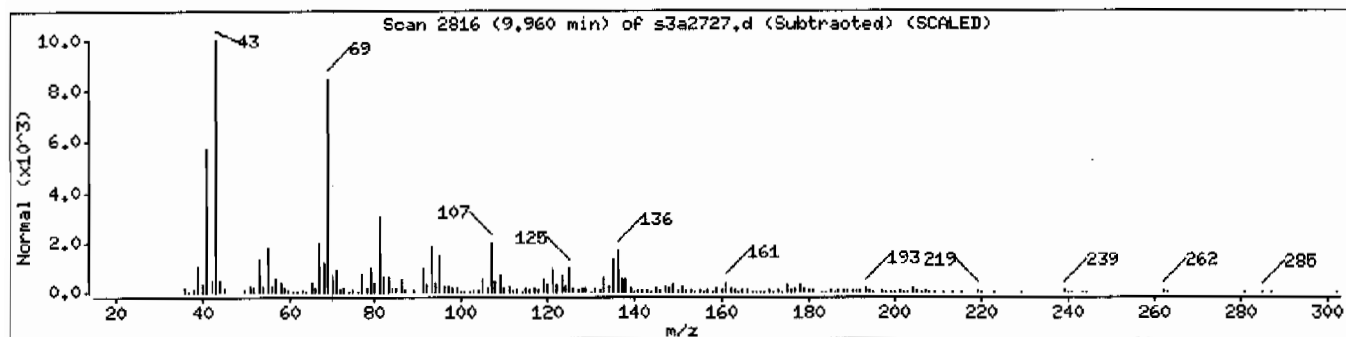
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula | Weight |
|--|------------|----------|--------|---------|---------|--------|
| 5,9,13-Pentadecatrien-2-one, 6,10,14-tri | 1117-52-8  | NIST05.L | 100205 | 83      | C18H30O | 262    |
| 5,9,13-Pentadecatrien-2-one, 6,10,14-tri | 1117-52-8  | NIST05.L | 100204 | 72      | C18H30O | 262    |
| 1,5,9-Undecatriene, 2,6,10-trimethyl-, ( | 62951-96-6 | NIST05.L | 51370  | 50      | C14H24  | 192    |



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: HSD3.i

Sample Info: 1245114010194487411SVHF111LANL

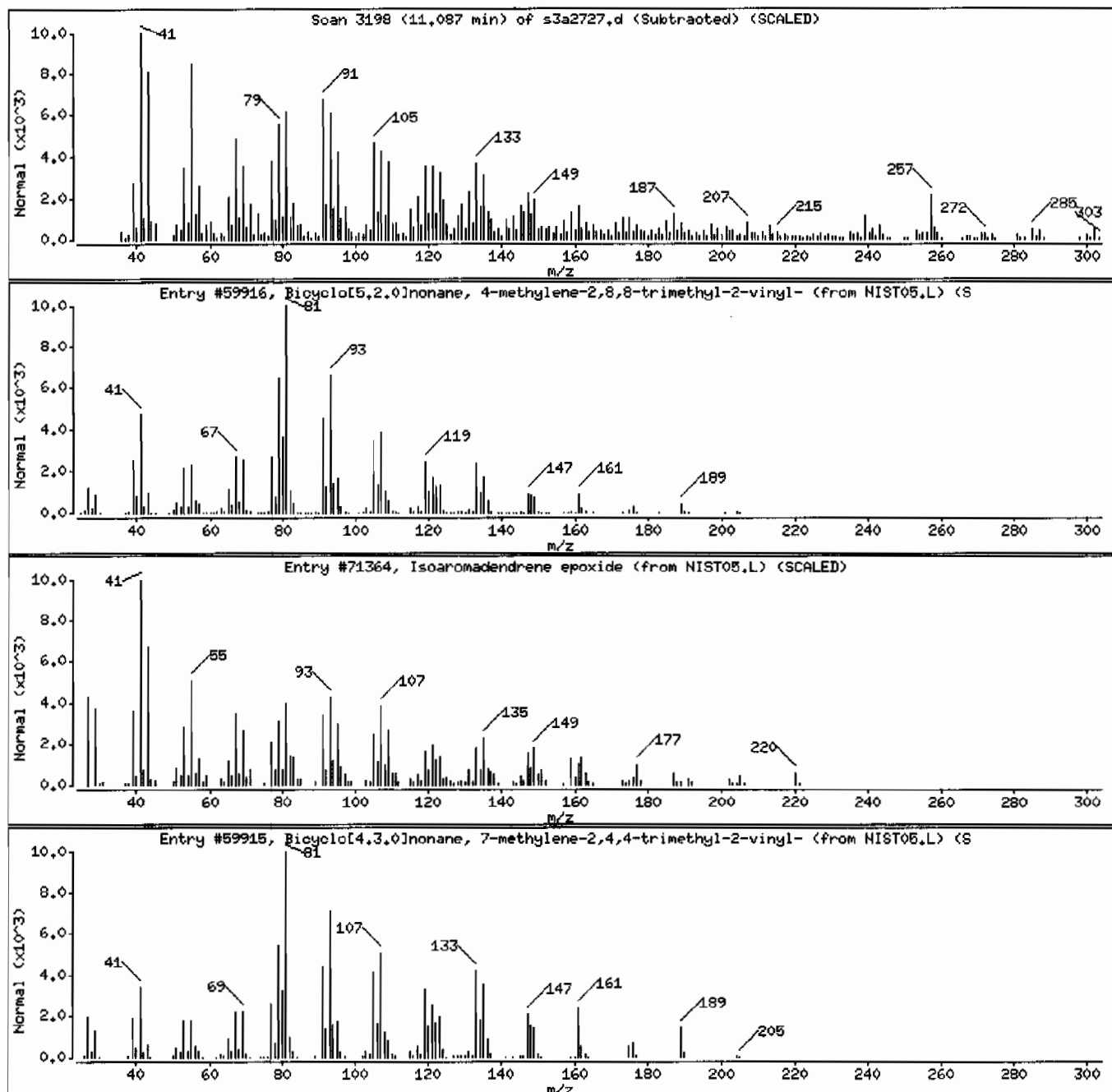
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula | Weight |
|--|--------------|----------|-------|---------|---------|--------|
| Unknown                                  |              |          |       |         |         |        |
| Bicyclo[5.2.0]nonane, 4-methylene-2,8,8- | 1000159-38-2 | NIST05.L | 59916 | 59      | C15H24  | 204    |
| Isoaromadendrene epoxide                 | 1000159-36-6 | NIST05.L | 71364 | 49      | C15H24O | 220    |
| Bicyclo[4.3.0]nonane, 7-methylene-2,4,4- | 1000156-11-9 | NIST05.L | 59915 | 46      | C15H24  | 204    |



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVHF111LANL

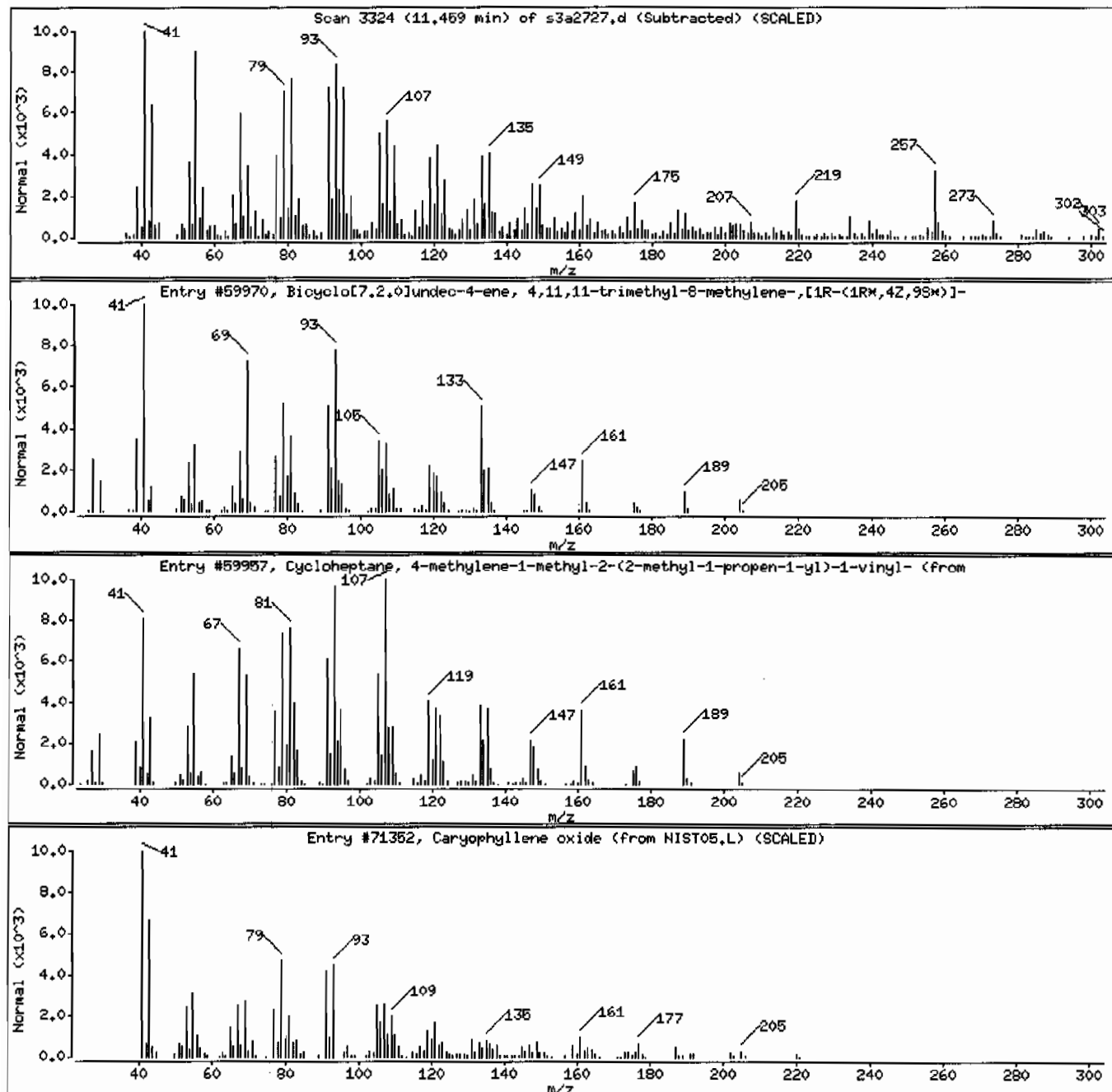
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula | Weight |
|--|--------------|----------|-------|---------|---------|--------|
| Bicyclo[7.2.0]undec-4-ene, 4,11,11-trime | 118-65-0     | NIST05.L | 59970 | 92      | C15H24  | 204    |
| Cycloheptane, 4-methylene-1-methyl-2-(2- | 1000159-38-5 | NIST05.L | 59957 | 64      | C15H24  | 204    |
| Caryophyllene oxide                      | 1139-30-6    | NIST05.L | 71352 | 52      | C15H24O | 220    |





Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944874111SVHF11/LANL

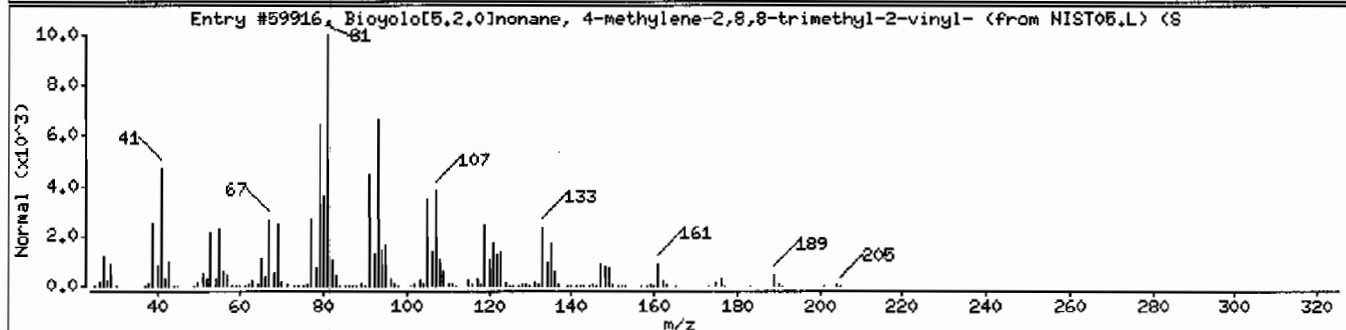
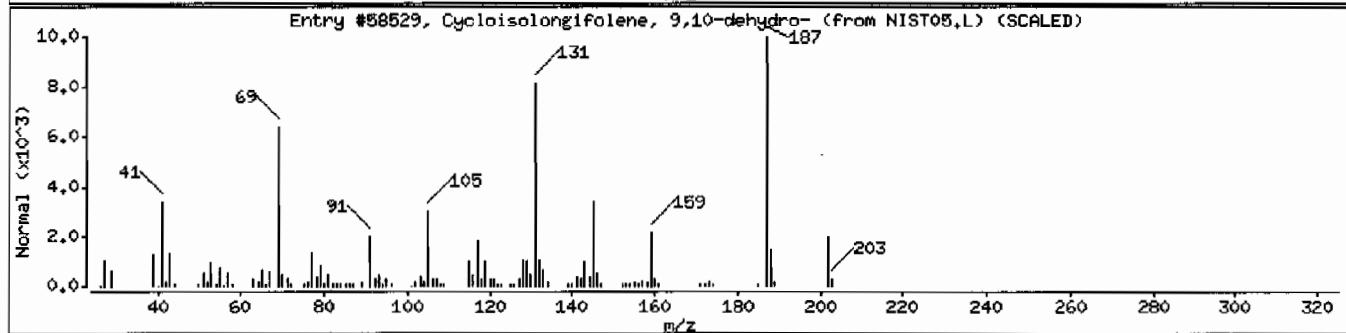
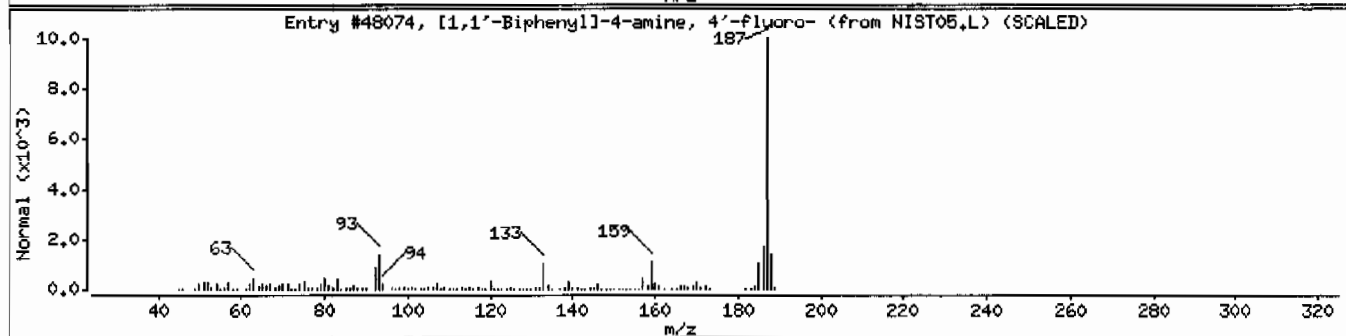
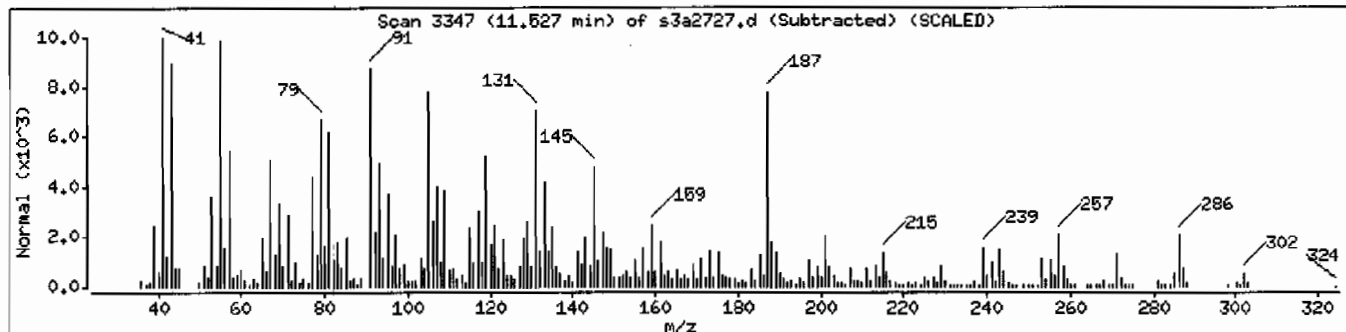
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula  | Weight |
|--|--------------|----------|-------|---------|----------|--------|
| Unknown                                  |              |          |       |         |          |        |
| [1,1'-Biphenyl]-4-amine, 4'-fluoro-      | 324-93-6     | NIST05.L | 48074 | 35      | C12H10FN | 187    |
| Cycloisolongifolene, 9,10-dehydro-       | 1000156-81-6 | NIST05.L | 58529 | 35      | C15H22   | 202    |
| Bicyclo[5.2.0]nonane, 4-methylene-2,8,8- | 1000159-38-2 | NIST05.L | 59916 | 26      | C15H24   | 204    |



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: HSD3.i

Sample Info: 1245114010|94487411|SVHF11|LANL

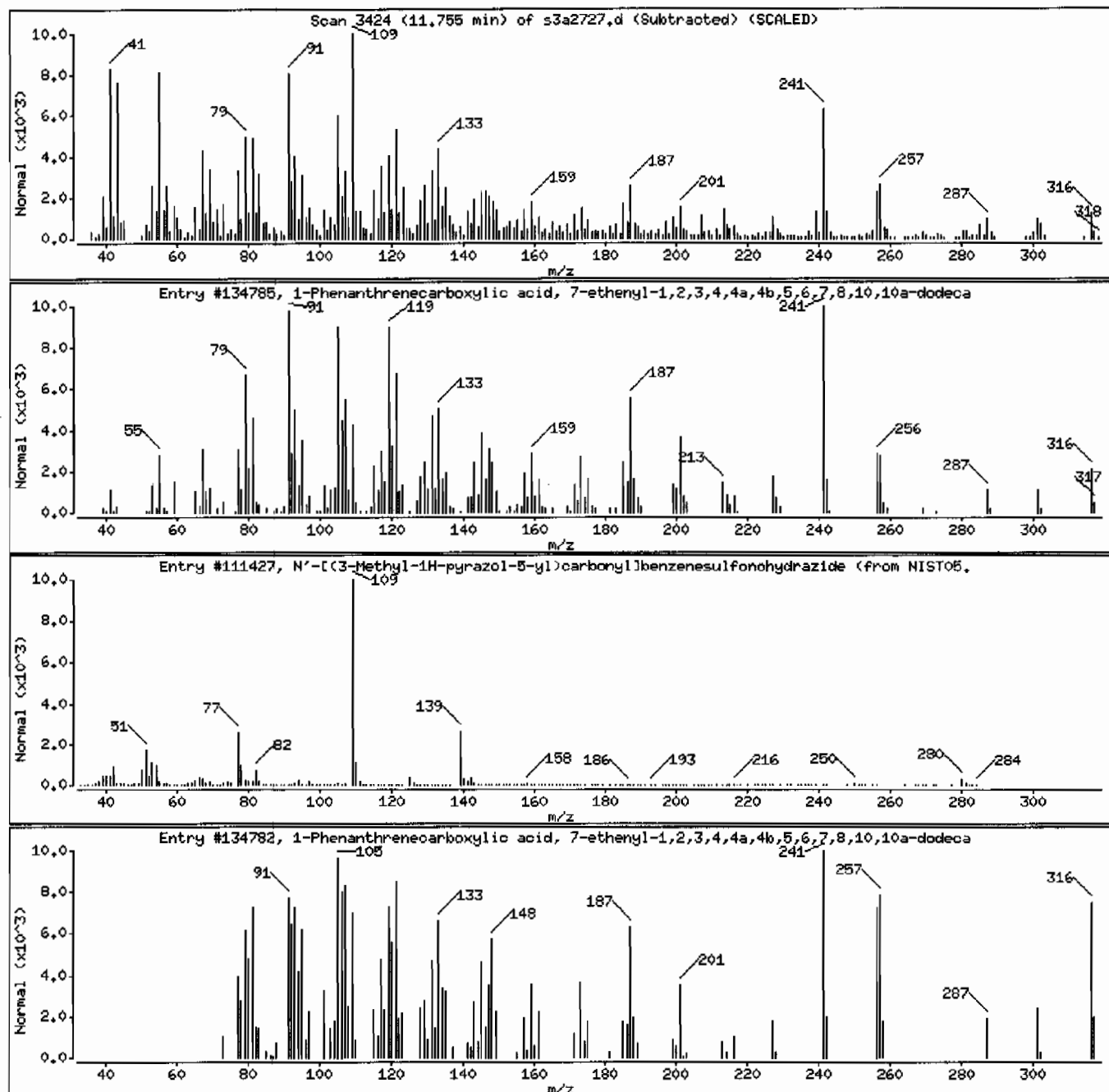
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula     | Weight |
|--|--------------|----------|--------|---------|-------------|--------|
| 1-Phenanthrenecarboxylic acid, 7-ethenyl | 1686-62-0    | NIST05.L | 134785 | 95      | C21H32O2    | 316    |
| N'-[(3-Methyl-1H-pyrazol-5-yl)carbonyl]b | 1000266-89-3 | NIST05.L | 111427 | 53      | C11H12N4O3S | 280    |
| 1-Phenanthrenecarboxylic acid, 7-ethenyl | 1686-62-0    | NIST05.L | 134782 | 42      | C21H32O2    | 316    |



Date: 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVHF111LANL

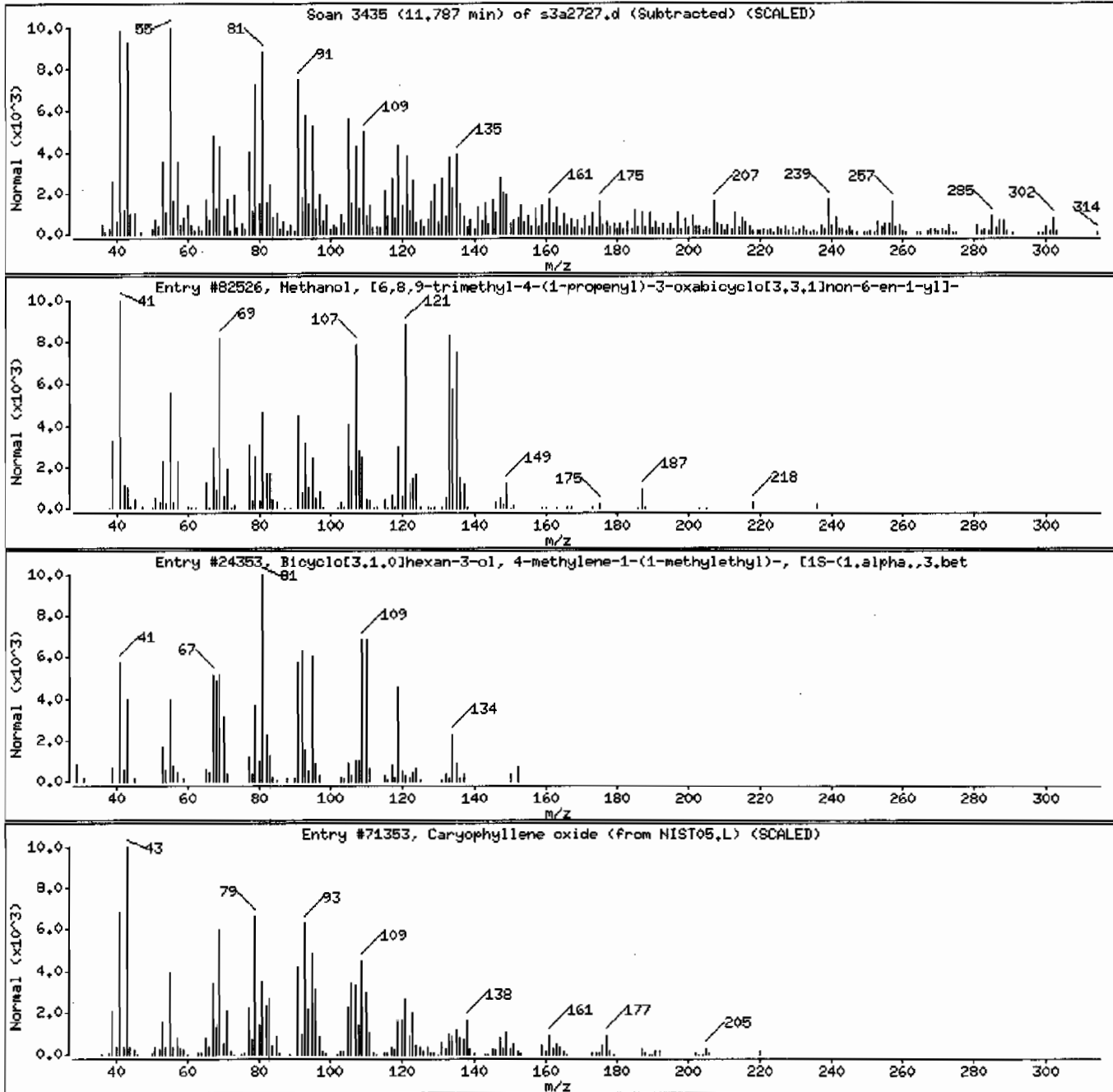
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula  | Weight |
|--|--------------|----------|-------|---------|----------|--------|
| Unknown                                  |              |          |       |         |          |        |
| Methanol, [6,8,9-trimethyl-4-(1-propenyl | 1000277-60-9 | NIST05.L | 82526 | 56      | C15H24O2 | 236    |
| Bicyclo[3.1.0]hexan-3-ol, 4-methylene-1- | 471-16-9     | NIST05.L | 24353 | 56      | C10H16O  | 152    |
| Caryophyllene oxide                      | 1139-30-6    | NIST05.L | 71353 | 55      | C15H24O  | 220    |



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.1

Sample Info: 1245114010194487411SVMF111LANL

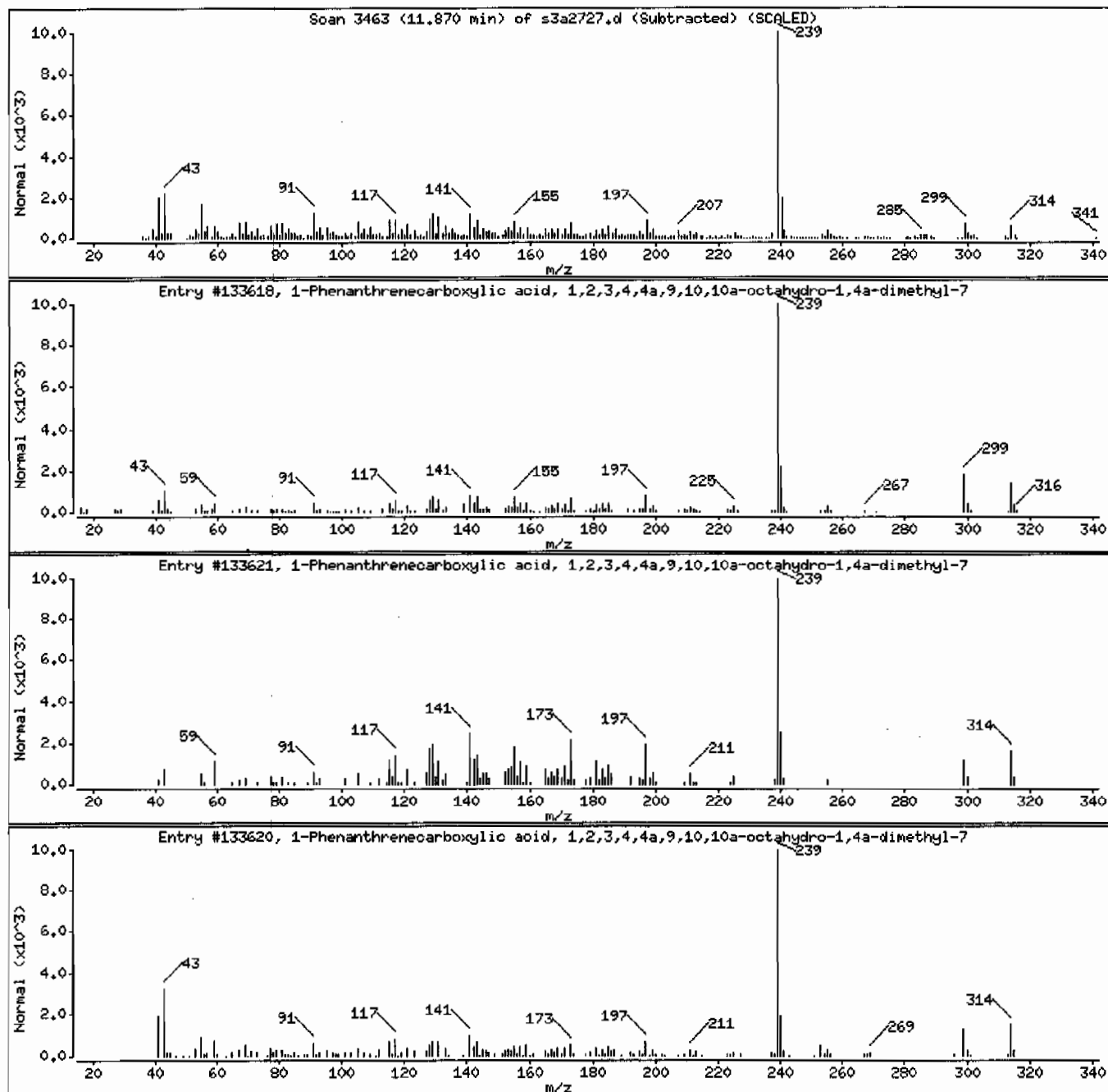
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133618 | 98      | C21H30O2 | 314    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133621 | 95      | C21H30O2 | 314    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133620 | 93      | C21H30O2 | 314    |



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVHF111LANL

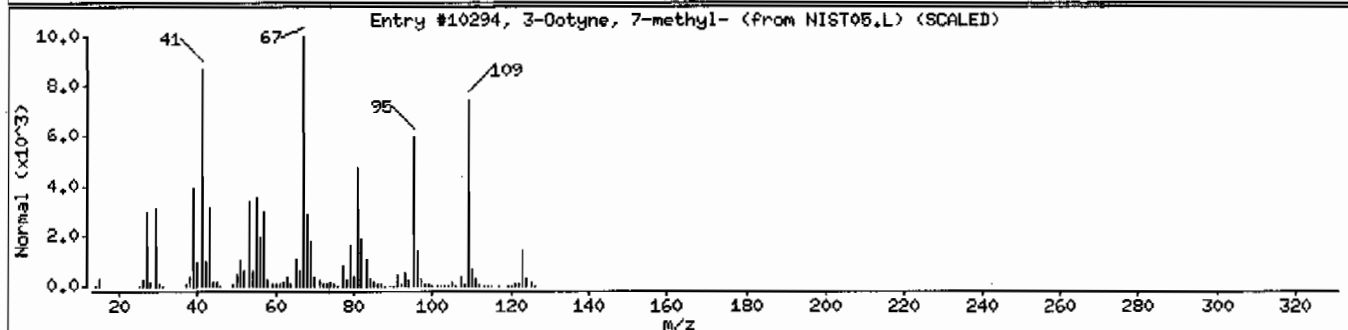
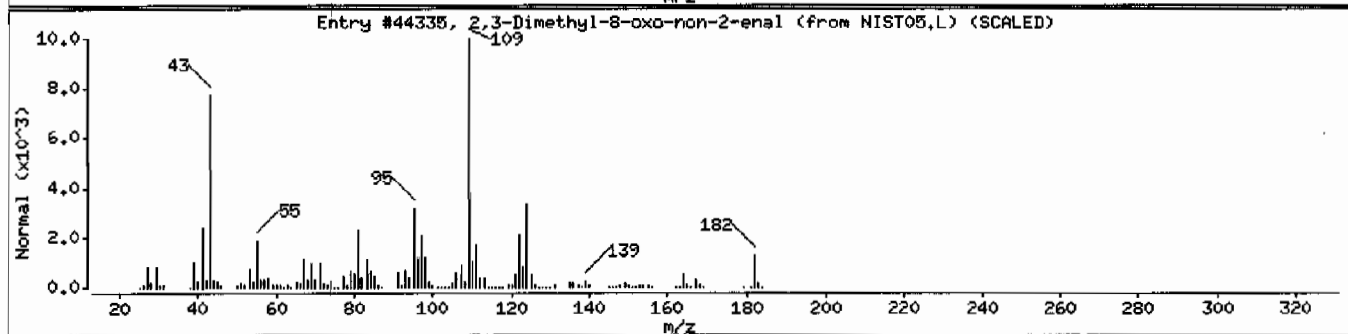
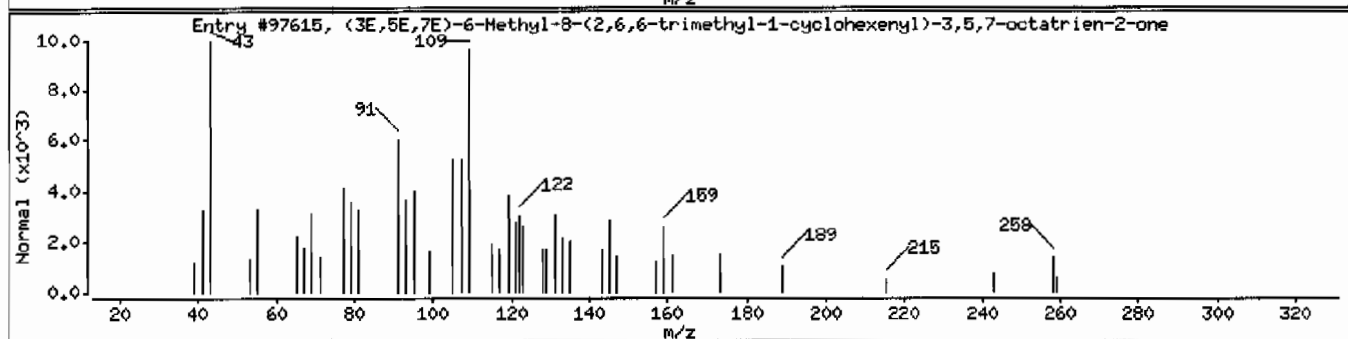
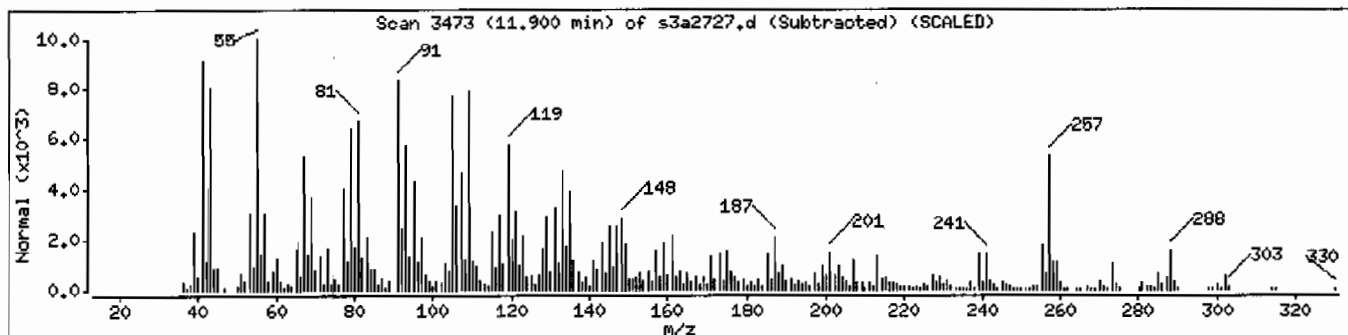
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula  | Weight |
|--|--------------|----------|-------|---------|----------|--------|
| (3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1 | 17974-57-1   | NIST05.L | 97615 | 90      | C18H26O  | 258    |
| 2,3-Dimethyl-8-oxo-non-2-enal            | 1000186-82-6 | NIST05.L | 44335 | 30      | C11H18O2 | 182    |
| 3-Octyne, 7-methyl-                      | 37050-06-9   | NIST05.L | 10294 | 30      | C9H16    | 124    |



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.1

Sample Info: 1245114010194487411SVMF11ILANL

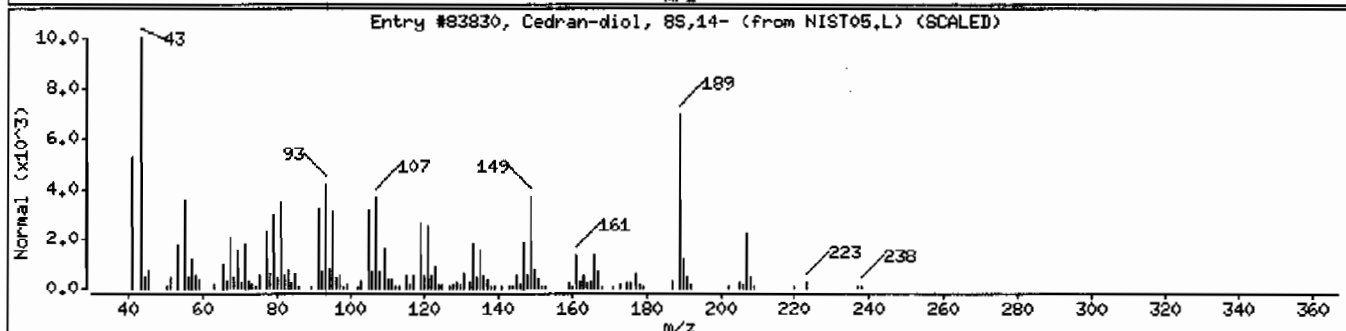
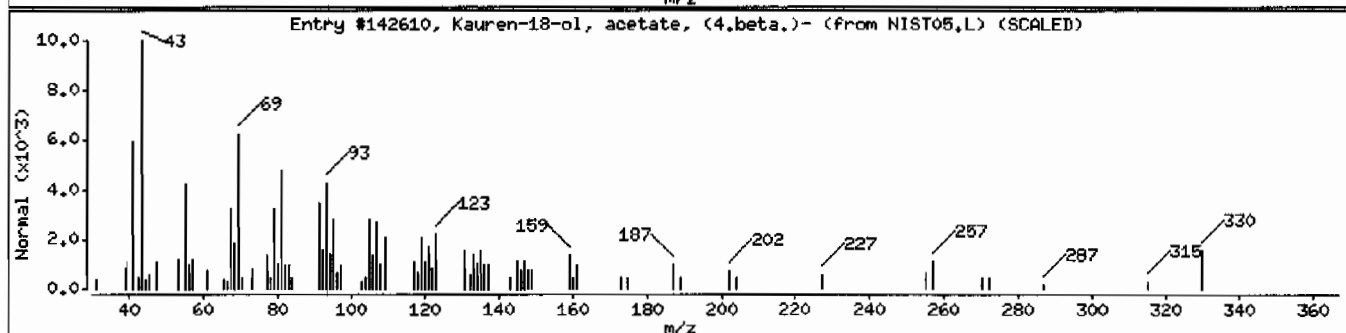
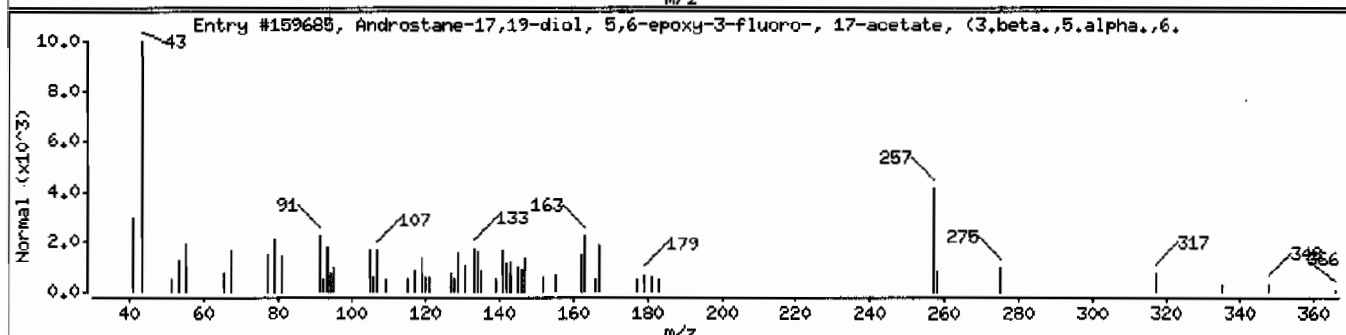
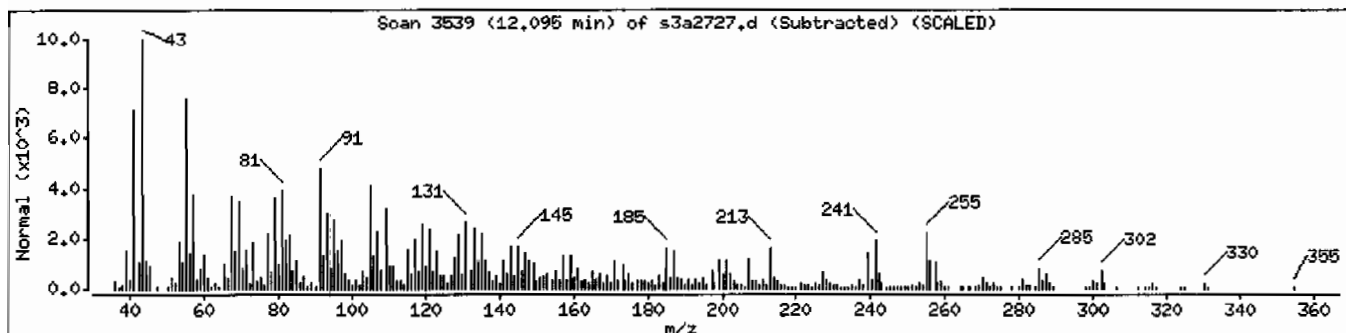
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula   | Weight |
|--|------------|----------|--------|---------|-----------|--------|
| Unknown                                  |            |          |        |         |           |        |
| Androstane-17,19-diol, 5,6-epoxy-3-fluor | 40242-94-2 | NIST05.L | 159685 | 16      | C21H31FO4 | 366    |
| Kauren-18-ol, acetate, (4,beta.)-        | 72150-74-4 | NIST05.L | 142610 | 14      | C22H34O2  | 330    |
| Cedran-diol, 8S,14-                      | 62600-05-9 | NIST05.L | 83830  | 10      | C15H26O2  | 238    |



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVHF11|LANL

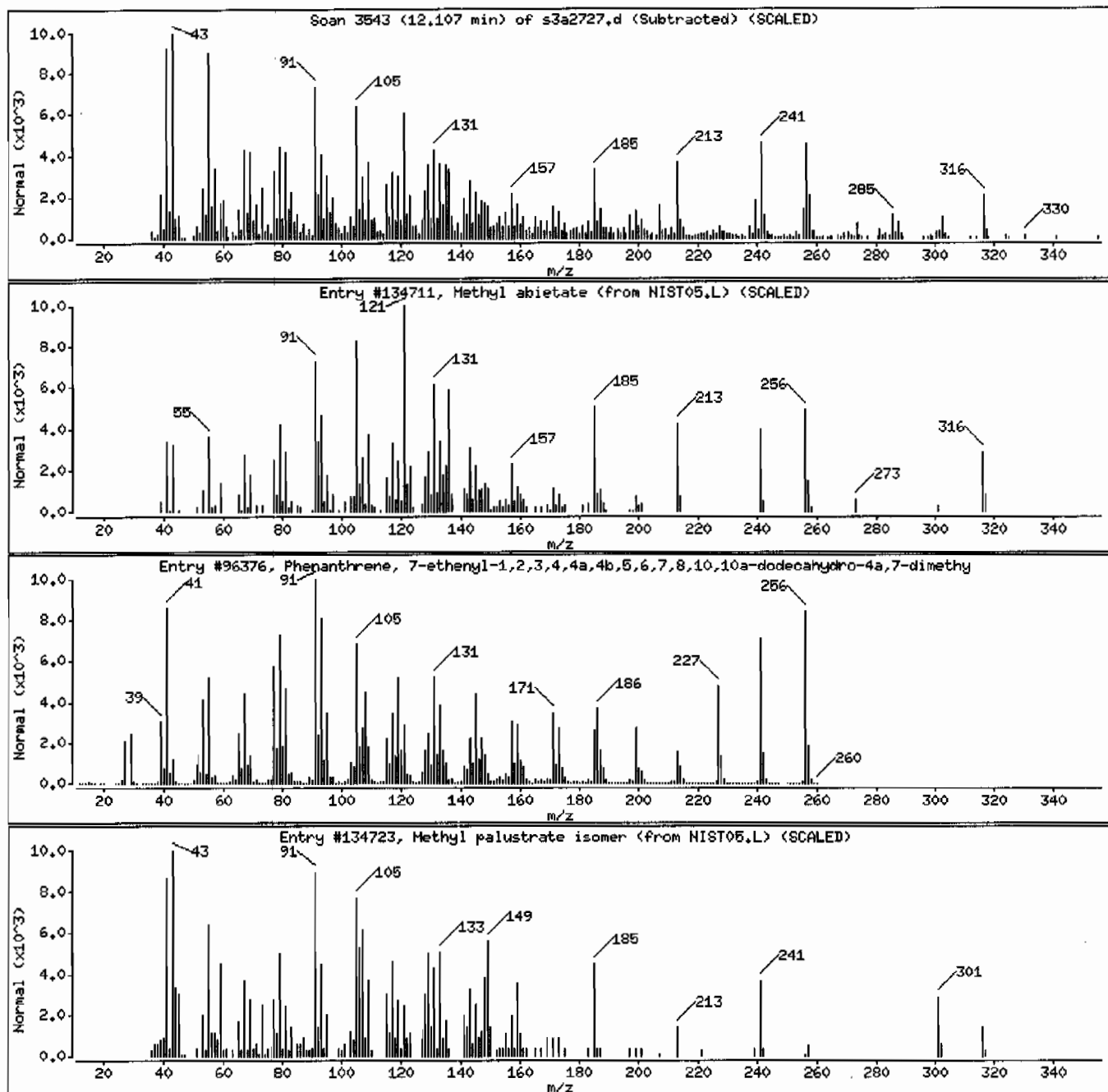
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| Unknown                                  |            |          |        |         |          |        |
| Methyl abietate                          | 127-25-3   | NIST05.L | 134711 | 53      | C21H32O2 | 316    |
| Phenanthrene, 7-ethenyl-1,2,3,4,4a,4b,5, | 26549-04-2 | NIST05.L | 96376  | 49      | C19H28   | 256    |
| Methyl palustrate isomer                 | 3310-94-9  | NIST05.L | 134723 | 41      | C21H32O2 | 316    |



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.1

Sample Info: 12451140101944874111SVHF111LANL

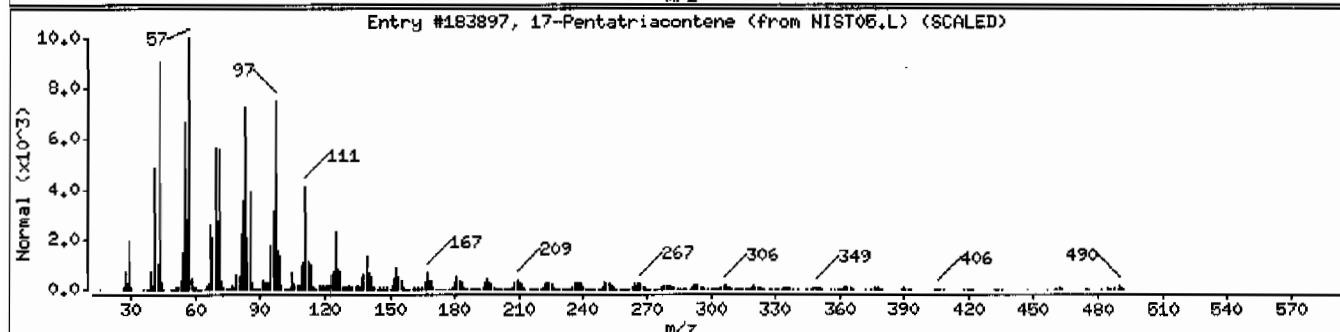
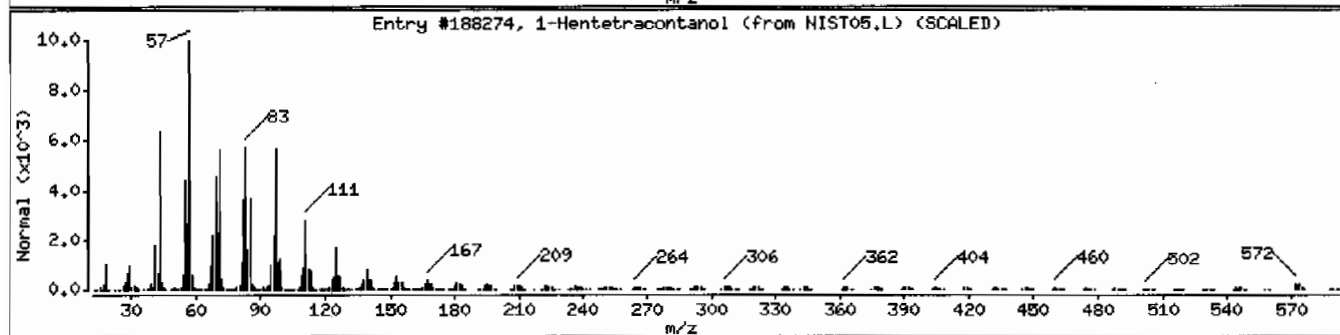
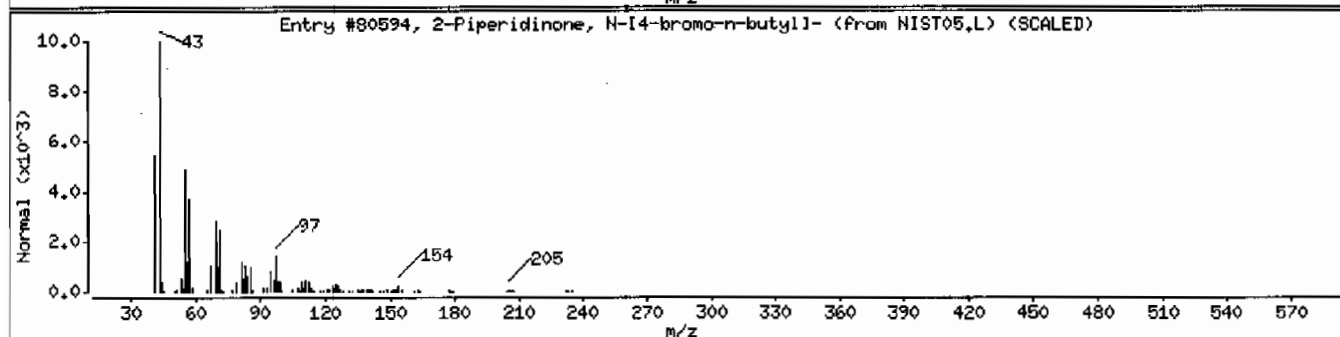
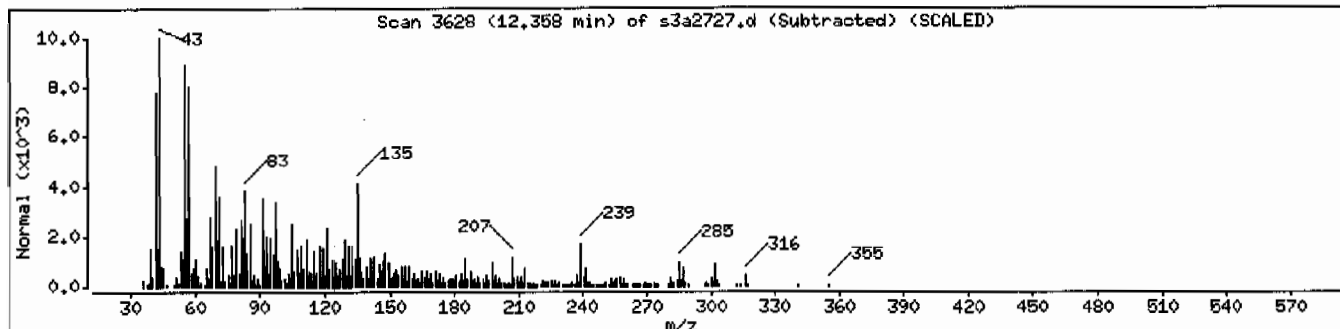
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match        | CAS Number  | Library  | Entry  | Quality | Formula   | Weight |
|--------------------------------------|-------------|----------|--------|---------|-----------|--------|
| Unknown                              |             |          |        |         |           |        |
| 2-Piperidinone, N-[4-bromo-n-butyl]- | 195194-80-0 | NIST05.L | 80594  | 62      | C9H16BrNO | 233    |
| 1-Hentetracontanol                   | 40710-42-7  | NIST05.L | 188274 | 50      | C41H84O   | 593    |
| 17-Pentatriacontene                  | 6971-40-0   | NIST05.L | 183897 | 50      | C35H70    | 491    |





Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944874111SVHF111LANL

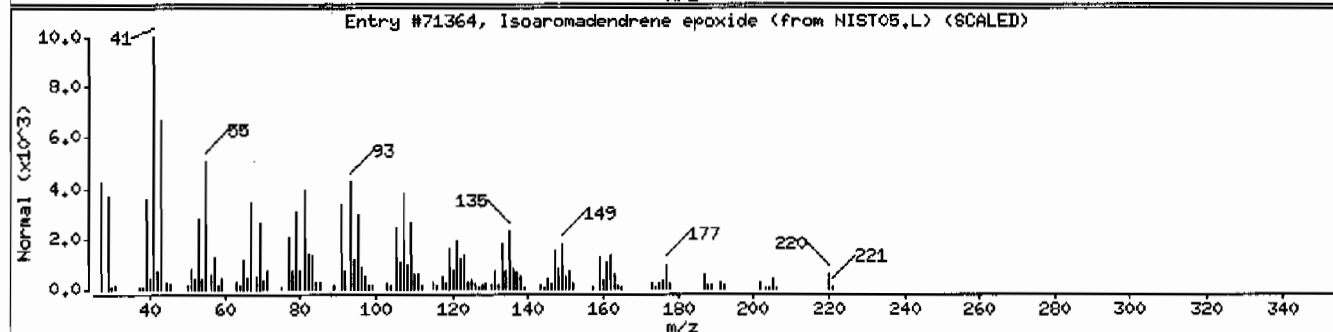
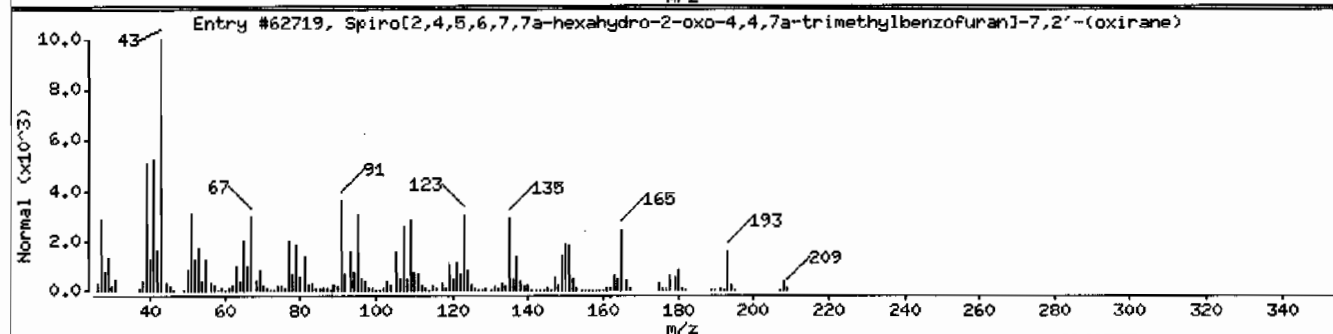
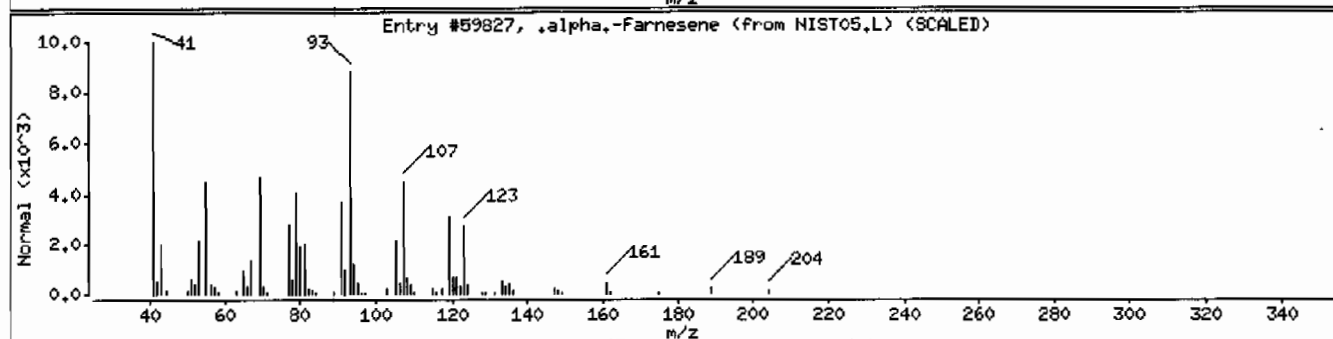
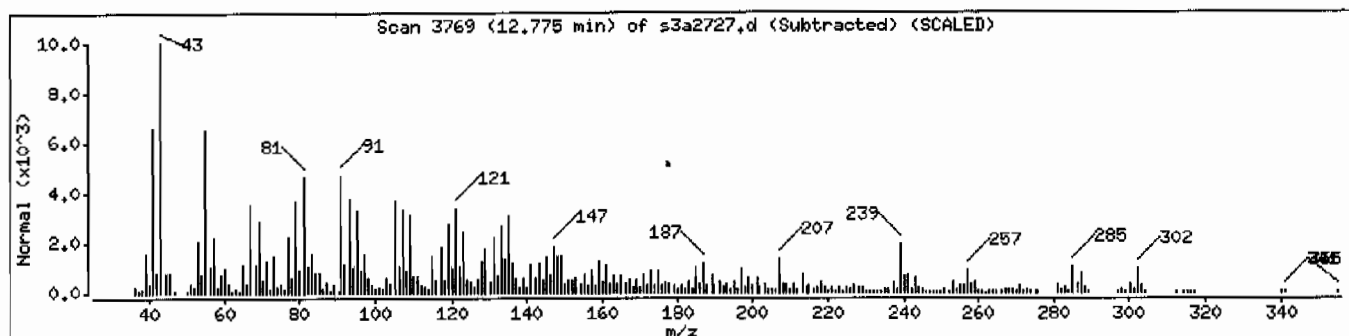
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula  | Weight |
|--|--------------|----------|-------|---------|----------|--------|
| Unknown                                  |              |          |       |         |          |        |
| .alpha.-Farnesene                        | 502-61-4     | NIST05.L | 59827 | 49      | C15H24   | 204    |
| Spiro[2,4,5,6,7,7a-hexahydro-2-oxo-4,4,7 | 1000197-10-9 | NIST05.L | 62719 | 46      | C12H16O3 | 208    |
| Isoaromadendrene epoxide                 | 1000169-36-6 | NIST05.L | 71364 | 38      | C15H24O  | 220    |



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944874111SVMF111LANL

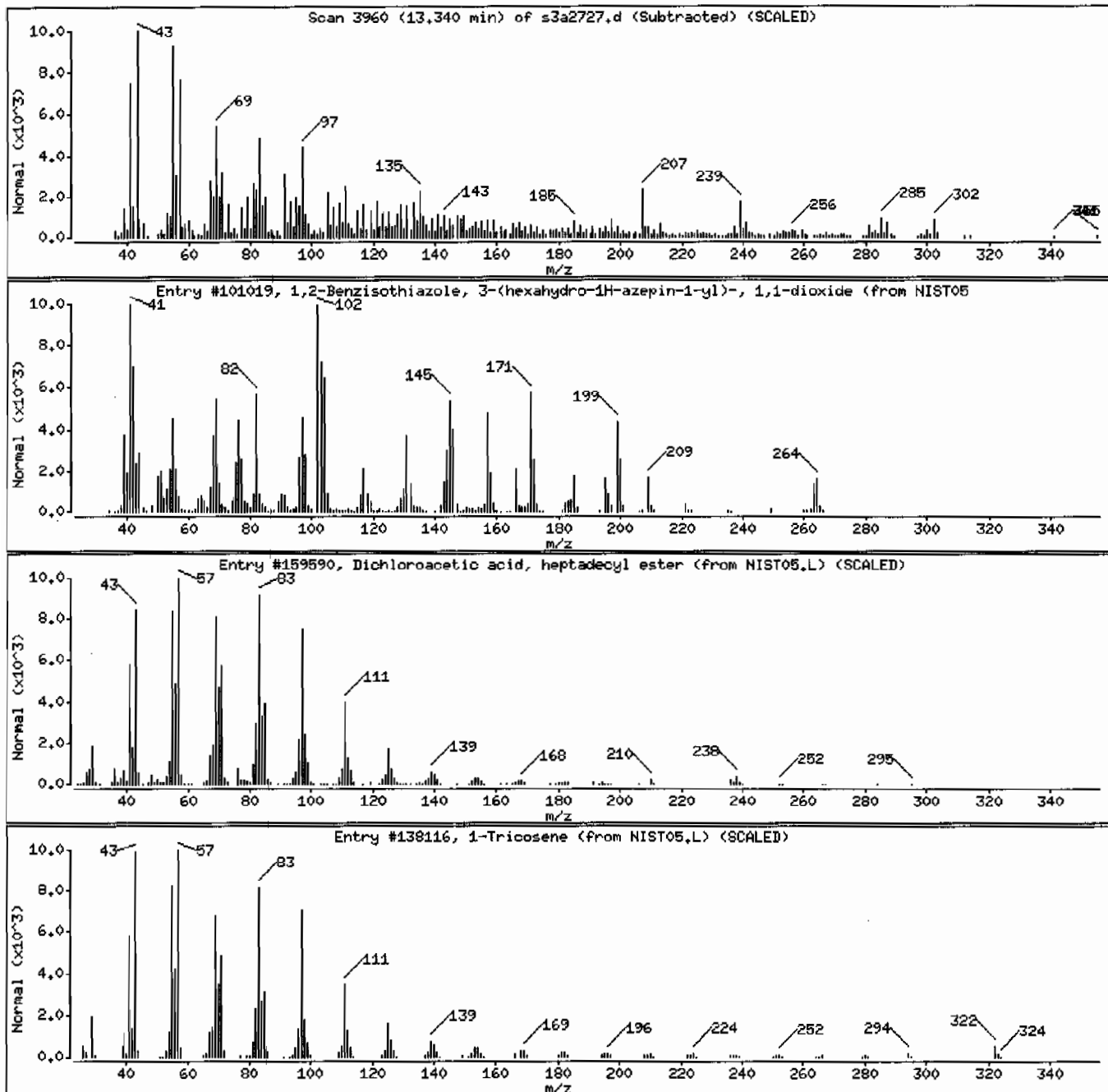
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula     | Weight |
|--|--------------|----------|--------|---------|-------------|--------|
| 1,2-Benzisothiazole, 3-(hexahydro-1H-aze | 309735-29-3  | NIST05.L | 101019 | 91      | C13H16N2O2S | 264    |
| Dichloroacetic acid, heptadecyl ester    | 1000282-98-2 | NIST05.L | 159590 | 60      | C19H36Cl2O2 | 366    |
| 1-Tricosene                              | 18835-32-0   | NIST05.L | 138116 | 60      | C23H46      | 322    |



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVHF111LANL

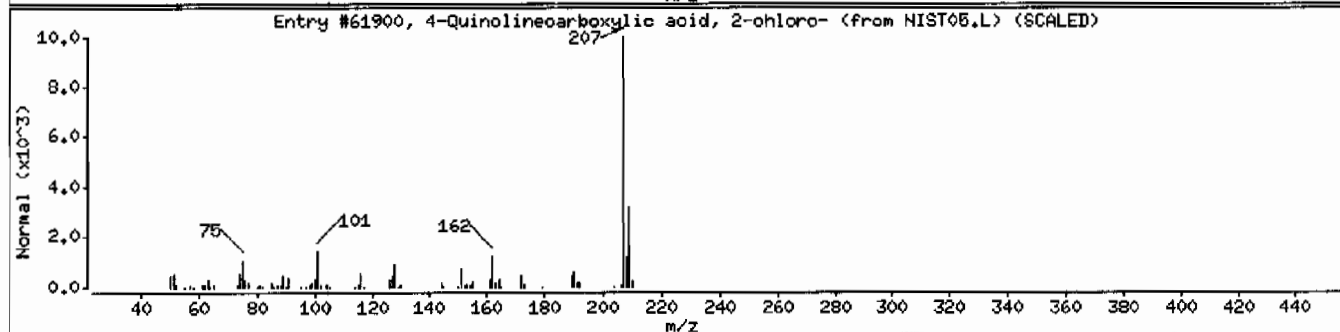
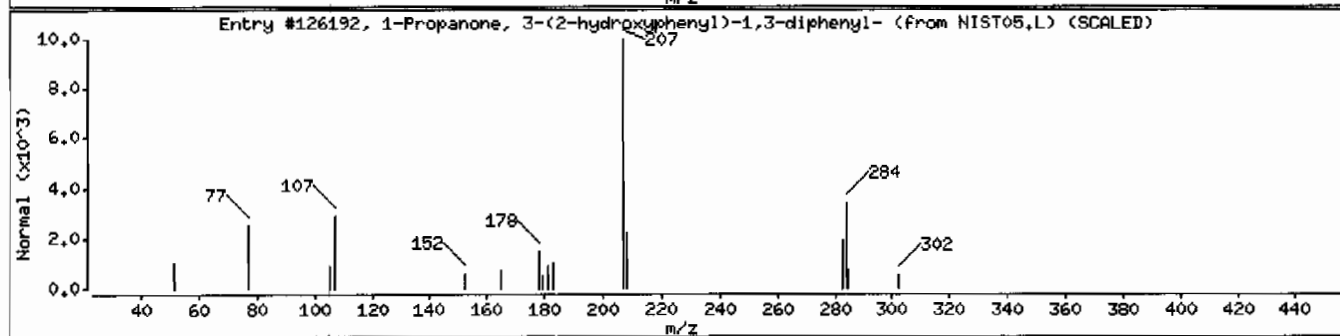
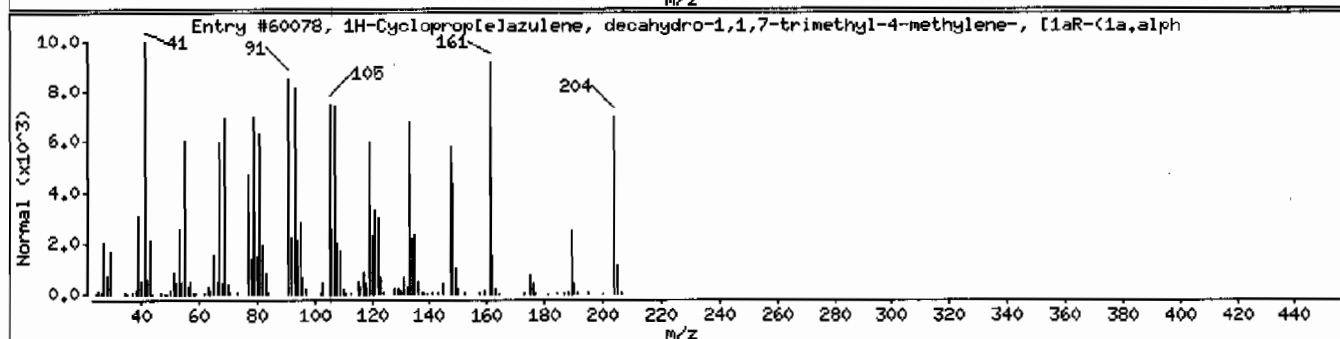
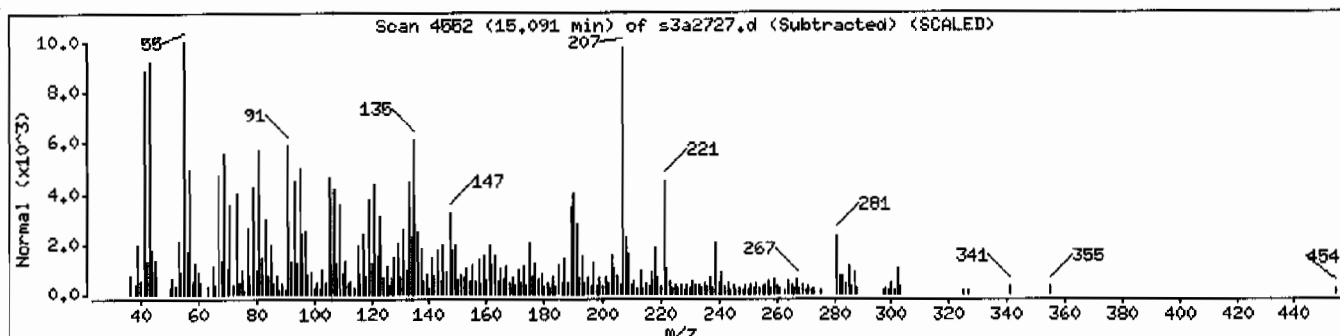
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula    | Weight |
|--|------------|----------|--------|---------|------------|--------|
| Unknown                                  |            |          |        |         |            |        |
| 1H-Cyclopropylazulene, decahydro-1,1,7-  | 489-39-4   | NIST05.L | 60078  | 43      | C15H24     | 204    |
| 1-Propanone, 3-(2-hydroxyphenyl)-1,3-dip | 4376-83-4  | NIST05.L | 126192 | 38      | C21H18O2   | 302    |
| 4-Quinolinecarboxylic acid, 2-chloro-    | 5467-57-2  | NIST05.L | 61900  | 25      | C10H6ClNO2 | 207    |



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944874111SVMF111LANL

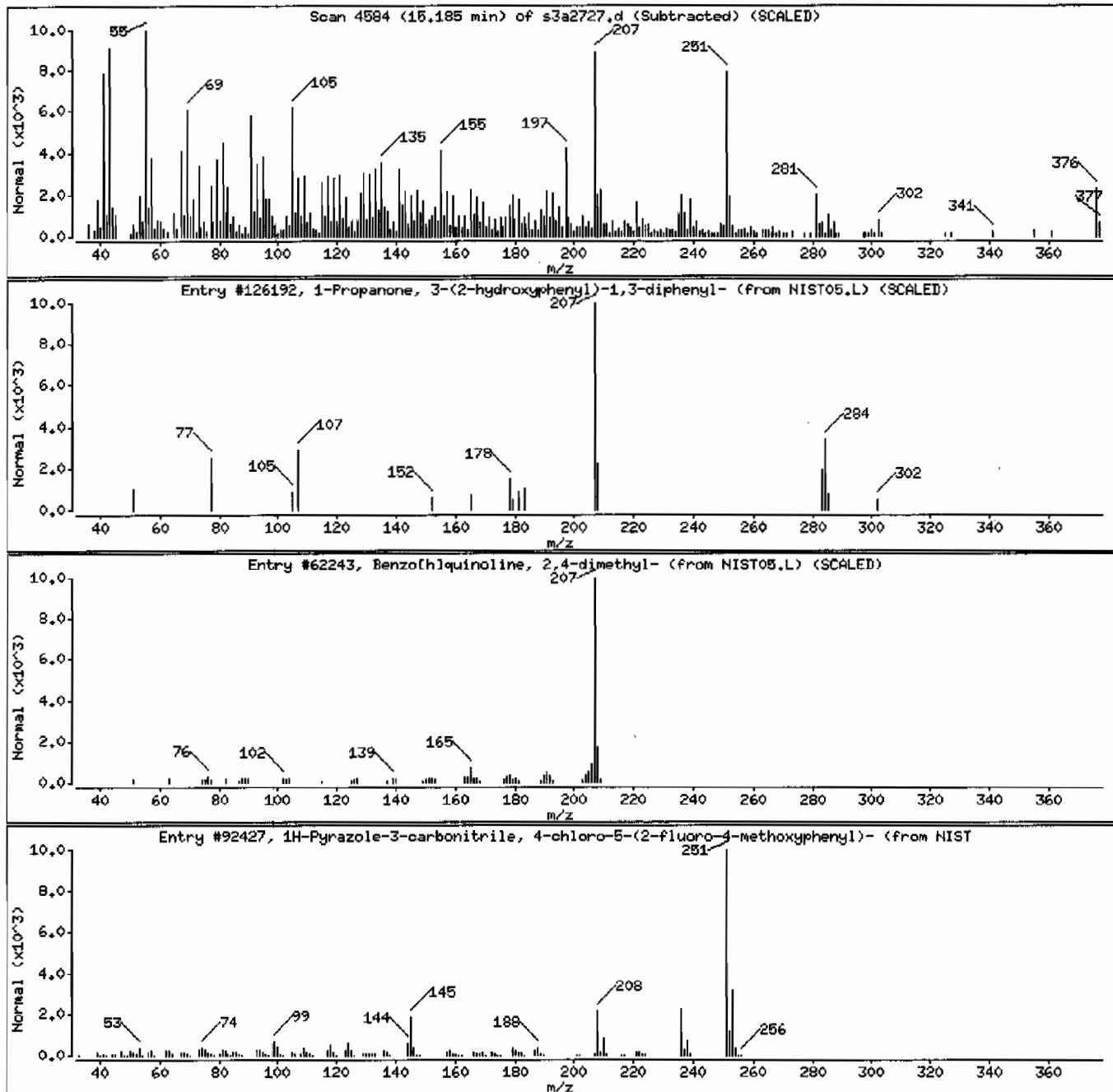
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula     | Weight |
|--|--------------|----------|--------|---------|-------------|--------|
| Unknown                                  |              |          |        |         |             |        |
| 1-Propanone, 3-(2-hydroxyphenyl)-1,3-dip | 4376-83-4    | NIST05.L | 126192 | 25      | C21H18O2    | 302    |
| Benzo[h]quinoline, 2,4-dimethyl-         | 605-67-4     | NIST05.L | 62243  | 25      | C15H13N     | 207    |
| 1H-Pyrazole-3-carbonitrile, 4-chloro-5-( | 1000310-08-9 | NIST05.L | 92427  | 18      | C11H7ClFN3O | 251    |



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944874111SVHF111LANL

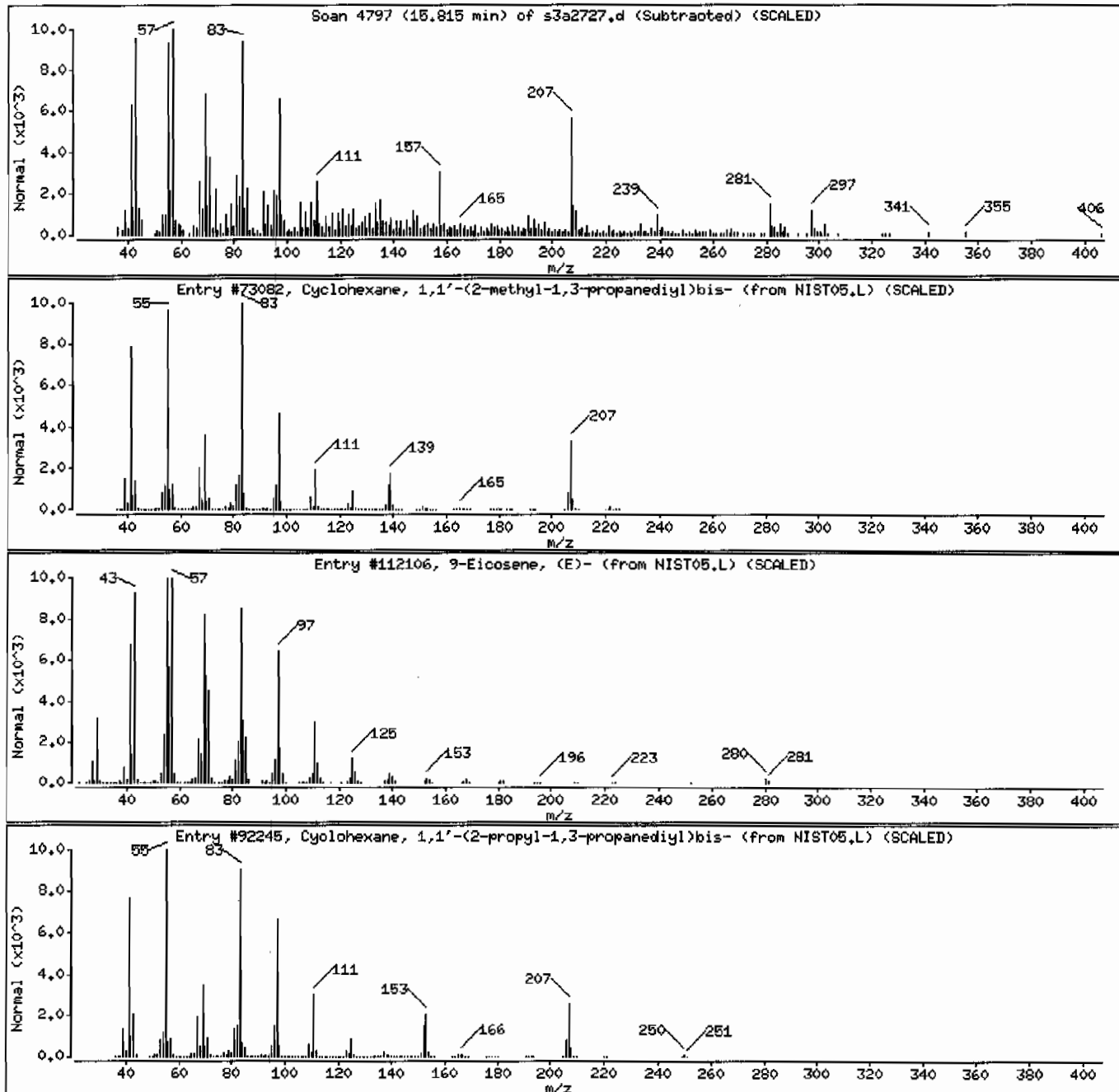
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match                    | CAS Number | Library  | Entry  | Quality | Formula | Weight |
|--|------------|----------|--------|---------|---------|--------|
| Unknown  |            |          |        |         |         |        |
| Cyclohexane, 1,1'-(2-methyl-1,3-propanediyl)bis- | 2883-08-1  | NIST05.L | 73082  | 58      | C16H30  | 222    |
| 9-Eicosene, (E)-                                 | 74685-29-3 | NIST05.L | 112106 | 53      | C20H40  | 280    |
| Cyclohexane, 1,1'-(2-propyl-1,3-propanediyl)bis- | 55030-21-2 | NIST05.L | 92245  | 52      | C18H34  | 250    |



Date : 27-JAN-2010 20:19

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVHF111LANL

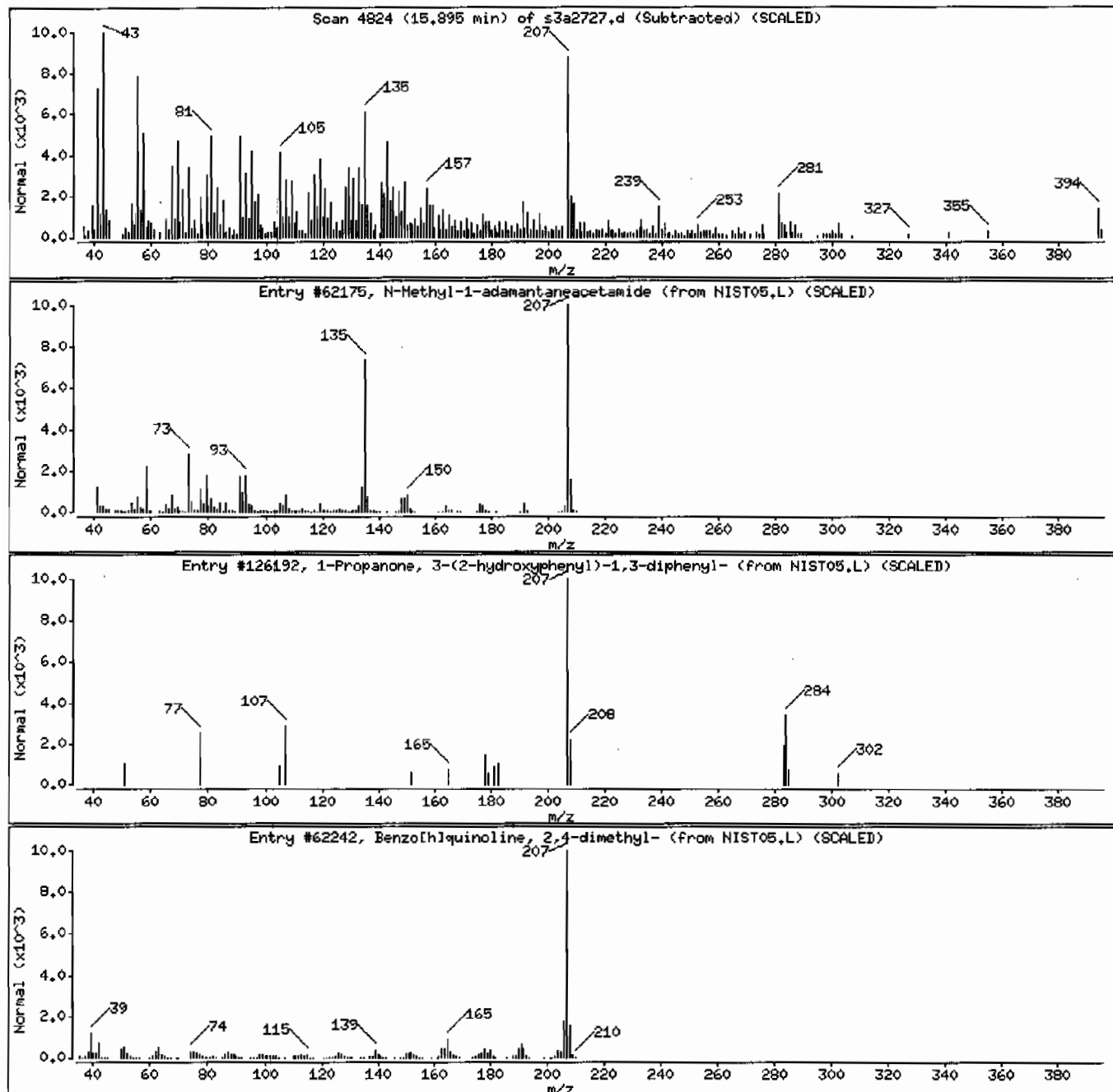
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| Unknown                                  |            |          |        |         |          |        |
| N-Methyl-1-adamantaneacetamide           | 31897-93-5 | NIST05.L | 62175  | 27      | C13H21NO | 207    |
| 1-Propanone, 3-(2-hydroxyphenyl)-1,3-dip | 4376-83-4  | NIST05.L | 126192 | 20      | C21H18O2 | 302    |
| Benzo[h]quinoline, 2,4-dimethyl-         | 605-67-4   | NIST05.L | 62242  | 20      | C15H13N  | 207    |



Date: 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVHF111LANL

Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

## Library Search Compound Match

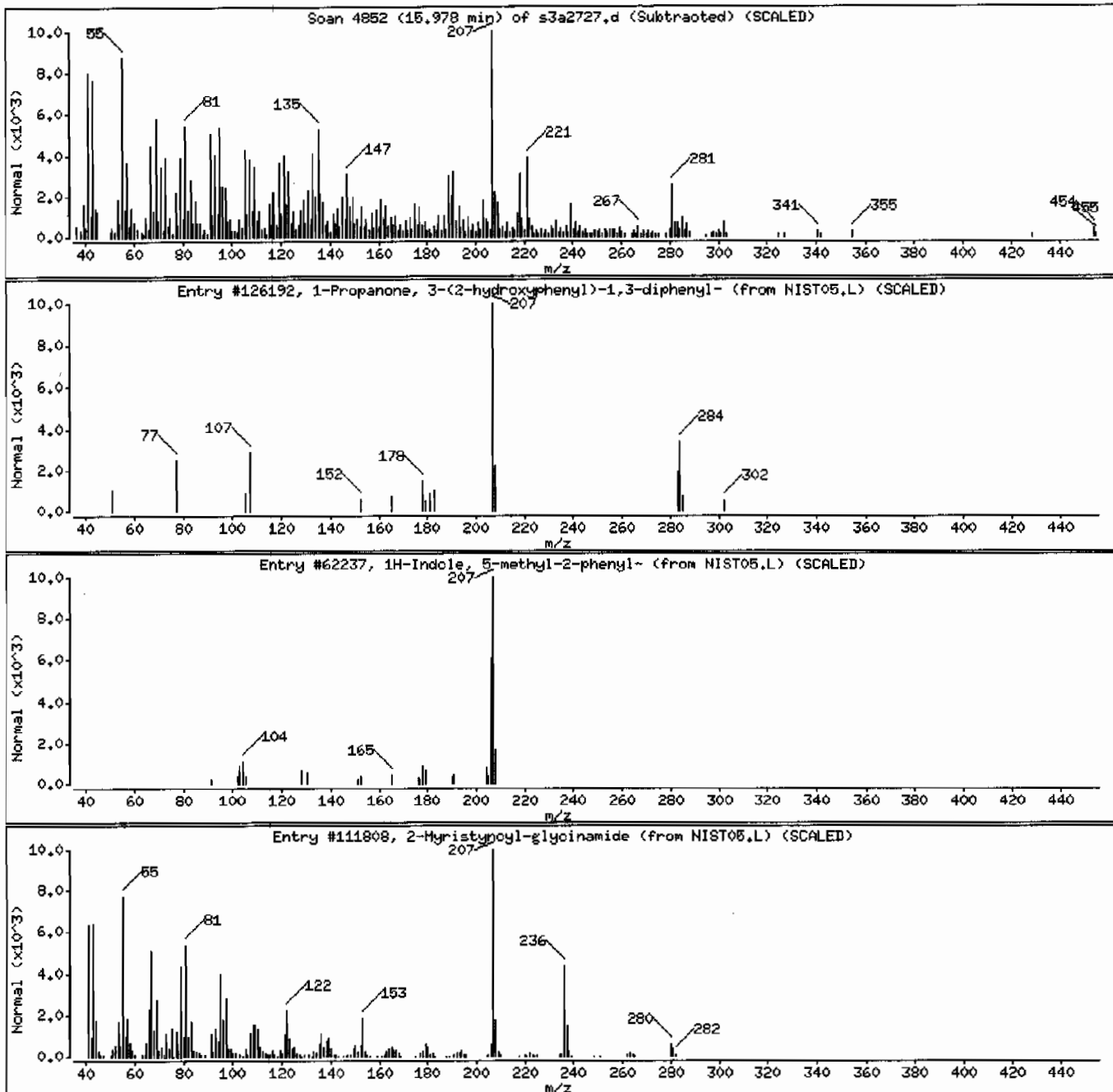
Unknown

1-Propanone, 3-(2-hydroxyphenyl)-1,3-dip

| CAS Number   | Library  | Entry  | Quality | Formula    | Weight |
|--------------|----------|--------|---------|------------|--------|
| 4376-83-4    | NIST05.L | 126192 | 27      | C21H18O2   | 302    |
| 13228-36-9   | NIST05.L | 62237  | 25      | C15H13N    | 207    |
| 1000111-57-7 | NIST05.L | 111808 | 25      | C16H28N2O2 | 280    |

1H-Indole, 5-methyl-2-phenyl-

2-Hyristynoyl-glycinamide



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411|SVHF11|LANL

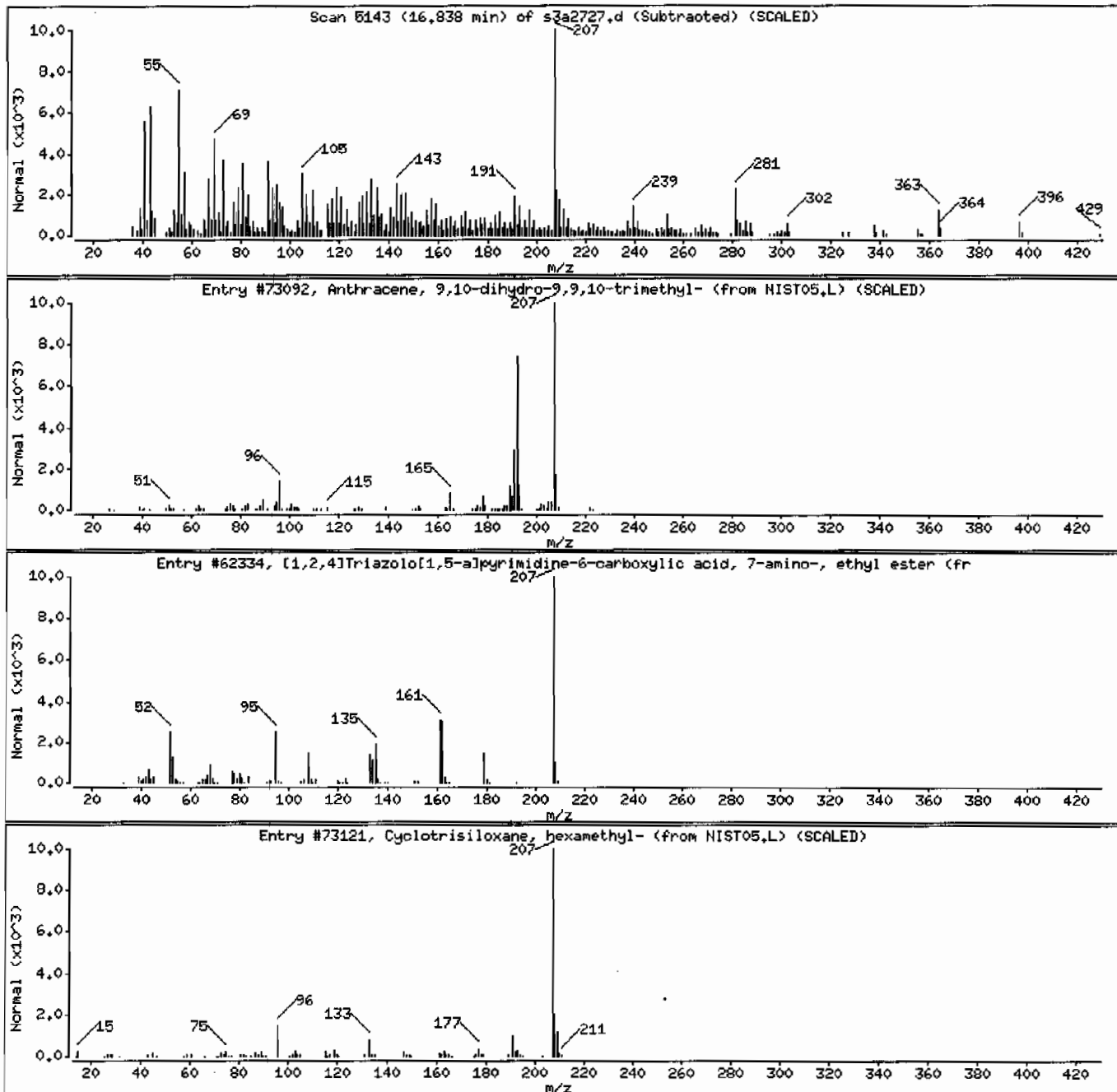
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match              | CAS Number   | Library  | Entry | Quality | Formula    | Weight |
|--|--------------|----------|-------|---------|------------|--------|
| Unknown                                    |              |          |       |         |            |        |
| Anthracene, 9,10-dihydro-9,9,10-trimethyl- | 14923-29-6   | NIST05.L | 73092 | 38      | C17H18     | 222    |
| [1,2,4]Triazolo[1,5-a]pyrimidine-6-carbo   | 1000316-75-8 | NIST05.L | 62334 | 35      | C8H9N5O2   | 207    |
| Cyclotrisiloxane, hexamethyl-              | 541-05-9     | NIST05.L | 73121 | 35      | C6H18O3Si3 | 222    |





Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944874111SVHF111LANL

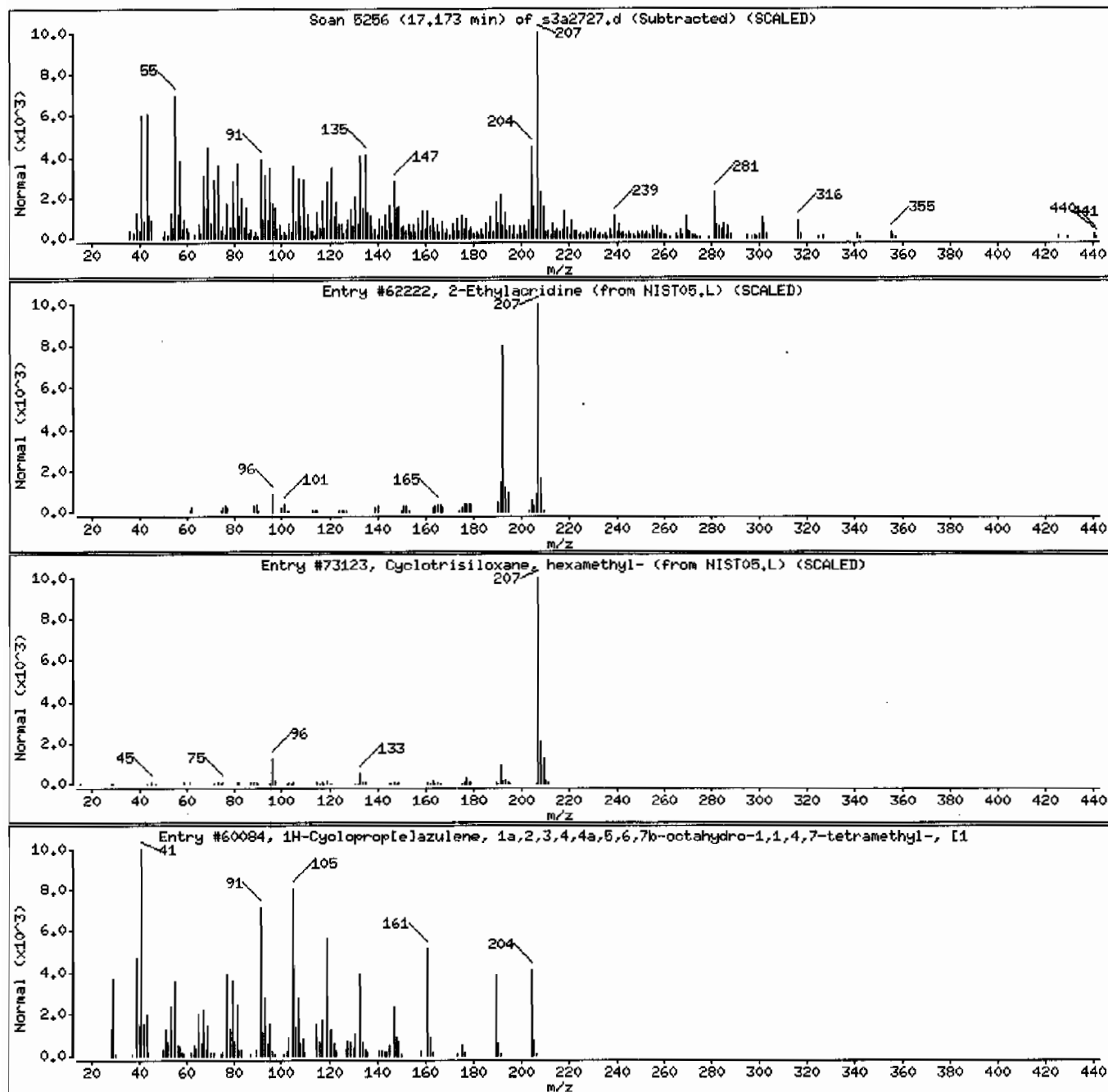
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match             | CAS Number | Library  | Entry | Quality | Formula    | Weight |
|---|------------|----------|-------|---------|------------|--------|
| Unknown                                   |            |          |       |         |            |        |
| 2-Ethylacridine                           | 55751-83-2 | NIST05.L | 62222 | 30      | C15H13N    | 207    |
| Cyclotrisiloxane, hexamethyl-             | 541-05-9   | NIST05.L | 73123 | 27      | C6H18O3Si3 | 222    |
| 1H-Cycloprop[el]azulene, 1a,2,3,4,4a,5,6, | 489-40-7   | NIST05.L | 60084 | 25      | C15H24     | 204    |



Date: 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVHF111LANL

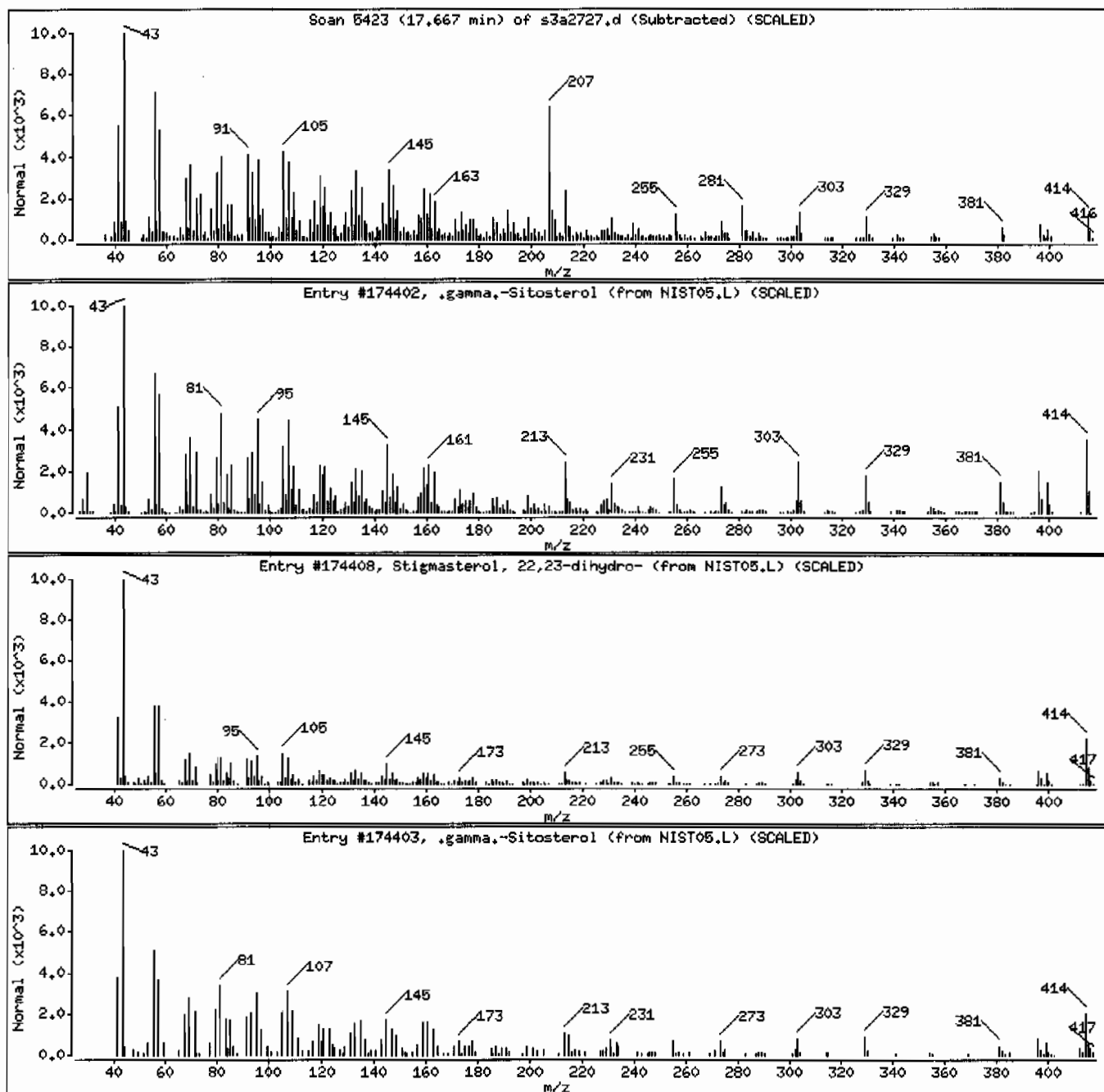
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number   | Library  | Entry  | Quality | Formula | Weight |
|-------------------------------|--------------|----------|--------|---------|---------|--------|
| .gamma.-Sitosterol            | 83-47-6      | NIST05.L | 174402 | 97      | C29H50O | 414    |
| Stigmasterol, 22,23-dihydro-  | 1000214-20-7 | NIST05.L | 174408 | 93      | C29H50O | 414    |
| .gamma.-Sitosterol            | 83-47-6      | NIST05.L | 174403 | 89      | C29H50O | 414    |



Date : 27-JAN-2010 20:10

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944874111SVHF111LANL

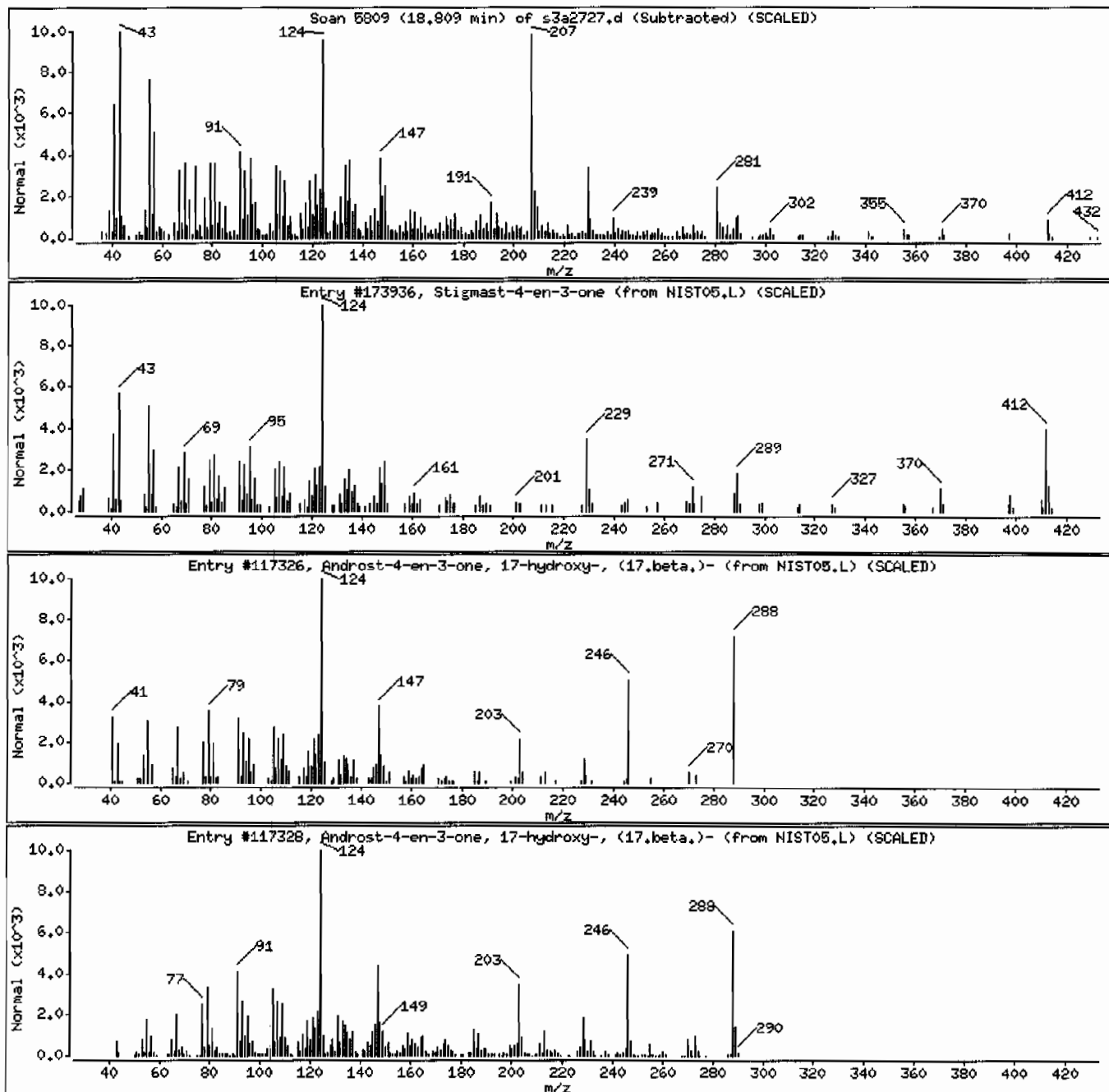
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| Stigmast-4-en-3-one                      | 1058-61-3  | NIST05.L | 173936 | 89      | C29H48O  | 412    |
| Androst-4-en-3-one, 17-hydroxy-, (17,bet | 58-22-0    | NIST05.L | 117326 | 55      | C19H28O2 | 288    |
| Androst-4-en-3-one, 17-hydroxy-, (17,bet | 58-22-0    | NIST05.L | 117328 | 38      | C19H28O2 | 288    |



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114013

Client ID: RE15-10-8424  
Batch ID: 944874  
Run Date: 01/29/2010 03:24  
Prep Date: 01/25/2010 21:06  
Data File: s3a2841.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 369    | ug/kg | 73.8    | 369     |
| 108-95-2   | Phenol                        | U         | 369    | ug/kg | 73.8    | 369     |
| 95-57-8    | 2-Chlorophenol                | U         | 369    | ug/kg | 73.8    | 369     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 369    | ug/kg | 73.8    | 369     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 369    | ug/kg | 73.8    | 369     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 369    | ug/kg | 73.8    | 369     |
| 83-32-9    | Acenaphthene                  | U         | 36.9   | ug/kg | 12.2    | 36.9    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 369    | ug/kg | 36.9    | 369     |
| 100-02-7   | 4-Nitrophenol                 | U         | 369    | ug/kg | 122     | 369     |
| 87-86-5    | Pentachlorophenol             | U         | 369    | ug/kg | 92.2    | 369     |
| 129-00-0   | Pyrene                        | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 110-86-1   | Pyridine                      | U         | 369    | ug/kg | 73.8    | 369     |
| 62-53-3    | Aniline                       | U         | 369    | ug/kg | 111     | 369     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 369    | ug/kg | 73.8    | 369     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 369    | ug/kg | 73.8    | 369     |
| 100-51-6   | Benzyl alcohol                | U         | 369    | ug/kg | 111     | 369     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 369    | ug/kg | 73.8    | 369     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 369    | ug/kg | 73.8    | 369     |
| 95-48-7    | o-Cresol                      | U         | 369    | ug/kg | 73.8    | 369     |
| 65794-96-9 | m,p-Cresols                   | U         | 369    | ug/kg | 111     | 369     |
| 67-72-1    | Hexachloroethane              | U         | 369    | ug/kg | 73.8    | 369     |
| 98-95-3    | Nitrobenzene                  | U         | 369    | ug/kg | 73.8    | 369     |
| 78-59-1    | Isophorone                    | U         | 369    | ug/kg | 73.8    | 369     |
| 88-75-5    | 2-Nitrophenol                 | U         | 369    | ug/kg | 73.8    | 369     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 369    | ug/kg | 129     | 369     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 369    | ug/kg | 73.8    | 369     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 369    | ug/kg | 73.8    | 369     |
| 65-85-0    | Benzoic acid                  | U         | 738    | ug/kg | 184     | 738     |
| 91-20-3    | Naphthalene                   | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 106-47-8   | 4-Chloroaniline               | U         | 369    | ug/kg | 73.8    | 369     |
| 87-68-3    | Hexachlorobutadiene           | U         | 369    | ug/kg | 73.8    | 369     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 36.9   | ug/kg | 7.38    | 36.9    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 369    | ug/kg | 73.8    | 369     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 369    | ug/kg | 73.8    | 369     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 369    | ug/kg | 73.8    | 369     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 36.9   | ug/kg | 12.2    | 36.9    |
| 88-74-4    | 2-Nitroaniline                | U         | 369    | ug/kg | 73.8    | 369     |
|            | <i>o</i> -Nitroaniline        |           |        |       |         |         |
| 99-09-2    | 3-Nitroaniline                | U         | 369    | ug/kg | 73.8    | 369     |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114013

Client ID: RE15-10-8424  
Batch ID: 944874  
Run Date: 01/29/2010 03:24  
Prep Date: 01/25/2010 21:06  
Data File: s3a2841.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|------------------------------|-----------|--------|-------|---------|---------|
|           | <i>m-Nitroaniline</i>        |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate            | U         | 369    | ug/kg | 73.8    | 369     |
| 606-20-2  | 2,6-Dinitrotoluene           | U         | 369    | ug/kg | 36.9    | 369     |
| 208-96-8  | Acenaphthylene               | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 51-28-5   | 2,4-Dinitrophenol            | U         | 738    | ug/kg | 140     | 738     |
| 132-64-9  | Dibenzofuran                 | U         | 369    | ug/kg | 73.8    | 369     |
| 84-66-2   | Diethylphthalate             | U         | 369    | ug/kg | 73.8    | 369     |
| 86-73-7   | Fluorene                     | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 7005-72-3 | 4-Chlorophenylphenylether    | U         | 369    | ug/kg | 73.8    | 369     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol   | U         | 369    | ug/kg | 73.8    | 369     |
| 100-01-6  | 4-Nitroaniline               | U         | 369    | ug/kg | 111     | 369     |
|           | <i>p-Nitroaniline</i>        |           |        |       |         |         |
| 122-39-4  | Diphenylamine                | U         | 369    | ug/kg | 73.8    | 369     |
| 122-66-7  | Azobenzene                   | U         | 369    | ug/kg | 73.8    | 369     |
|           | <i>1,2-Diphenylhydrazine</i> |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether     | U         | 369    | ug/kg | 73.8    | 369     |
| 118-74-1  | Hexachlorobenzene            | U         | 369    | ug/kg | 73.8    | 369     |
| 85-01-8   | Phenanthrene                 | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 120-12-7  | Anthracene                   | U         | 36.9   | ug/kg | 7.38    | 36.9    |
| 84-74-2   | Di-n-butylphthalate          | U         | 369    | ug/kg | 73.8    | 369     |
| 206-44-0  | Fluoranthene                 | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 85-68-7   | Butylbenzylphthalate         | U         | 369    | ug/kg | 73.8    | 369     |
| 56-55-3   | Benzo(a)anthracene           | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 91-94-1   | 3,3'-Dichlorobenzidine       | U         | 369    | ug/kg | 111     | 369     |
| 218-01-9  | Chrysene                     | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate   | J         | 170    | ug/kg | 73.8    | 369     |
| 117-84-0  | Di-n-octylphthalate          | U         | 369    | ug/kg | 73.8    | 369     |
| 205-99-2  | Benzo(b)fluoranthene         | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 207-08-9  | Benzo(k)fluoranthene         | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 50-32-8   | Benzo(a)pyrene               | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene       | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 53-70-3   | Dibenzo(a,h)anthracene       | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 191-24-2  | Benzo(ghi)perylene           | U         | 36.9   | ug/kg | 11.1    | 36.9    |
| 120-82-1  | 1,2,4-Trichlorobenzene       | U         | 369    | ug/kg | 73.8    | 369     |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.09 | 2120      | ug/kg |     | J    |
|         | Unknown                               | 2.26 | 209       | ug/kg |     | J    |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

Page 3 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114013

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8424  
Batch ID: 944874  
Run Date: 01/29/2010 03:24  
Prep Date: 01/25/2010 21:06  
Data File: s3a2841.d

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |  |       |           |       |     |      |
|---|--|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC)    | RT    | Estimated | Units | Fit | Qual |
|   | Unknown Aldol Condensate                 | 3.33  | 184       | ug/kg |     | JA   |
| 7785-70-8                               | 1R-.alpha.-Pinene                        | 4.1   | 231       | ug/kg | 98  | NJ   |
| 498-15-7                                | Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy | 4.66  | 211       | ug/kg | 97  | NJ   |
|   | Unknown                                  | 11.42 | 415       | ug/kg |     | J    |
|   | Unknown                                  | 11.45 | 158       | ug/kg |     | J    |
| 1686-62-0                               | 1-Phenanthrenecarboxylic acid, 7-ethenyl | 11.64 | 405       | ug/kg | 95  | NJ   |
| 1235-74-1                               | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.76 | 228       | ug/kg | 99  | NJ   |
| 127-25-3                                | Methyl abietate                          | 11.99 | 329       | ug/kg | 86  | NJ   |
|   | Unknown                                  | 15.65 | 1410      | ug/kg |     | J    |
|   | Unknown                                  | 16.42 | 2340      | ug/kg |     | J    |
|   | Unknown                                  | 17.6  | 609       | ug/kg |     | J    |

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012810a.b/s3a2841.d  
Lab Smp Id: 245114013 Client Smp ID: RE15-10-8424  
Inj Date : 29-JAN-2010 03:24  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |245114013|944874|1|SVMF|1|LANL  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m  
Meth Date : 29-Jan-2010 10:49 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 16  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1324.sub  
Target Version: 3.50  
Processing Host: hpclp1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.14000  | weight of sample          |
| M    | 10.03960  | % moisture                |

Cpnd Variable Local Compound Variable

| Compounds                   | QUANT SIG |        |                | RESPONSE | CONCENTRATIONS       |                  |
|-----------------------------|-----------|--------|----------------|----------|----------------------|------------------|
|                             | MASS      | RT     | EXP RT REL RT  |          | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/Kg) |
| * 10 1,4-Dichlorobenzene-d4 | 152       | 4.723  | 4.722 (1.000)  | 635350   | 40.0000              |                  |
| * 29 Naphthalene-d8         | 136       | 6.000  | 6.003 (1.000)  | 2302107  | 40.0000              |                  |
| * 46 Acenaphthene-d10       | 164       | 7.870  | 7.875 (1.000)  | 1165118  | 40.0000              |                  |
| * 67 Phenanthrene-d10       | 188       | 9.486  | 9.486 (1.000)  | 1586639  | 40.0000              |                  |
| * 91 Chrysene-d12           | 240       | 12.475 | 12.478 (1.000) | 637662   | 40.0000              |                  |
| * 98 Perylene-d12           | 264       | 14.762 | 14.762 (1.000) | 333205   | 40.0000              |                  |
| \$ 3 2-Fluorophenol         | 112       | 3.561  | 3.549 (0.754)  | 1146434  | 69.3438              | 2560             |
| \$ 5 Phenol-d5              | 99        | 4.333  | 4.331 (0.917)  | 1331289  | 64.0722              | 2360             |
| \$ 20 Nitrobenzene-d5       | 82        | 5.257  | 5.262 (0.876)  | 625510   | 36.7830              | 1360             |
| \$ 39 2-Fluorobiphenyl      | 172       | 7.127  | 7.128 (0.906)  | 1173599  | 38.9695              | 1440             |
| \$ 60 2,4,6-Tribromophenol  | 329       | 8.721  | 8.724 (1.108)  | 205191   | 61.4331              | 2260             |
| \$ 81 p-Terphenyl-d14       | 244       | 11.198 | 11.196 (0.898) | 661249   | 60.3318              | 2220             |

| Compounds                     | QUANT SIG<br>MASS | RT     | EXP RT | REL RT  | RESPONSE | CONCENTRATIONS       |                  |
|-------------------------------|-------------------|--------|--------|---------|----------|----------------------|------------------|
|                               |                   |        |        |         |          | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/Kg) |
| 93 bis(2-Ethylhexyl)phthalate | 149               | 12.431 | 12.431 | (0.996) | 57859    | 4.59882              | 170 (a)          |

#### QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation (BLOQ).



## ION RATIO REPORT

## SV REPORT

Data file: s3a2841.d

Report Date: 01/29/2010 11:49

Lab. ID: 245114013

SampleType: SAMPLE

Injection Date: 29-JAN-2010 03:24

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245114013|944874|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1324

Sample Matrix: SOIL

| MASS                      | RESPONSE | RT             | EXPECT RT | TARGET RANGE | RATIO | QUAL |
|---------------------------|----------|----------------|-----------|--------------|-------|------|
| =====                     |          |                |           |              |       |      |
| 4 Aniline                 |          | CAS#: 62-53-3  |           |              |       |      |
| 66                        | 76608    | 4.33           | 4.41      | 80-120       | 100   | (T)  |
| 93                        | 15767    | 4.39           | 4.41      | 201-261      | 21    | (Q)  |
| -----                     |          |                |           |              |       |      |
| 17 N-Nitrosodipropylamine |          | CAS#: 621-64-7 |           |              |       |      |
| 70                        | 92623    | 5.26           | 5.10      | 80-120       | 100   | (T)  |
| 42                        | 62571    | 5.26           | 5.10      | 45-105       | 68    | (T)  |
| -----                     |          |                |           |              |       |      |
| 40 2-Chloronaphthalene    |          | CAS#: 91-58-7  |           |              |       |      |
| 162                       | 18327    | 7.47           | 7.27      | 80-120       | 100   | (T)  |
| 164                       | 985      | 7.47           | 7.27      | 3- 63        | 5     | (T)  |
| 127                       | 1414     | 7.47           | 7.27      | 10- 70       | 8     | (QT) |
| -----                     |          |                |           |              |       |      |
| 42 o-Nitroaniline         |          | CAS#: 88-74-4  |           |              |       |      |
| 65                        | 24235    | 7.47           | 7.37      | 80-120       | 100   | (T)  |
| 92                        | 27194    | 7.47           | 7.37      | 32- 92       | 112   | (QT) |
| 138                       | 2000     | 7.47           | 7.37      | 72-132       | 8     | (QT) |
| -----                     |          |                |           |              |       |      |
| 41 m-Nitroaniline         |          | CAS#: 99-09-2  |           |              |       |      |
| 138                       | 199      | 7.87           | 7.82      | 80-120       | 100   | ( )  |
| 92                        | 7028     | 7.87           | 7.82      | 80-140       | 3527  | (Q)  |
| 108                       | 26267    | 7.87           | 7.82      | 0- 40        | 13182 | (Q)  |
| -----                     |          |                |           |              |       |      |
| 44 2,6-Dinitrotoluene     |          | CAS#: 606-20-2 |           |              |       |      |
| 165                       | 152261   | 7.87           | 7.63      | 80-120       | 100   | (T)  |
| 63                        | 2817     | 7.87           | 7.63      | 35- 95       | 2     | (QT) |
| -----                     |          |                |           |              |       |      |

| MASS                  | RESPONSE | RT   | EXPECT RT | TARGET RANGE   | RATIO | QUAL |
|-----------------------|----------|------|-----------|----------------|-------|------|
| =====                 |          |      |           |                |       |      |
| 50 2,4-Dinitrotoluene |          |      |           | CAS#: 121-14-2 |       |      |
| 165                   | 152261   | 7.87 | 8.07      | 80-120         | 100   | (T)  |
| 89                    | 2380     | 7.87 | 8.07      | 43-103         | 2     | (QT) |
| 63                    | 2817     | 7.87 | 8.07      | 23- 83         | 2     | (QT) |

|                               |       |       |       |                |     |     |
|-------------------------------|-------|-------|-------|----------------|-----|-----|
| 93 bis(2-Ethylhexyl)phthalate |       |       |       | CAS#: 117-81-7 |     |     |
| 149                           | 57859 | 12.43 | 12.43 | 80-120         | 100 | ( ) |
| 167                           | 17309 | 12.43 | 12.43 | 3- 63          | 30  | ( ) |

-----  
 Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012810a.b/s3a2841.d  
 Lab Smp Id: 245114013 Client Smp ID: RE15-10-8424  
 Inj Date : 29-JAN-2010 03:24  
 Operator : JLD1 Inst ID: MSD3.i  
 Smp Info : |245114013|944874|1|SVMF|1|LANL  
 Misc Info : |MSD8270\_S|WBN100107-02|  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m  
 Meth Date : 29-Jan-2010 10:49 jen00986 Quant Type: ISTD  
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
 Als bottle: 16  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1324.sub  
 Target Version: 3.50  
 Processing Host: hpclpl

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.14000  | weight of sample          |
| M    | 10.03960  | % moisture                |

Cpnd Variable Local Compound Variable

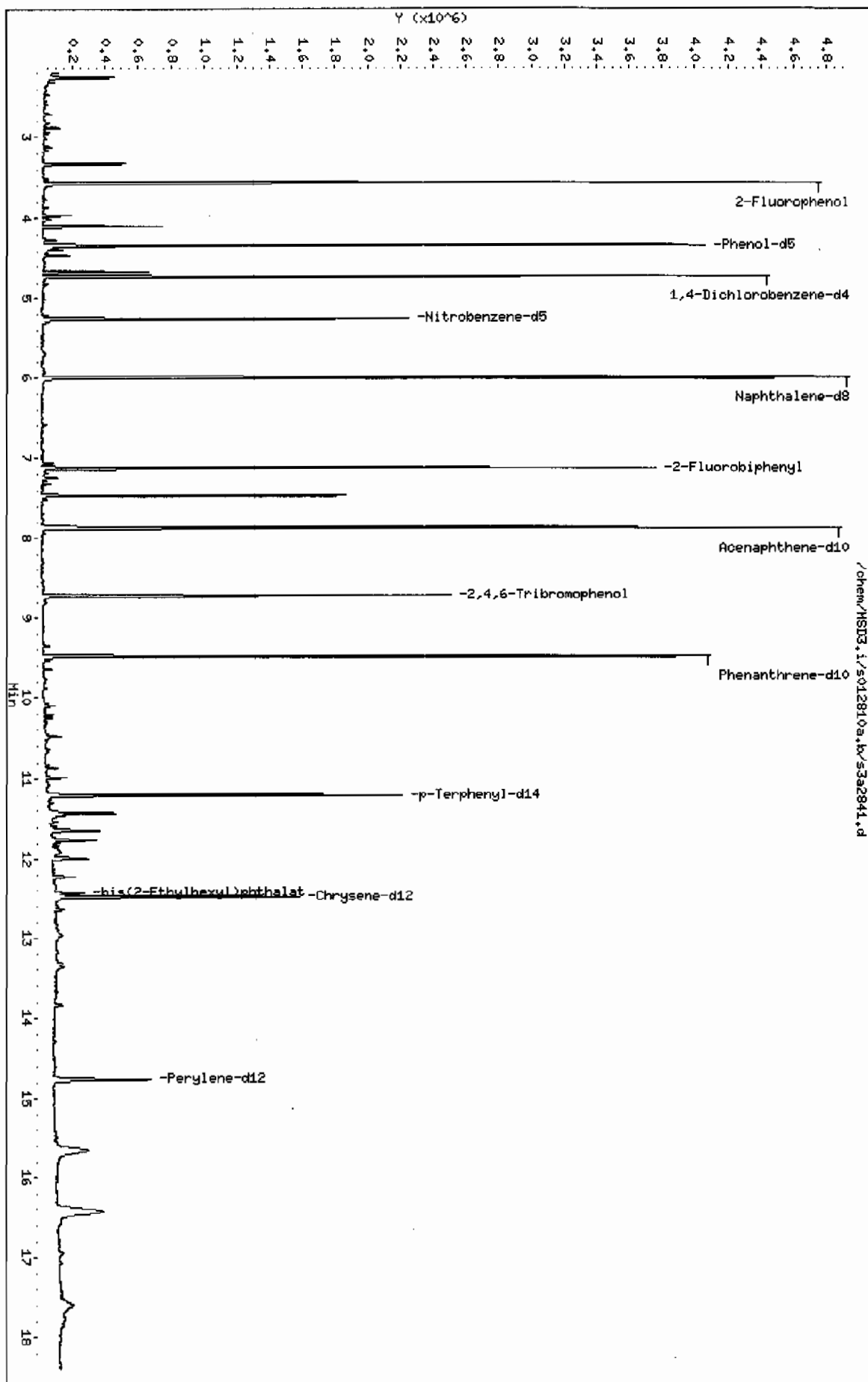
| ISTD                        | RT     | AREA    | AMOUNT |
|-----------------------------|--------|---------|--------|
| * 10 1,4-Dichlorobenzene-d4 | 4.723  | 4051521 | 40.000 |
| * 91 Chrysene-d12           | 12.475 | 1876587 | 40.000 |
| * 98 Perylene-d12           | 14.762 | 1011594 | 40.000 |

| CONCENTRATIONS |      |               |              | QUANT |         |           |        |
|----------------|------|---------------|--------------|-------|---------|-----------|--------|
| RT             | AREA | ON-COL(ng/ul) | FINAL(ug/Kg) | QUAL  | LIBRARY | LIB ENTRY | CPND # |
| ----           | ---- | -----         | -----        | ----  | -----   | -----     | -----  |

| RT                                       | CONCENTRATIONS |                |               | QUAL             | QUANT    |           | CPND # |
|--|----------------|----------------|---------------|------------------|----------|-----------|--------|
|  | AREA           | ON-COL (ng/ul) | FINAL (ug/Kg) |                  | LIBRARY  | LIB ENTRY |        |
| Unknown                                  |                |                |               | CAS #:           |          |           |        |
| 2.088                                    | 5827034        | 57.5293350     | 2120          | 0                |          | 0         | 10     |
| Unknown                                  |                |                |               | CAS #:           |          |           |        |
| 2.259                                    | 574225         | 5.66922671     | 209           | 0                |          | 0         | 10     |
| Unknown Aldol Condensate                 |                |                |               | CAS #:           |          |           |        |
| 3.329                                    | 505738         | 4.99306655     | 184           | 0                |          | 0         | 10     |
| 1R-.alpha.-Pinene                        |                |                |               | CAS #: 7785-70-8 |          |           |        |
| 4.095                                    | 633531         | 6.25474254     | 231           | 98               | NIST05.L | 15188     | 10     |
| Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy |                |                |               | CAS #: 498-15-7  |          |           |        |
| 4.665                                    | 578682         | 5.71323452     | 211           | 97               | NIST05.L | 15369     | 10     |
| Unknown                                  |                |                |               | CAS #:           |          |           |        |
| 11.419                                   | 528405         | 11.2630985     | 415           | 0                |          | 0         | 91     |
| Unknown                                  |                |                |               | CAS #:           |          |           |        |
| 11.448                                   | 200897         | 4.28217042     | 158           | 0                |          | 0         | 91     |
| 1-Phenanthrenecarboxylic acid, 7-ethenyl |                |                |               | CAS #: 1686-62-0 |          |           |        |
| 11.640                                   | 515479         | 10.9875817     | 405           | 95               | NIST05.L | 134785    | 91     |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 |                |                |               | CAS #: 1235-74-1 |          |           |        |
| 11.758                                   | 290379         | 6.18951212     | 228           | 99               | NIST05.L | 133618    | 91     |
| Methyl abietate                          |                |                |               | CAS #: 127-25-3  |          |           |        |
| 11.991                                   | 418629         | 8.92319172     | 329           | 86               | NIST05.L | 134710    | 91     |
| Unknown                                  |                |                |               | CAS #:           |          |           |        |
| 15.654                                   | 967659         | 38.2627135     | 1410          | 0                |          | 0         | 98     |
| Unknown                                  |                |                |               | CAS #:           |          |           |        |
| 16.424                                   | 1604176        | 63.4315924     | 2340          | 0                |          | 0         | 98     |
| Unknown                                  |                |                |               | CAS #:           |          |           |        |
| 17.597                                   | 417480         | 16.5078071     | 609           | 0                |          | 0         | 98     |

Data File: /chem/MSD3.i/sol2810a.bv/s3a2841.d  
 Date: 29-JAN-2010 03:24  
 Client ID: RE15-10-8424  
 Sample Info: 1245134013/94487411SVHF11LNL  
 Volume Injected (uL): 0.5  
 Column phase: J&W DB-SMS

Instrument: MSD3.i  
 Operator: JLD1  
 Column diameter: 0.20



Date : 29-JAN-2010 03:24

Client ID: RE15-10-8424

Instrument: MSD3.i

Sample Info: 12451140131944874111SVHF111LANL

Volume Injected (uL): 0.5

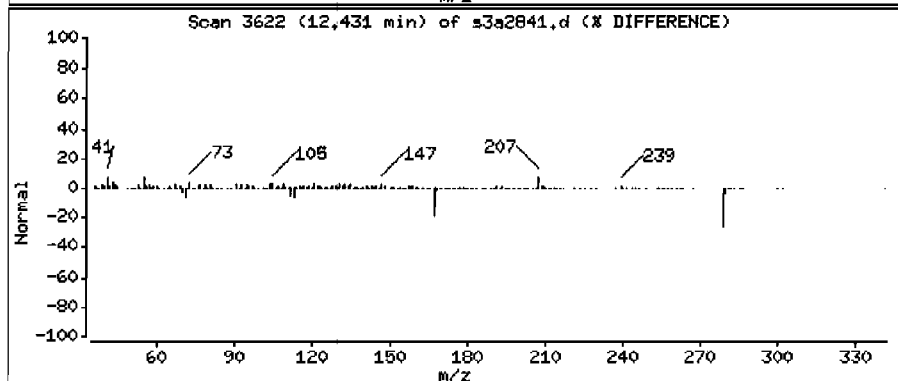
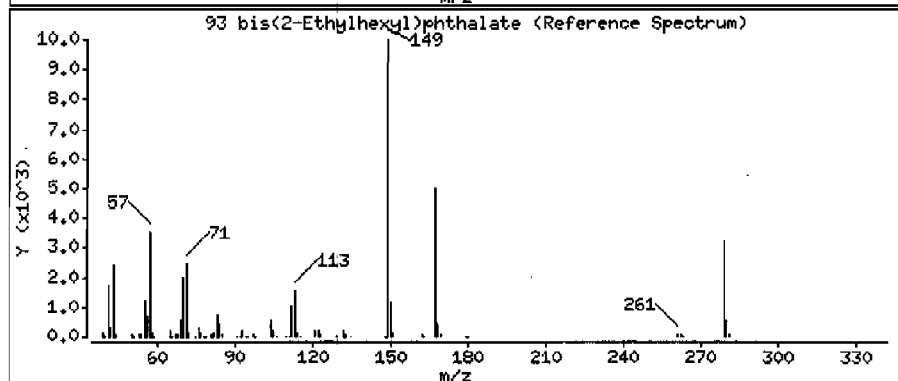
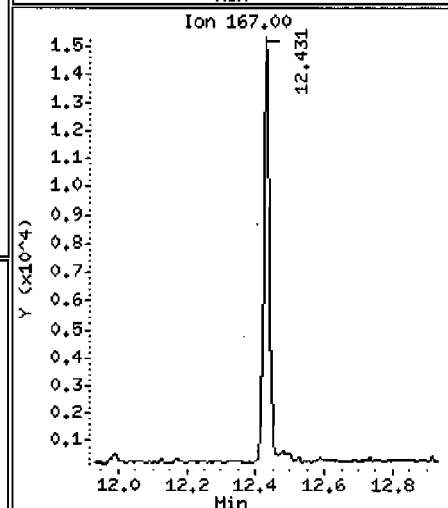
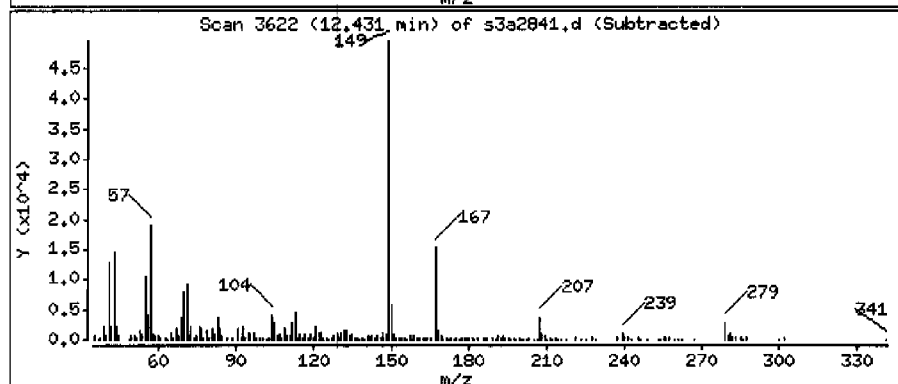
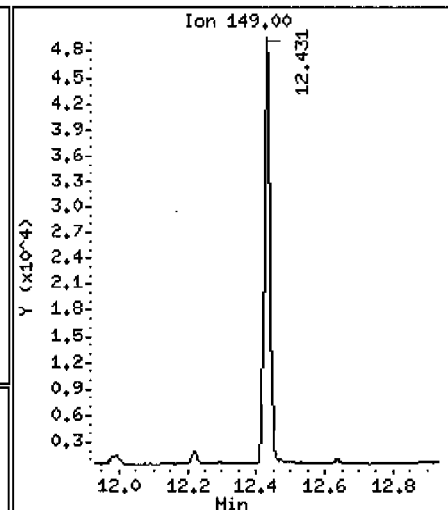
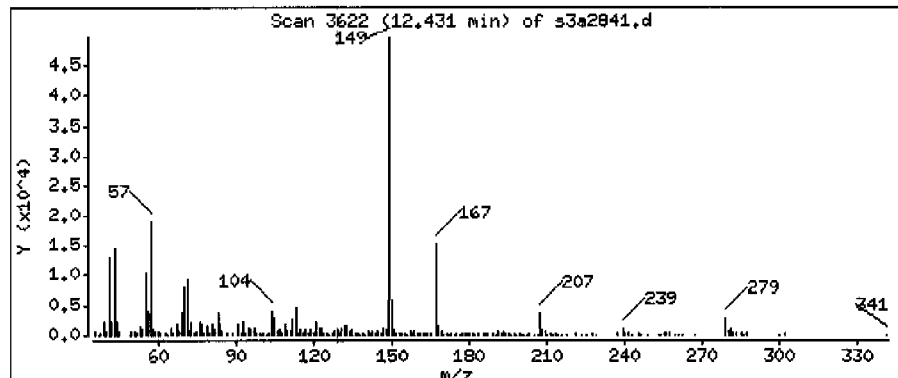
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

93 bis(2-Ethylhexyl)phthalate

Concentration: 170 ug/Kg



Date : 29-JAN-2010 03:24

Client ID: RE15-10-8424

Instrument: HSD3.i

Sample Info: 12451140131944874111SVMF111LANL

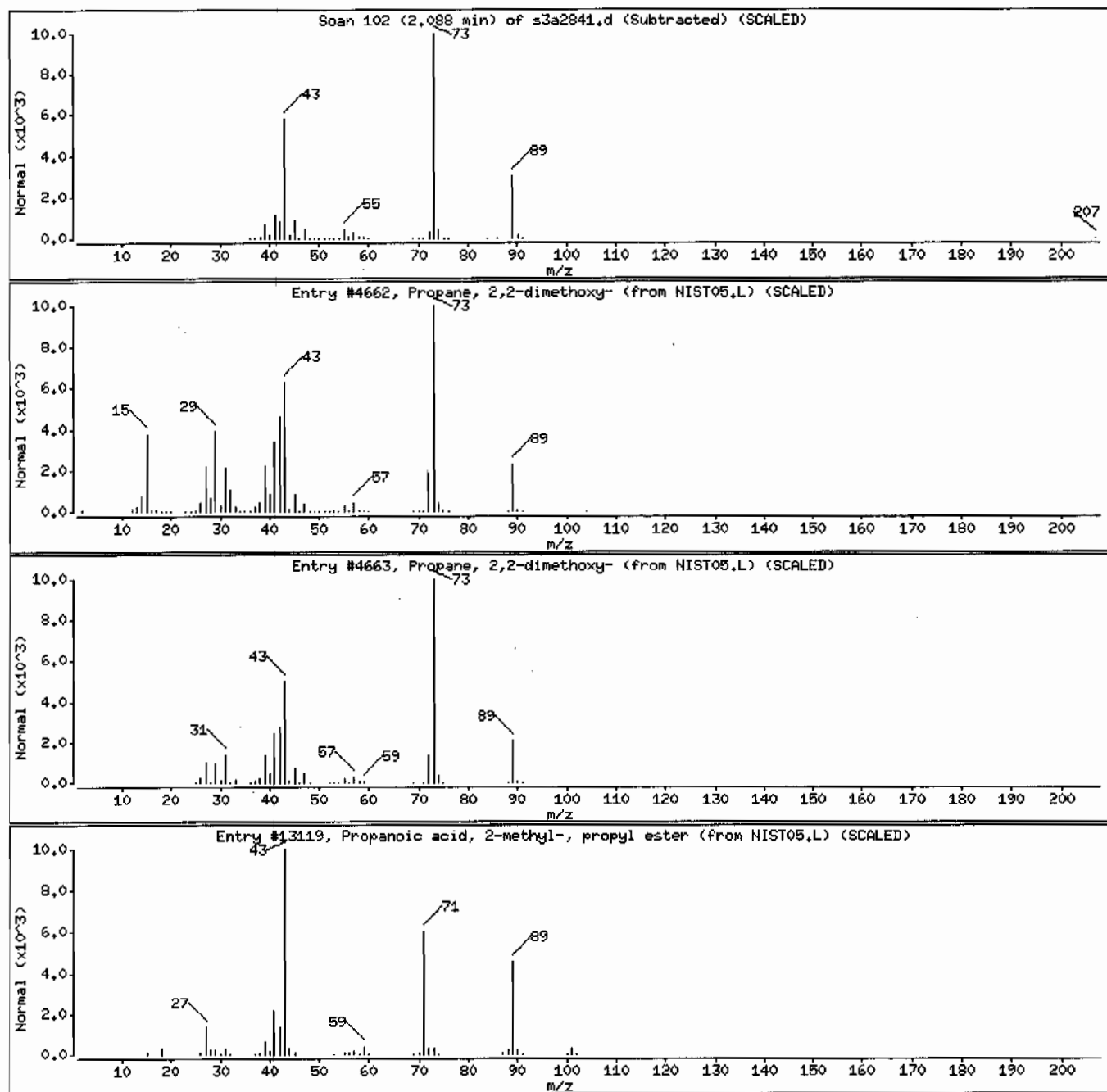
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match           | CAS Number | Library  | Entry | Quality | Formula | Weight |
|---|------------|----------|-------|---------|---------|--------|
| Unknown                                 |            |          |       |         |         |        |
| Propane, 2,2-dimethoxy-                 | 77-76-9    | NIST05.L | 4662  | 50      | C5H12O2 | 104    |
| Propane, 2,2-dimethoxy-                 | 77-76-9    | NIST05.L | 4663  | 38      | C5H12O2 | 104    |
| Propanoic acid, 2-methyl-, propyl ester | 644-49-5   | NIST05.L | 13119 | 23      | C7H14O2 | 130    |



Date : 29-JAN-2010 03:24

Client ID: RE15-10-8424

Instrument: MSD3.i

Sample Info: 1245114013194487411SVHF111LANL

Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

## Library Search Compound Match

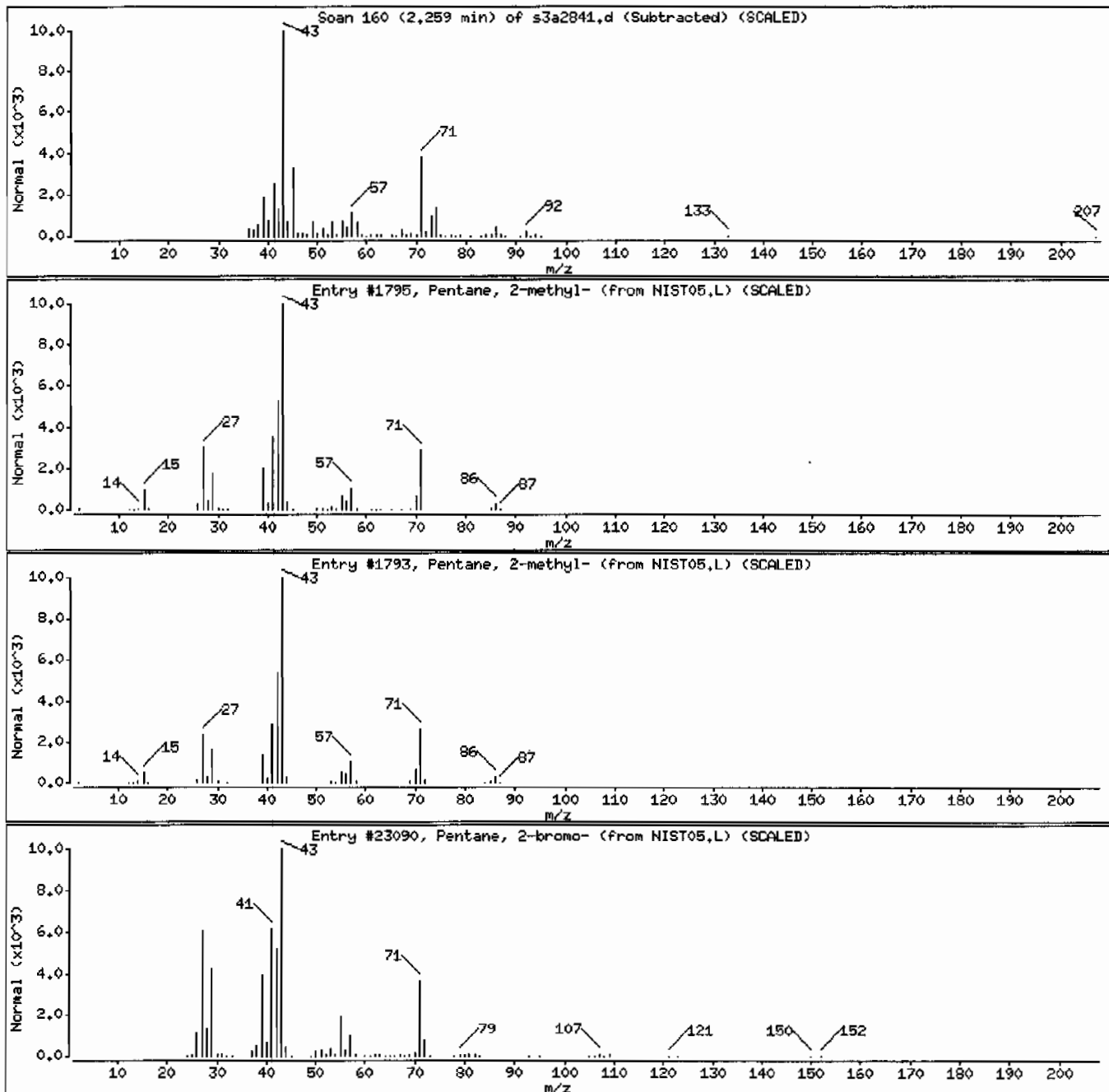
Unknown

Pentane, 2-methyl-

| CAS Number | Library  | Entry | Quality | Formula | Weight |
|------------|----------|-------|---------|---------|--------|
| 107-83-5   | NIST05.L | 1795  | 43      | C6H14   | 86     |
| 107-83-5   | NIST05.L | 1793  | 38      | C6H14   | 86     |
| 107-81-3   | NIST05.L | 23090 | 25      | C5H11Br | 150    |

Pentane, 2-methyl-

Pentane, 2-bromo-





Date : 29-JAN-2010 03:24

Client ID: RE15-10-8424

Instrument: MSD3.i

Sample Info: I245114013|944874|1|SVHF11|LANL

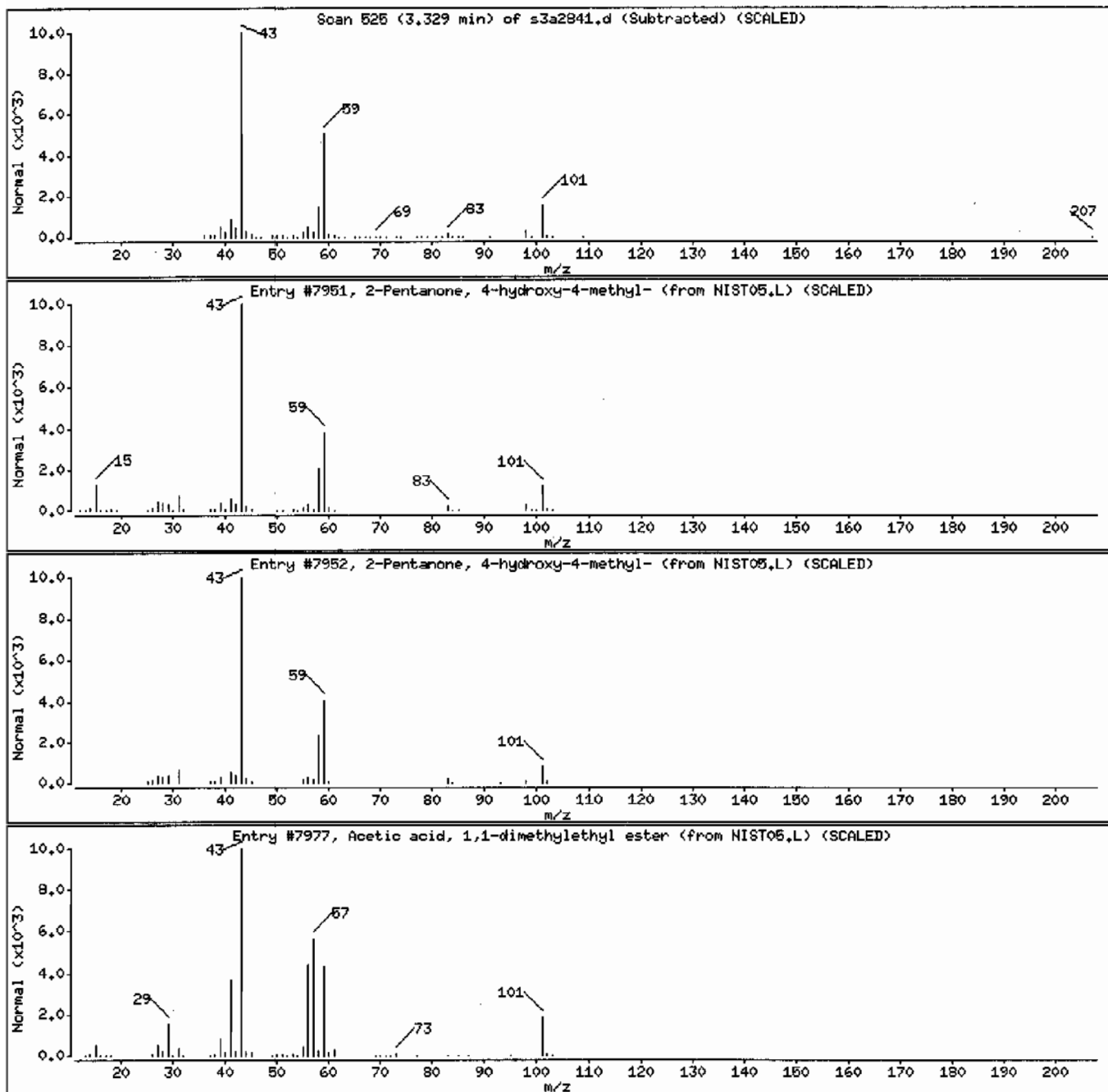
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match        | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--------------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown Aldol Condensate             |            |          |       |         |         |        |
| 2-Pentanone, 4-hydroxy-4-methyl-     | 123-42-2   | NIST05.L | 7951  | 59      | C6H12O2 | 116    |
| 2-Pentanone, 4-hydroxy-4-methyl-     | 123-42-2   | NIST05.L | 7952  | 50      | C6H12O2 | 116    |
| Acetic acid, 1,1-dimethylethyl ester | 540-88-5   | NIST05.L | 7977  | 38      | C6H12O2 | 116    |



Date: 29-JAN-2010 03:24

Client ID: RE15-10-8424

Instrument: MSD3.i

Sample Info: 1245114013194487411SVHF111LANL

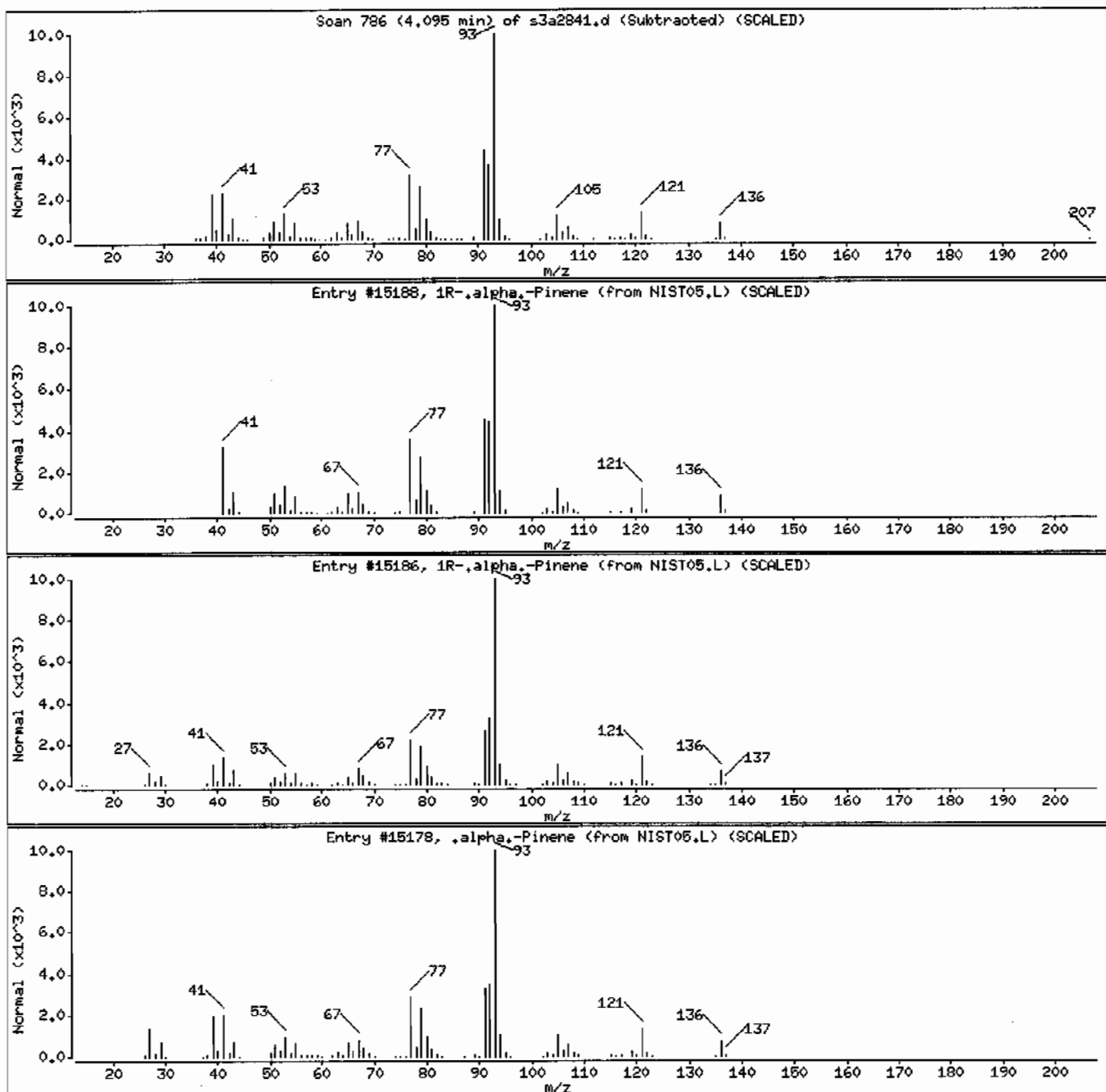
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| 1R-.alpha.-Pinene             | 7785-70-8  | NIST05.L | 15188 | 98      | C10H16  | 136    |
| 1R-.alpha.-Pinene             | 7785-70-8  | NIST05.L | 15186 | 96      | C10H16  | 136    |
| .alpha.-Pinene                | 80-56-8    | NIST05.L | 15178 | 96      | C10H16  | 136    |



Date : 29-JAN-2010 03:24

Client ID: RE15-10-8424

Instrument: MSD3.1

Sample Info: 1245114013194487411SVHF111LANL

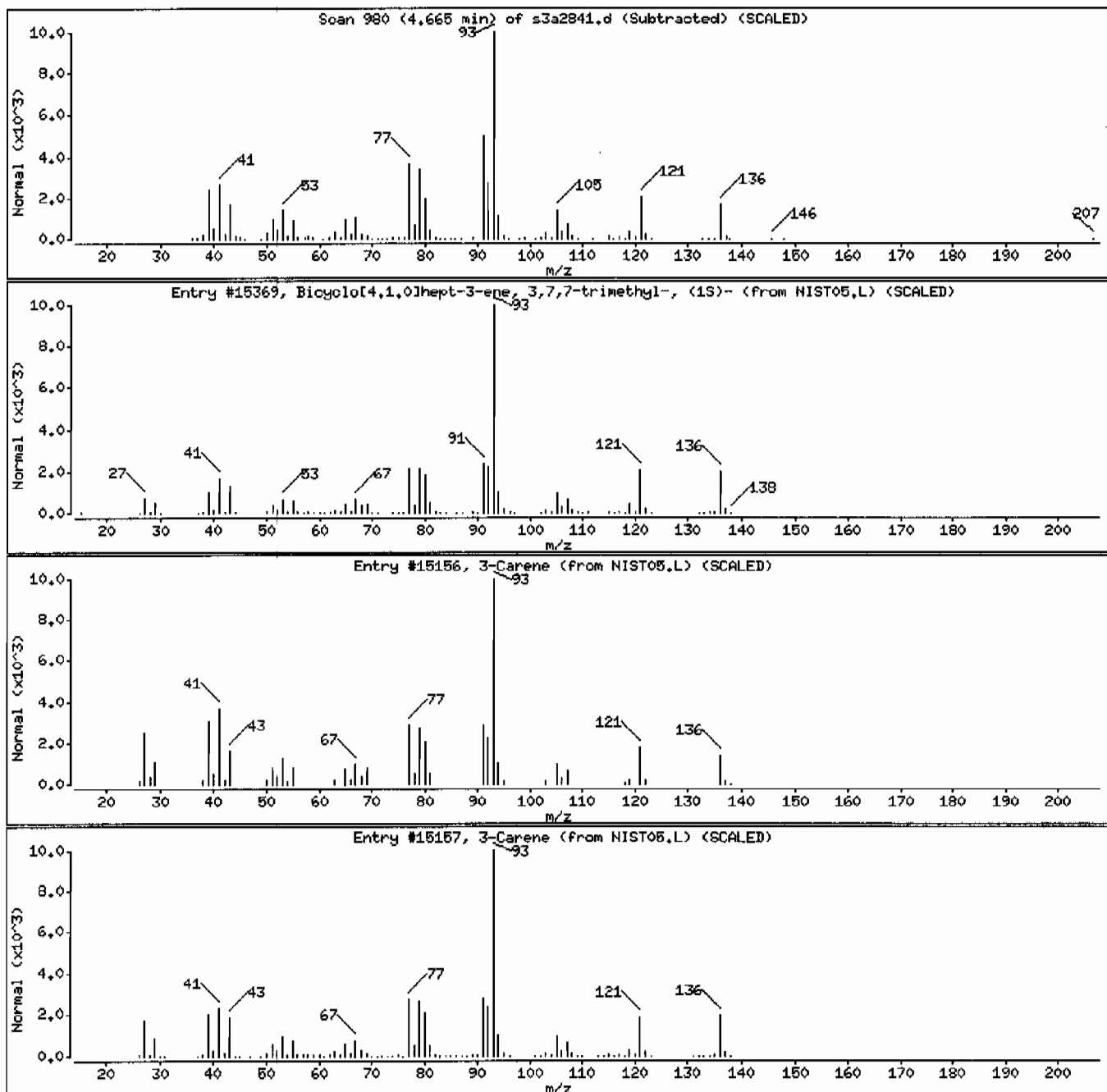
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match             | CAS Number | Library  | Entry | Quality | Formula | Weight |
|---|------------|----------|-------|---------|---------|--------|
| Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl | 498-15-7   | NIST05.L | 15369 | 97      | C10H16  | 136    |
| 3-Carene                                  | 13466-78-9 | NIST05.L | 15156 | 96      | C10H16  | 136    |
| 3-Carene                                  | 13466-78-9 | NIST05.L | 15157 | 95      | C10H16  | 136    |



Date : 29-JAN-2010 03:24

Client ID: RE15-10-8424

Instrument: MSD3.i

Sample Info: 1245114013194487411SVHF111LANL

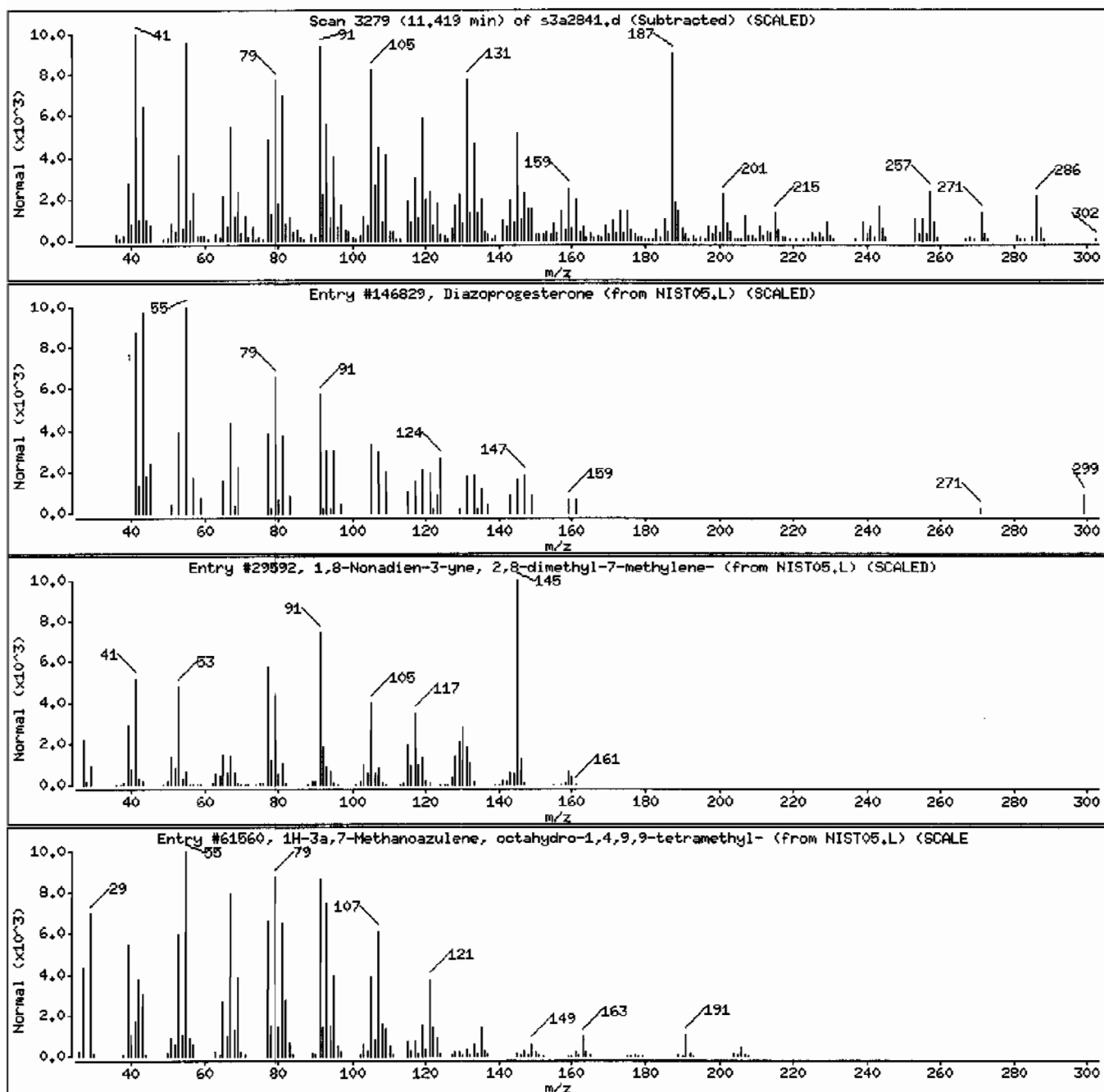
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|--|--------------|----------|--------|---------|----------|--------|
| Unknown                                  |              |          |        |         |          |        |
| Diazoprogestrone                         | 1000255-30-9 | NIST05.L | 146829 | 35      | C21H30N4 | 338    |
| 1,8-Nonadien-3-yne, 2,8-dimethyl-7-methy | 76003-41-3   | NIST05.L | 29592  | 35      | C12H16   | 160    |
| 1H-3a,7-Methanoazulene, octahydro-1,4,9, | 25491-20-7   | NIST05.L | 61560  | 27      | C15H26   | 206    |



Date : 29-JAN-2010 03:24

Client ID: RE15-10-8424

Instrument: MSD3.1

Sample Info: 1245114013194487411|SVHF11|LANL

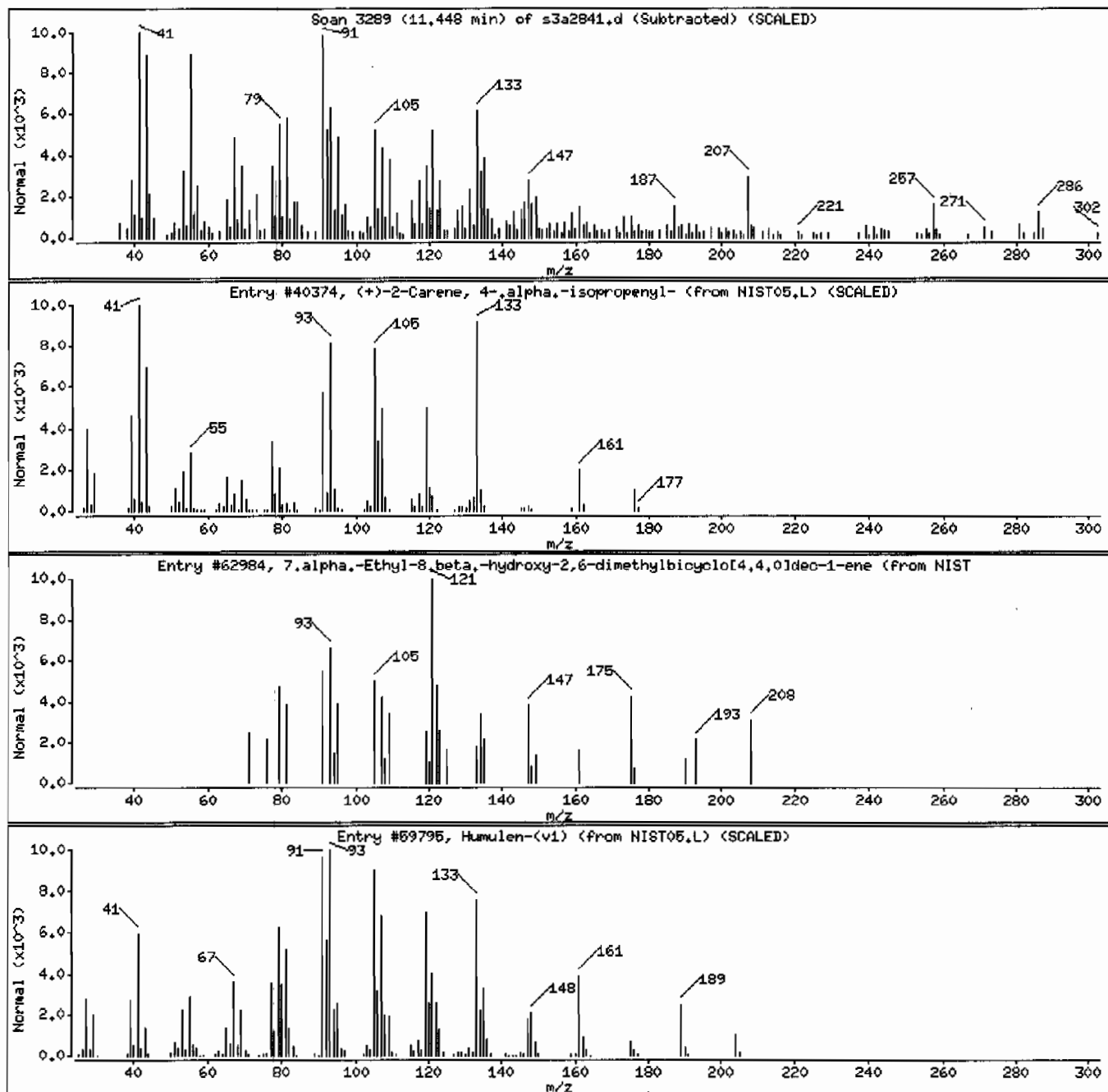
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula | Weight |
|--|--------------|----------|-------|---------|---------|--------|
| Unknown                                  |              |          |       |         |         |        |
| (+)-2-Carene, 4-.alpha.-isopropenyl-     | 1000151-26-0 | NIST05.L | 40374 | 43      | C13H20  | 176    |
| 7.alpha.-Ethyl-8.beta.-hydroxy-2,6-dimet | 1000077-92-4 | NIST05.L | 62984 | 38      | C14H24O | 208    |
| Humulen-(v1)                             | 1000159-39-4 | NIST05.L | 59795 | 38      | C15H24  | 204    |



Date : 29-JAN-2010 03:24

Client ID: RE15-10-8424

Instrument: HSD3.i

Sample Info: 12451140131944874111SVHF111LANL

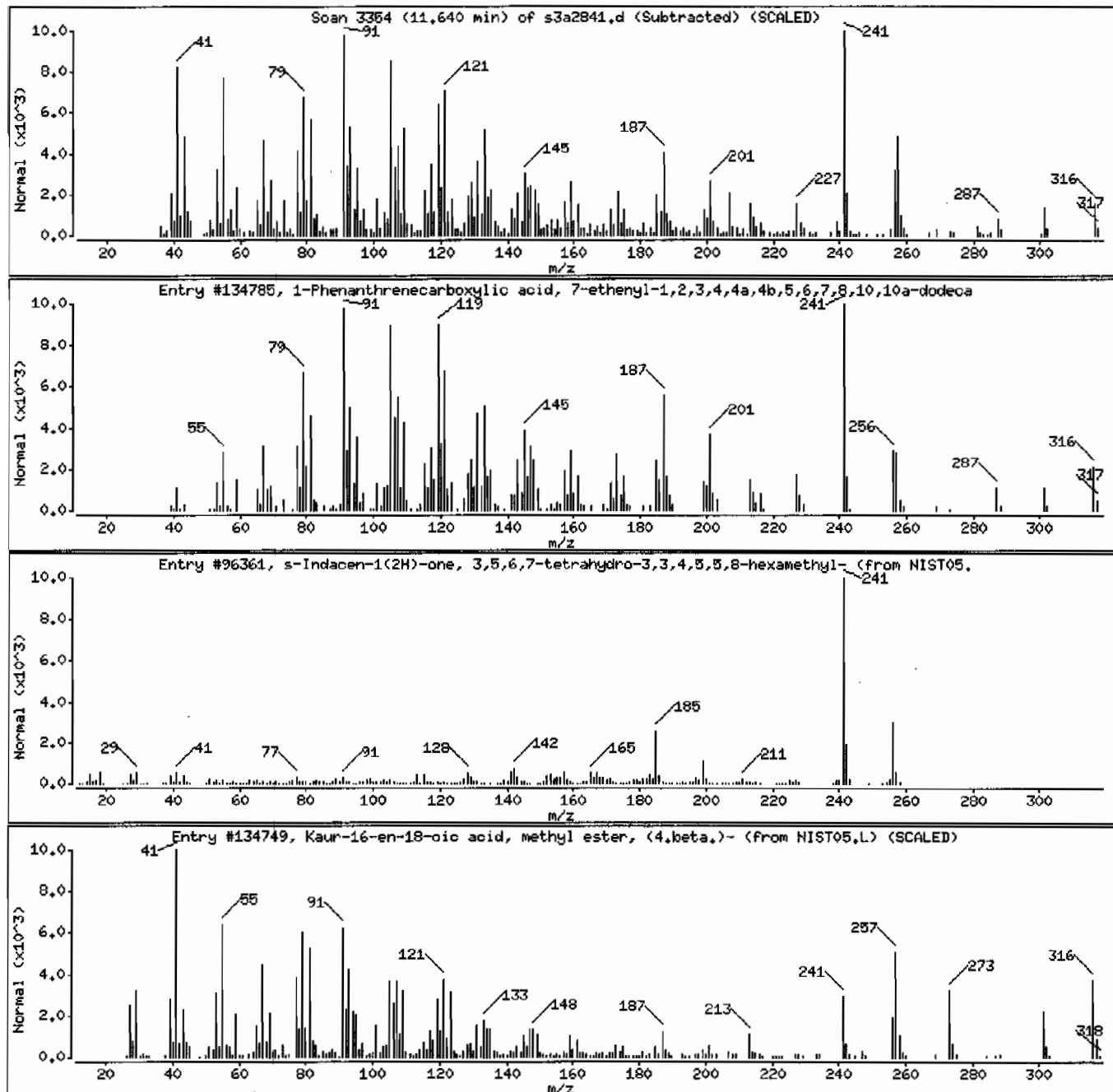
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| 1-Phenanthrenecarboxylic acid, 7-ethenyl | 1686-62-0  | NIST05.L | 134785 | 95      | C21H32O2 | 316    |
| s-Indacen-1(2H)-one, 3,5,6,7-tetrahydro- | 38754-94-8 | NIST05.L | 96361  | 90      | C18H24O  | 256    |
| Kaur-16-en-18-oic acid, methyl ester, (4 | 5524-25-4  | NIST05.L | 134749 | 70      | C21H32O2 | 316    |



Date : 29-JAN-2010 03:24

Client ID: RE15-10-8424

Instrument: MSD3.i

Sample Info: 1245114013194487411SVMF111LANL

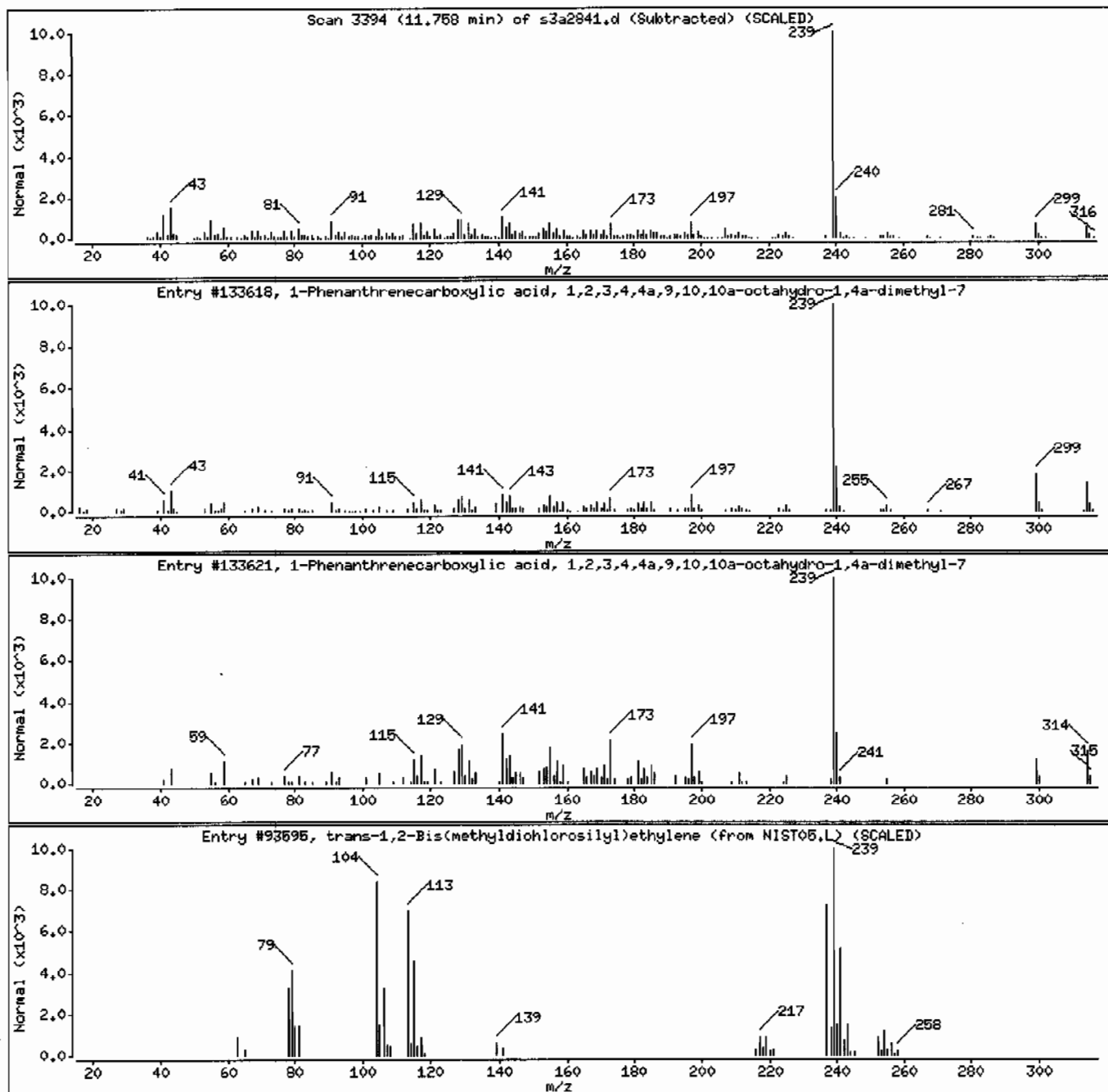
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match              | CAS Number | Library  | Entry  | Quality | Formula    | Weight |
|--|------------|----------|--------|---------|------------|--------|
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4   | 1235-74-1  | NIST05.L | 133618 | 99      | C21H30O2   | 314    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4   | 1235-74-1  | NIST05.L | 133621 | 95      | C21H30O2   | 314    |
| trans-1,2-Bis(methyldichlorosilyl)ethylene | 65899-10-7 | NIST05.L | 93595  | 95      | C4H8Cl4Si2 | 252    |



Date : 29-JAN-2010 03:24

Client ID: RE15-10-8424

Instrument: MSD3.i

Sample Info: 1245114013194487411SVMF11LANL

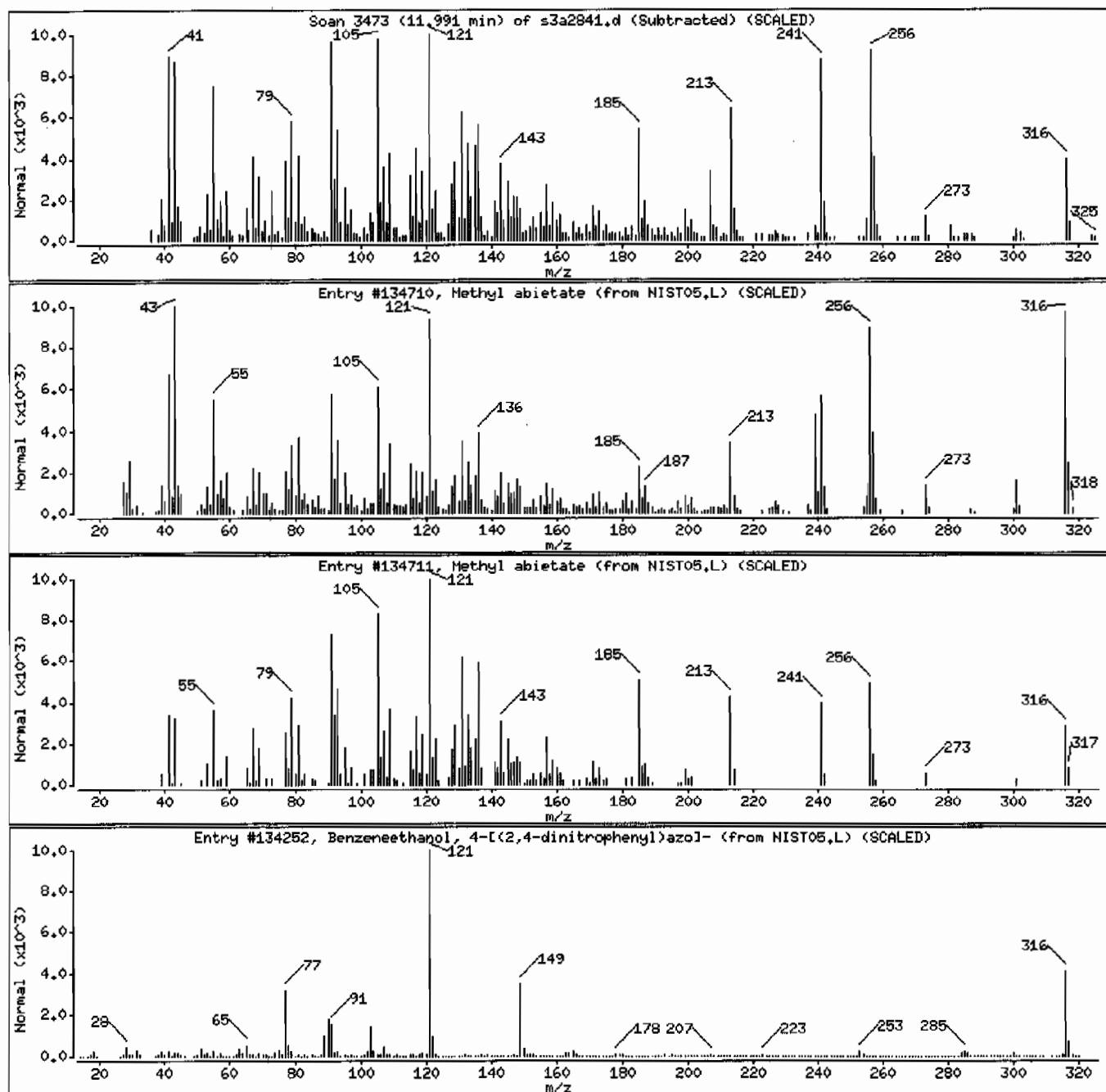
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match              | CAS Number | Library  | Entry  | Quality | Formula    | Weight |
|--|------------|----------|--------|---------|------------|--------|
| Methyl abietate                            | 127-25-3   | NIST05.L | 134710 | 86      | C21H32O2   | 316    |
| Methyl abietate                            | 127-25-3   | NIST05.L | 134711 | 64      | C21H32O2   | 316    |
| Benzeneethanol, 4-[(2,4-dinitrophenyl)azo] | 77673-48-9 | NIST05.L | 134252 | 53      | C14H12N4O5 | 316    |





Date : 29-JAN-2010 03:24

Client ID: RE15-10-8424

Instrument: MSD3.i

Sample Info: 1245114013194487411SVHF111LANL

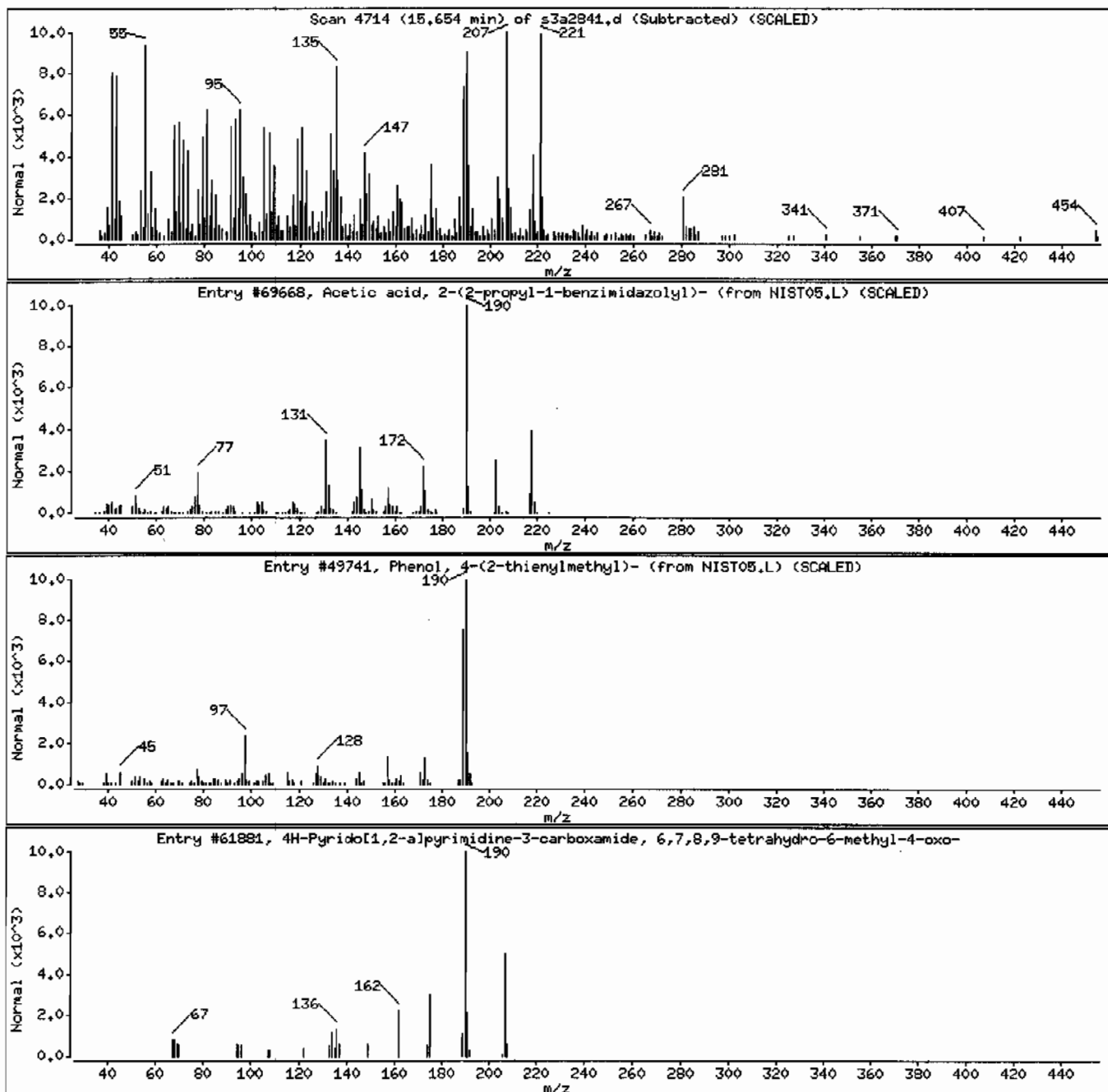
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match               | CAS Number  | Library  | Entry | Quality | Formula    | Weight |
|---|-------------|----------|-------|---------|------------|--------|
| Unknown                                     |             |          |       |         |            |        |
| Acetic acid, 2-(2-propyl-1-benzimidazolyl)- | 331736-92-6 | NIST05.L | 69668 | 46      | C12H14N2O2 | 218    |
| Phenol, 4-(2-thienylmethyl)-                | 91680-55-6  | NIST05.L | 49741 | 35      | C11H10OS   | 190    |
| 4H-Pyrido[1,2-a]pyrimidine-3-carboxamide    | 33484-45-6  | NIST05.L | 61881 | 35      | C10H13N3O2 | 207    |



Date : 29-JAN-2010 03:24

Client ID: RE15-10-8424

Instrument: MSD3.i

Sample Info: 1245114013194487411SVHF11LANL

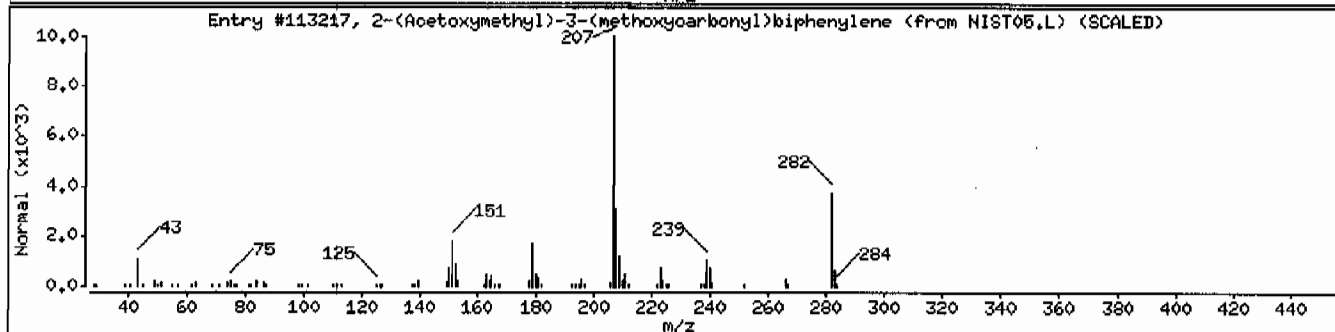
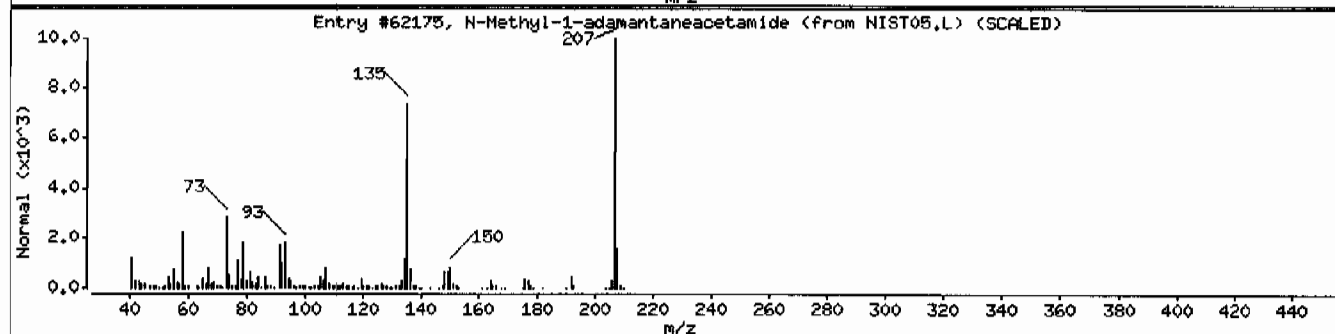
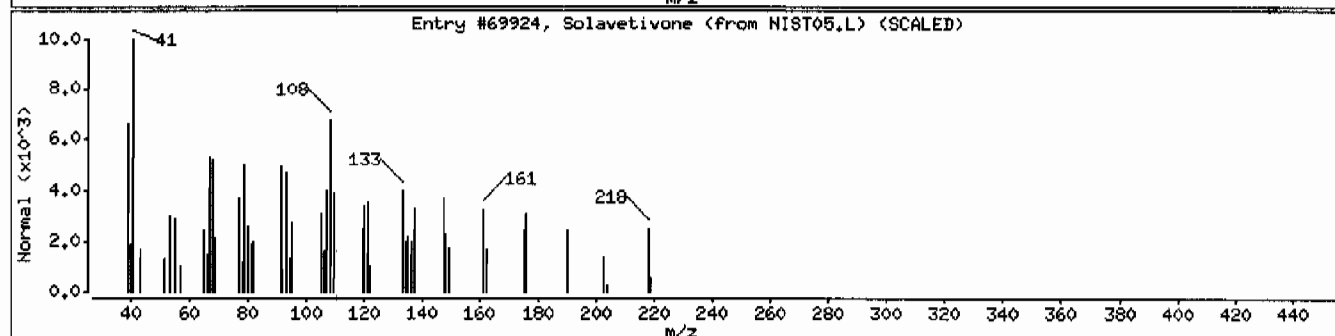
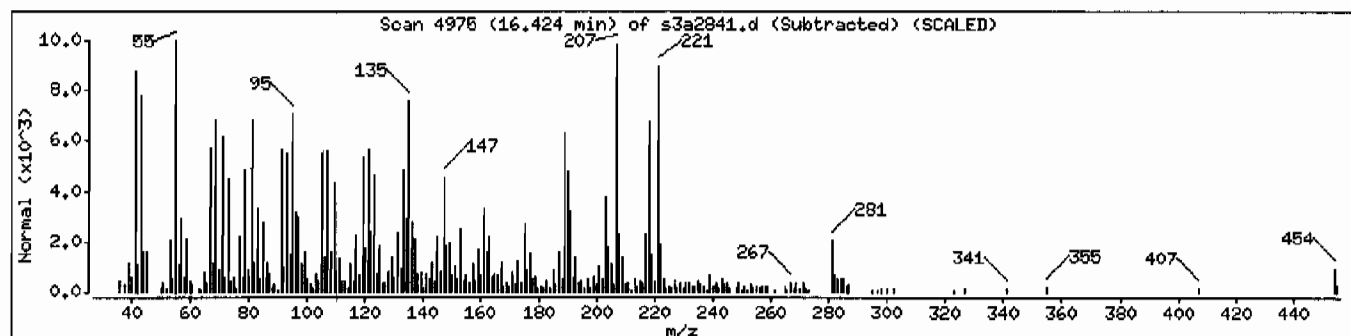
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| Unknown                                  |            |          |        |         |          |        |
| Solavetivone                             | 54878-25-0 | NIST05.L | 69924  | 35      | C15H22O  | 218    |
| N-Methyl-1-adamantaneacetamide           | 31897-93-5 | NIST05.L | 62175  | 30      | C13H21NO | 207    |
| 2-(Acetoxymethyl)-3-(methoxycarbonyl)bip | 93103-70-9 | NIST05.L | 113217 | 25      | C17H14O4 | 282    |



Date: 29-JAN-2010 03:24

Client ID: RE15-10-8424

Instrument: MSD3.i

Sample Info: 12451140131944874111SVHF111LANL

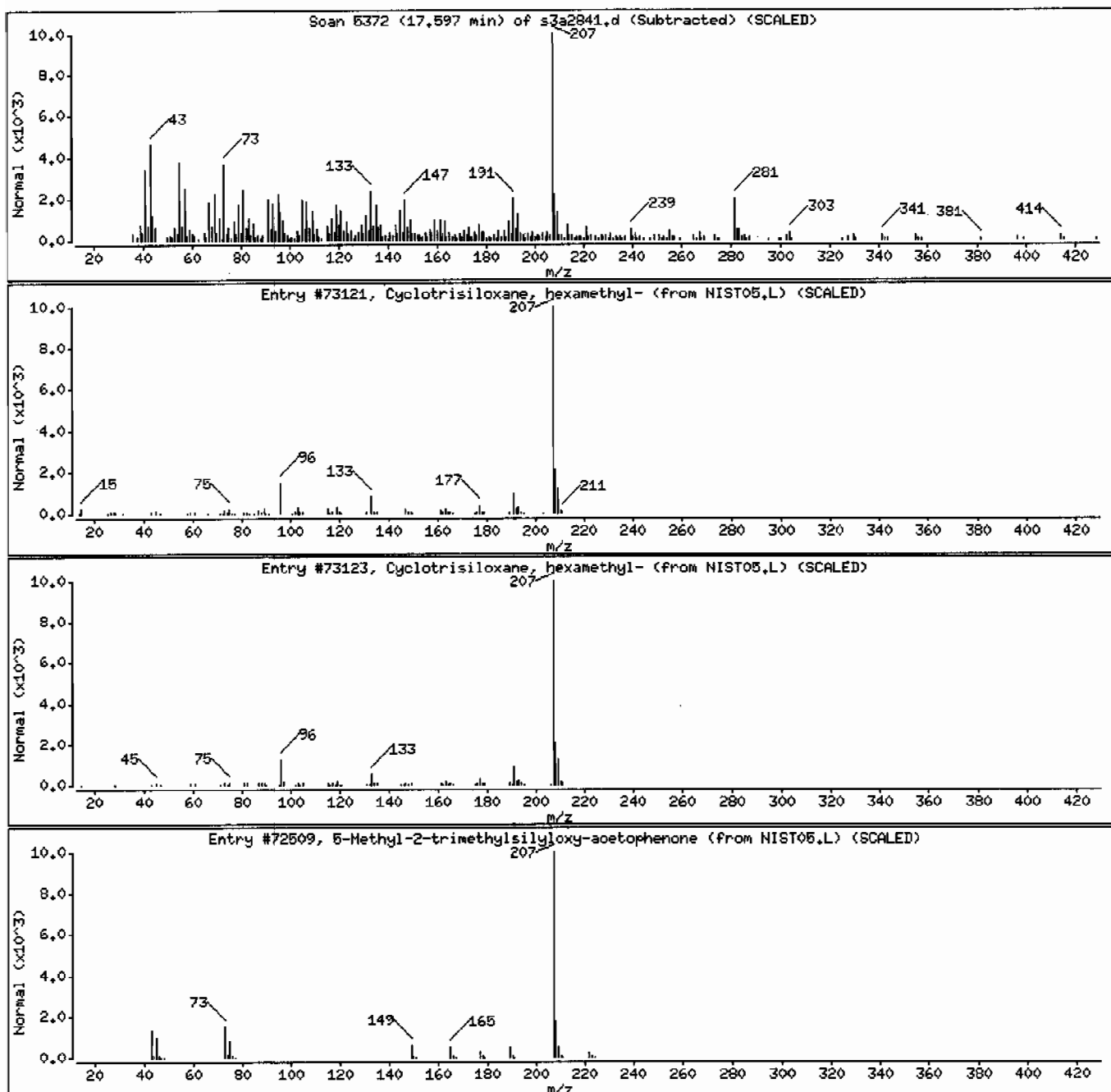
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula    | Weight |
|--|------------|----------|-------|---------|------------|--------|
| Unknown                                  |            |          |       |         |            |        |
| Cyclotrisiloxane, hexamethyl-            | 541-05-9   | NIST05.L | 73121 | 47      | C6H18O3Si3 | 222    |
| Cyclotrisiloxane, hexamethyl-            | 541-05-9   | NIST05.L | 73123 | 46      | C6H18O3Si3 | 222    |
| 5-Methyl-2-trimethylsilyloxy-acetophenon | 97389-69-0 | NIST05.L | 72509 | 38      | C12H18O2Si | 222    |



Semi-Volatile  
Certificate of Analysis  
Sample Summary

Page 1 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114007

Client ID: RE15-10-8425  
Batch ID: 944874  
Run Date: 01/27/2010 18:53  
Prep Date: 01/25/2010 21:06  
Data File: s3a2724.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/23/2010 09:20  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.05 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 371    | ug/kg | 74.3    | 371     |
| 108-95-2   | Phenol                        | U         | 371    | ug/kg | 74.3    | 371     |
| 95-57-8    | 2-Chlorophenol                | U         | 371    | ug/kg | 74.3    | 371     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 371    | ug/kg | 74.3    | 371     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 371    | ug/kg | 74.3    | 371     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 371    | ug/kg | 74.3    | 371     |
| 83-32-9    | Acenaphthene                  | U         | 37.1   | ug/kg | 12.3    | 37.1    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 371    | ug/kg | 37.1    | 371     |
| 100-02-7   | 4-Nitrophenol                 | U         | 371    | ug/kg | 123     | 371     |
| 87-86-5    | Pentachlorophenol             | U         | 371    | ug/kg | 92.9    | 371     |
| 129-00-0   | Pyrene                        | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 110-86-1   | Pyridine                      | U         | 371    | ug/kg | 74.3    | 371     |
| 62-53-3    | Aniline                       | U         | 371    | ug/kg | 111     | 371     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 371    | ug/kg | 74.3    | 371     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 371    | ug/kg | 74.3    | 371     |
| 100-51-6   | Benzyl alcohol                | U         | 371    | ug/kg | 111     | 371     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 371    | ug/kg | 74.3    | 371     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 371    | ug/kg | 74.3    | 371     |
| 95-48-7    | o-Cresol                      | U         | 371    | ug/kg | 74.3    | 371     |
| 65794-96-9 | m,p-Cresols                   | U         | 371    | ug/kg | 111     | 371     |
| 67-72-1    | Hexachloroethane              | U         | 371    | ug/kg | 74.3    | 371     |
| 98-95-3    | Nitrobenzene                  | U         | 371    | ug/kg | 74.3    | 371     |
| 78-59-1    | Isophorone                    | U         | 371    | ug/kg | 74.3    | 371     |
| 88-75-5    | 2-Nitrophenol                 | U         | 371    | ug/kg | 74.3    | 371     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 371    | ug/kg | 130     | 371     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 371    | ug/kg | 74.3    | 371     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 371    | ug/kg | 74.3    | 371     |
| 65-85-0    | Benzoic acid                  | U         | 743    | ug/kg | 186     | 743     |
| 91-20-3    | Naphthalene                   | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 106-47-8   | 4-Chloroaniline               | U         | 371    | ug/kg | 74.3    | 371     |
| 87-68-3    | Hexachlorobutadiene           | U         | 371    | ug/kg | 74.3    | 371     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 37.1   | ug/kg | 7.43    | 37.1    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 371    | ug/kg | 74.3    | 371     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 371    | ug/kg | 74.3    | 371     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 371    | ug/kg | 74.3    | 371     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 37.1   | ug/kg | 12.3    | 37.1    |
| 88-74-4    | 2-Nitroaniline                | U         | 371    | ug/kg | 74.3    | 371     |
|            | <i>o</i> -Nitroaniline        |           |        |       |         |         |
| 99-09-2    | 3-Nitroaniline                | U         | 371    | ug/kg | 74.3    | 371     |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114007

Client ID: RE15-10-8425  
Batch ID: 944874  
Run Date: 01/27/2010 18:53  
Prep Date: 01/25/2010 21:06  
Data File: s3a2724.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/23/2010 09:20  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.05 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|----------------------------|-----------|--------|-------|---------|---------|
|           | <i>m</i> -Nitroaniline     |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate          | U         | 371    | ug/kg | 74.3    | 371     |
| 606-20-2  | 2,6-Dinitrotoluene         | U         | 371    | ug/kg | 37.1    | 371     |
| 208-96-8  | Accnaphthylene             | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 51-28-5   | 2,4-Dinitrophenol          | U         | 743    | ug/kg | 141     | 743     |
| 132-64-9  | Dibenzofuran               | U         | 371    | ug/kg | 74.3    | 371     |
| 84-66-2   | Diethylphthalate           | U         | 371    | ug/kg | 74.3    | 371     |
| 86-73-7   | Fluorene                   | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 7005-72-3 | 4-Chlorophenylphenylether  | U         | 371    | ug/kg | 74.3    | 371     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol | U         | 371    | ug/kg | 74.3    | 371     |
| 100-01-6  | 4-Nitroaniline             | U         | 371    | ug/kg | 111     | 371     |
|           | <i>p</i> -Nitroaniline     |           |        |       |         |         |
| 122-39-4  | Diphenylamine              | U         | 371    | ug/kg | 74.3    | 371     |
| 122-66-7  | Azobenzene                 | U         | 371    | ug/kg | 74.3    | 371     |
|           | 1,2-Diphenylhydrazine      |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether   | U         | 371    | ug/kg | 74.3    | 371     |
| 118-74-1  | Hexachlorobenzene          | U         | 371    | ug/kg | 74.3    | 371     |
| 85-01-8   | Phenanthrene               | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 120-12-7  | Anthracene                 | U         | 37.1   | ug/kg | 7.43    | 37.1    |
| 84-74-2   | Di-n-butylphthalate        | U         | 371    | ug/kg | 74.3    | 371     |
| 206-44-0  | Fluoranthene               | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 85-68-7   | Butylbenzylphthalate       | U         | 371    | ug/kg | 74.3    | 371     |
| 56-55-3   | Benzo(a)anthracene         | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 91-94-1   | 3,3'-Dichlorobenzidine     | U         | 371    | ug/kg | 111     | 371     |
| 218-01-9  | Chrysene                   | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | U         | 371    | ug/kg | 74.3    | 371     |
| 117-84-0  | Di-n-octylphthalate        | U         | 371    | ug/kg | 74.3    | 371     |
| 205-99-2  | Benzo(b)fluoranthene       | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 207-08-9  | Benzo(k)fluoranthene       | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 50-32-8   | Benzo(a)pyrene             | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene     | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 53-70-3   | Dibenzo(a,h)anthracene     | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 191-24-2  | Benzo(ghi)perylene         | U         | 37.1   | ug/kg | 11.1    | 37.1    |
| 120-82-1  | 1,2,4-Trichlorobenzene     | U         | 371    | ug/kg | 74.3    | 371     |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT  | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|-----|-----------|-------|-----|------|
|         | Unknown                               | 2.1 | 2270      | ug/kg |     | J    |
|         | Unknown Aldol Condensate              | 3.4 | 180       | ug/kg |     | JA   |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

Page 3 of 3

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114007    | Date Received: 01/23/2010 09:20  | %Moisture: 10.4      |
|                             | Client: LANL010                  | Project: LANL01004   |
| Client ID: RE15-10-8425     | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Batch ID: 944874            | Inst: MSD3.I                     | Dilution: 1          |
| Run Date: 01/27/2010 18:53  | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Prep Date: 01/25/2010 21:06 | Aliquot: 30.05 g                 | Final Volume: 1 mL   |
| Data File: s3a2724.d        | Column: J&W DB-5MS               | Level: LOW           |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |  |       |           |       |     |      |
|---|--|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC)    | RT    | Estimated | Units | Fit | Qual |
|   | Unknown                                  | 11.53 | 163       | ug/kg |     | J    |
|   | Unknown                                  | 11.65 | 177       | ug/kg |     | J    |
| 1686-62-0                               | 1-Phenanthrenecarboxylic acid, 7-ethenyl | 11.75 | 195       | ug/kg | 90  | NJ   |
| 1235-74-1                               | 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 11.87 | 157       | ug/kg | 98  | NJ   |
| 17974-57-1                              | (3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1 | 11.9  | 227       | ug/kg | 90  | NJ   |
|   | Unknown                                  | 11.99 | 169       | ug/kg |     | J    |
|   | Unknown                                  | 15.12 | 3270      | ug/kg |     | J    |
| 70038-20-9                              | 7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet | 16    | 3360      | ug/kg | 91  | NJ   |
|   | Unknown                                  | 16.14 | 171       | ug/kg |     | J    |
|   | Unknown                                  | 17.47 | 706       | ug/kg |     | J    |
| 83-47-6                                 | .gamma.-Sitosterol                       | 17.66 | 711       | ug/kg | 91  | NJ   |
|   | Unknown                                  | 18.16 | 157       | ug/kg |     | J    |

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2724.d  
Lab Smp Id: 245114007 Client Smp ID: RE15-10-8425  
Inj Date : 27-JAN-2010 18:53  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |245114007|944874|1|SVMF|1|LANL  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m  
Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 24  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1324.sub  
Target Version: 3.50  
Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.05000  | weight of sample          |
| M    | 10.40600  | % moisture                |

Cpnd Variable Local Compound Variable

| Compounds                   | QUANT SIG |        |        |         | RESPONSE | CONCENTRATIONS       |                  |
|-----------------------------|-----------|--------|--------|---------|----------|----------------------|------------------|
|                             | MASS      | RT     | EXP RT | REL RT  |          | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/Kg) |
| * 10 1,4-Dichlorobenzene-d4 | 152       | 4.818  | 4.817  | (1.000) | 237250   | 40.0000              |                  |
| * 29 Naphthalene-d8         | 136       | 6.099  | 6.100  | (1.000) | 958764   | 40.0000              |                  |
| * 46 Acenaphthene-d10       | 164       | 7.974  | 7.973  | (1.000) | 555197   | 40.0000              |                  |
| * 67 Phenanthrene-d10       | 188       | 9.591  | 9.588  | (1.000) | 916072   | 40.0000              |                  |
| * 91 Chrysene-d12           | 240       | 12.614 | 12.610 | (1.000) | 617638   | 40.0000              |                  |
| * 98 Perylene-d12           | 264       | 14.958 | 14.945 | (1.000) | 339000   | 40.0000              |                  |
| \$ 3 2-Fluorophenol         | 112       | 3.645  | 3.633  | (0.756) | 435616   | 70.5617              | 2620             |
| \$ 5 Phenol-d5              | 99        | 4.428  | 4.418  | (0.919) | 536383   | 69.1320              | 2570             |
| \$ 20 Nitrobenzene-d5       | 82        | 5.357  | 5.357  | (0.878) | 262953   | 37.1283              | 1380             |
| \$ 39 2-Fluorobiphenyl      | 172       | 7.228  | 7.227  | (0.907) | 554161   | 38.6157              | 1430             |
| \$ 60 2,4,6-Tribromophenol  | 329       | 8.830  | 8.825  | (1.107) | 142214   | 89.3530              | 3320             |
| \$ 81 p-Terphenyl-d14       | 244       | 11.304 | 11.297 | (0.896) | 534805   | 50.3771              | 1870             |

## ION RATIO REPORT

## SV REPORT

Data file: s3a2724.d

Report Date: 01/28/2010 08:35

Lab. ID: 245114007

SampleType: SAMPLE

Injection Date: 27-JAN-2010 18:53

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245114007|944874|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1324

Sample Matrix: SOIL

| MASS                      | RESPONSE | RT             | EXPECT RT | TARGET RANGE | RATIO | QUAL |
|---------------------------|----------|----------------|-----------|--------------|-------|------|
| =====                     |          |                |           |              |       |      |
| 4 Aniline                 |          | CAS#: 62-53-3  |           |              |       |      |
| 66                        | 31357    | 4.43           | 4.50      | 80-120       | 100   | (T)  |
| 93                        | 5476     | 4.48           | 4.50      | 205-265      | 17    | (Q)  |
| -----                     |          |                |           |              |       |      |
| 17 N-Nitrosodipropylamine |          | CAS#: 621-64-7 |           |              |       |      |
| 70                        | 37479    | 5.36           | 5.19      | 80-120       | 100   | (T)  |
| 42                        | 24798    | 5.36           | 5.19      | 43-103       | 66    | (T)  |
| -----                     |          |                |           |              |       |      |
| 40 2-Chloronaphthalene    |          | CAS#: 91-58-7  |           |              |       |      |
| 162                       | 6818     | 7.57           | 7.37      | 80-120       | 100   | (T)  |
| 164                       | 343      | 7.57           | 7.37      | 2- 62        | 5     | (T)  |
| 127                       | 521      | 7.57           | 7.37      | 9- 69        | 8     | (QT) |
| -----                     |          |                |           |              |       |      |
| 44 2,6-Dinitrotoluene     |          | CAS#: 606-20-2 |           |              |       |      |
| 165                       | 72064    | 7.97           | 7.73      | 80-120       | 100   | (T)  |
| 63                        | 1049     | 7.97           | 7.73      | 35- 95       | 1     | (QT) |
| -----                     |          |                |           |              |       |      |
| 50 2,4-Dinitrotoluene     |          | CAS#: 121-14-2 |           |              |       |      |
| 165                       | 72064    | 7.97           | 8.16      | 80-120       | 100   | (T)  |
| 89                        | 1129     | 7.98           | 8.16      | 42-102       | 2     | (QT) |
| 63                        | 1049     | 7.97           | 8.16      | 20- 80       | 1     | (QT) |

Q qualifier indicates ion failed ratio requirement



GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2724.d  
Lab Smp Id: 245114007 Client Smp ID: RE15-10-8425  
Inj Date : 27-JAN-2010 18:53  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |245114007|944874|1|SVMF|1|LANL  
Misc Info : |MSD8270 S|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m  
Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 24  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1324.sub  
Target Version: 3.50  
Processing Host: hpc1p1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.05000  | weight of sample          |
| M    | 10.40600  | % moisture                |

Cpnd Variable Local Compound Variable

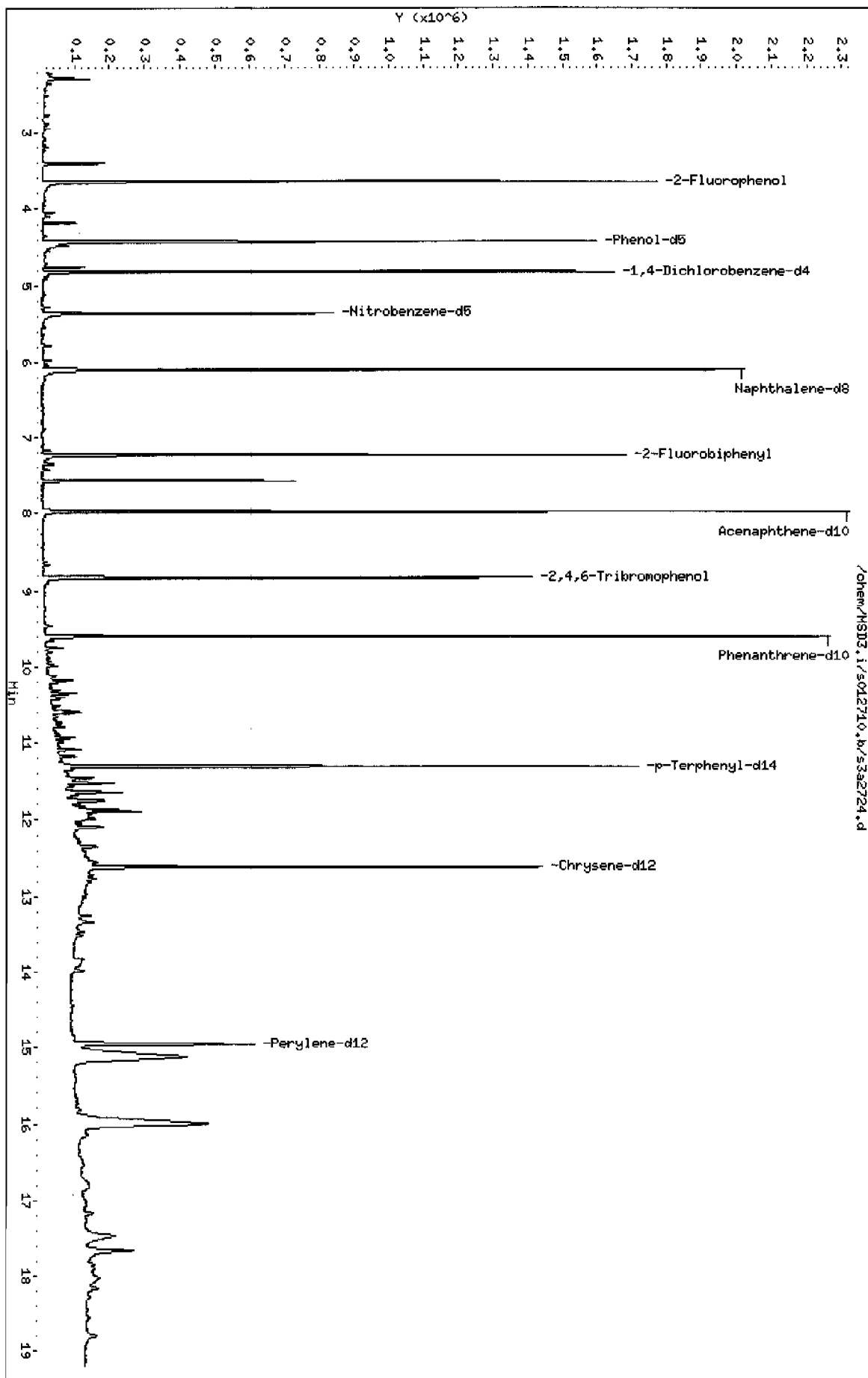
| ISTD                        | RT     | AREA    | AMOUNT |
|-----------------------------|--------|---------|--------|
| =====                       | =====  | =====   | =====  |
| * 10 1,4-Dichlorobenzene-d4 | 4.818  | 1518774 | 40.000 |
| * 91 Chrysene-d12           | 12.614 | 1831676 | 40.000 |
| * 98 Perylene-d12           | 14.958 | 950032  | 40.000 |

| CONCENTRATIONS |       |               |              |       | QUANT   |           |        |
|----------------|-------|---------------|--------------|-------|---------|-----------|--------|
| RT             | AREA  | ON-COL(ng/ul) | FINAL(ug/Kg) | QUAL  | LIBRARY | LIB ENTRY | CPND # |
| =====          | ===== | =====         | =====        | ===== | =====   | =====     | =====  |

| CONCENTRATIONS                           |         |                |              |      | QUANT             |           |        |  |
|--|---------|----------------|--------------|------|-------------------|-----------|--------|--|
| RT                                       | AREA    | ON-COL.(ng/ul) | FINAL(ug/Kg) | QUAL | LIBRARY           | LTB ENTRY | CPND # |  |
| Unknown                                  |         |                |              |      | CAS #:            |           |        |  |
| 2.103                                    | 2325126 | 61.2368962     | 2270         | 0    |                   | 0         | 10     |  |
| Unknown Aldol Condensate                 |         |                |              |      | CAS #:            |           |        |  |
| 3.401                                    | 184124  | 4.84927433     | 180          | 0    |                   | 0         | 10     |  |
| Unknown                                  |         |                |              |      | CAS #:            |           |        |  |
| 11.525                                   | 200843  | 4.38600159     | 163          | 0    |                   | 0         | 91     |  |
| Unknown                                  |         |                |              |      | CAS #:            |           |        |  |
| 11.646                                   | 218368  | 4.76871125     | 177          | 0    |                   | 0         | 91     |  |
| 1-Phenanthrenecarboxylic acid, 7-ethenyl |         |                |              |      | CAS #: 1686-62-0  |           |        |  |
| 11.752                                   | 240464  | 5.25124189     | 195          | 90   | NIST05.L          | 134785    | 91     |  |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 |         |                |              |      | CAS #: 1235-74-1  |           |        |  |
| 11.867                                   | 193244  | 4.22005094     | 157          | 98   | NIST05.L          | 133618    | 91     |  |
| (3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1 |         |                |              |      | CAS #: 17974-57-1 |           |        |  |
| 11.897                                   | 280110  | 6.11701026     | 227          | 90   | NIST05.L          | 97615     | 91     |  |
| Unknown                                  |         |                |              |      | CAS #:            |           |        |  |
| 11.986                                   | 207827  | 4.53851118     | 168          | 0    |                   | 0         | 91     |  |
| Unknown                                  |         |                |              |      | CAS #:            |           |        |  |
| 15.123                                   | 2092102 | 88.0854638     | 3270         | 0    |                   | 0         | 98     |  |
| 7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet |         |                |              |      | CAS #: 70038-20-9 |           |        |  |
| 16.000                                   | 2151361 | 90.5805155     | 3360         | 91   | NIST05.L          | 69982     | 98     |  |
| Unknown                                  |         |                |              |      | CAS #:            |           |        |  |
| 16.142                                   | 109327  | 4.60306873     | 171          | 0    |                   | 0         | 98     |  |
| Unknown                                  |         |                |              |      | CAS #:            |           |        |  |
| 17.471                                   | 451425  | 19.0067237     | 706          | 0    |                   | 0         | 98     |  |
| .gamma.-Sitosterol                       |         |                |              |      | CAS #: 83-47-6    |           |        |  |
| 17.660                                   | 454566  | 19.1389686     | 711          | 91   | NIST05.L          | 174402    | 98     |  |
| Unknown                                  |         |                |              |      | CAS #:            |           |        |  |
| 18.160                                   | 100572  | 4.23447917     | 157          | 0    |                   | 0         | 98     |  |

Data File: /chem/HSD3.i/s012710.b/s3a2724.d  
 Date: 27-JAN-2010 18:53  
 Client ID: RE15-10-8425  
 Sample Info: 124614007194487411SVMF11L1AN  
 Volume Injected (uL): 0.5  
 Column phase: J&W DB-5HS

Instrument: HSD3.i  
 Operator: JLDL  
 Column diameter: 0.20



Date : 27-JAN-2010 18:53

Client ID: RE15-10-8425

Instrument: MSD3.i

Sample Info: 1245114007194487411SVMF111LANL

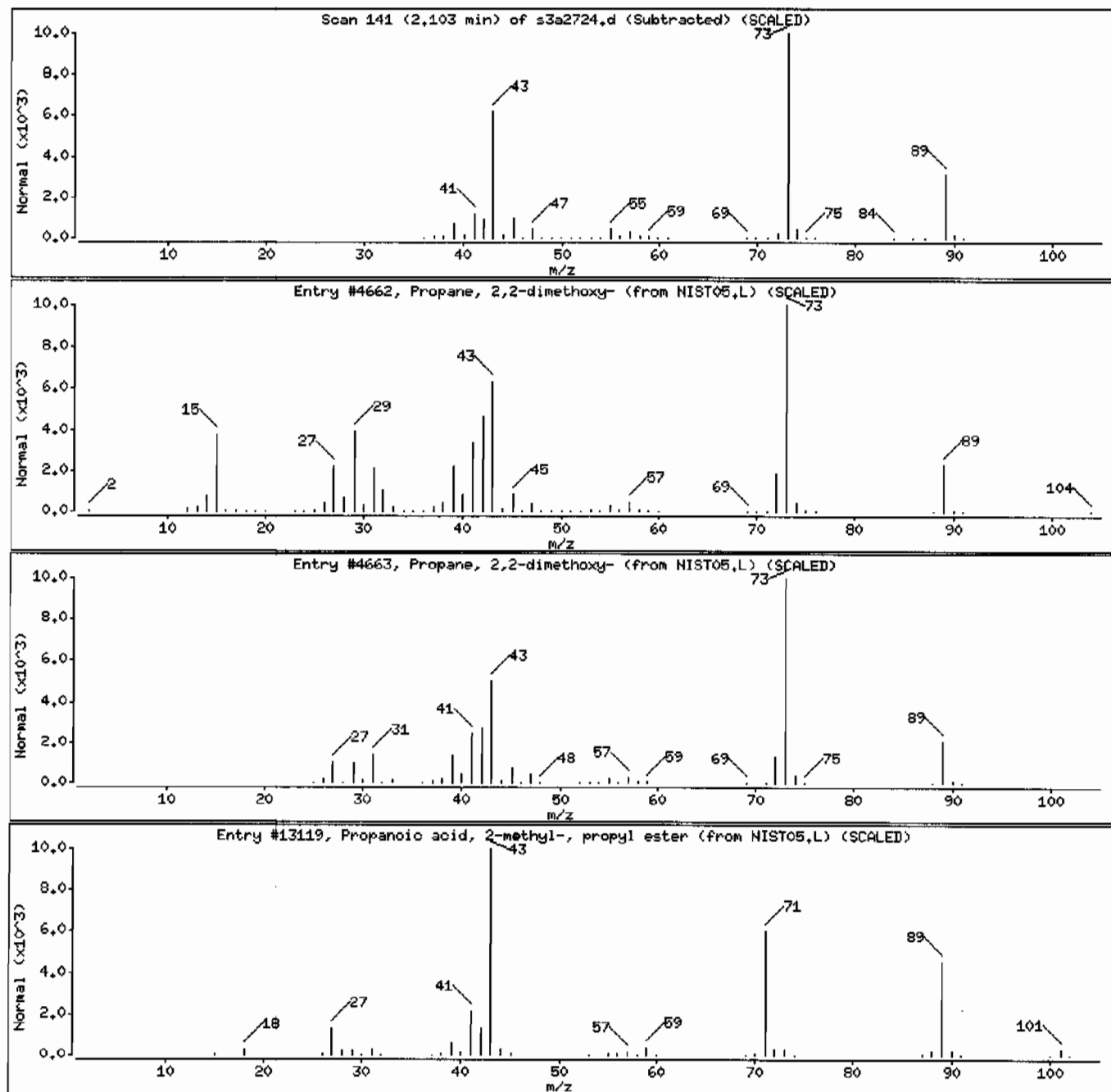
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match           | CAS Number | Library  | Entry | Quality | Formula | Weight |
|---|------------|----------|-------|---------|---------|--------|
| Unknown                                 |            |          |       |         |         |        |
| Propane, 2,2-dimethoxy-                 | 77-76-9    | NIST05.L | 4662  | 50      | C5H12O2 | 104    |
| Propane, 2,2-dimethoxy-                 | 77-76-9    | NIST05.L | 4663  | 38      | C5H12O2 | 104    |
| Propanoic acid, 2-methyl-, propyl ester | 644-49-5   | NIST05.L | 13119 | 23      | C7H14O2 | 130    |



Date : 27-JAN-2010 18:53

Client ID: RE15-10-8425

Instrument: MSD3.i

Sample Info: 12451140071944874111SVHF111LANL

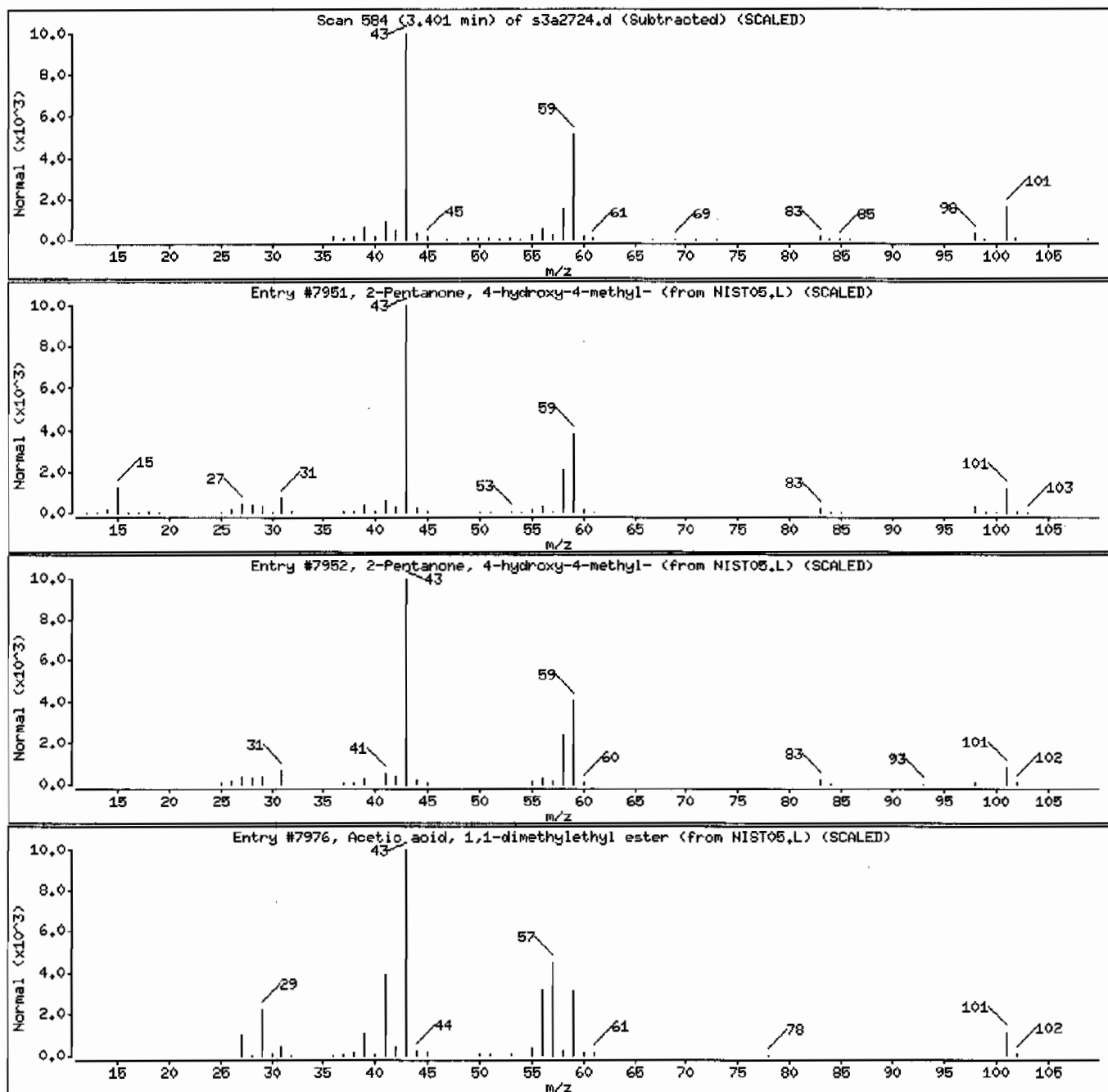
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match        | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--------------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown Aldol Condensate             |            |          |       |         |         |        |
| 2-Pentanone, 4-hydroxy-4-methyl-     | 123-42-2   | NIST05.L | 7951  | 59      | C6H12O2 | 116    |
| 2-Pentanone, 4-hydroxy-4-methyl-     | 123-42-2   | NIST05.L | 7952  | 50      | C6H12O2 | 116    |
| Acetic acid, 1,1-dimethylethyl ester | 540-88-5   | NIST05.L | 7976  | 28      | C6H12O2 | 116    |



Date: 27-JAN-2010 18:53

Client ID: RE15-10-8425

Instrument: MSD3.i

Sample Info: 1245114007194487411SVHF11ILANL

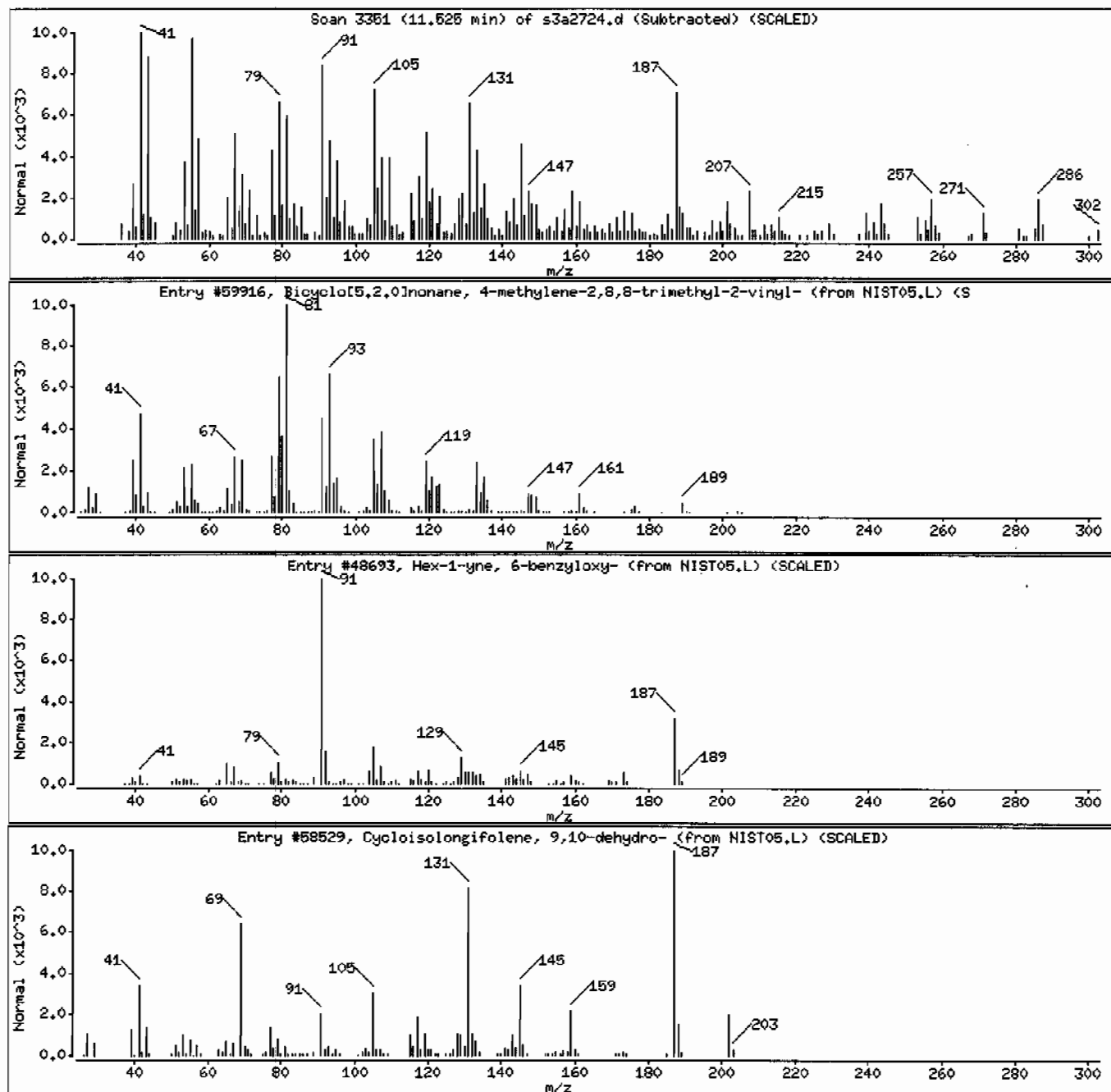
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5HS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula | Weight |
|--|--------------|----------|-------|---------|---------|--------|
| Unknown                                  |              |          |       |         |         |        |
| Bicyclo[5.2.0]nonane, 4-methylene-2,8,8- | 1000159-38-2 | NIST05.L | 59916 | 42      | C15H24  | 204    |
| Hex-1-yne, 6-benzoyloxy-                 | 60789-55-1   | NIST05.L | 48693 | 35      | C13H16O | 188    |
| Cycloisolongifolene, 9,10-dehydro-       | 1000186-81-6 | NIST05.L | 58529 | 25      | C15H22  | 202    |



Date: 27-JAN-2010 18:53

Client ID: RE15-10-8425

Instrument: HSD3.i

Sample Info: 1245114007194487411SVHF11LANL

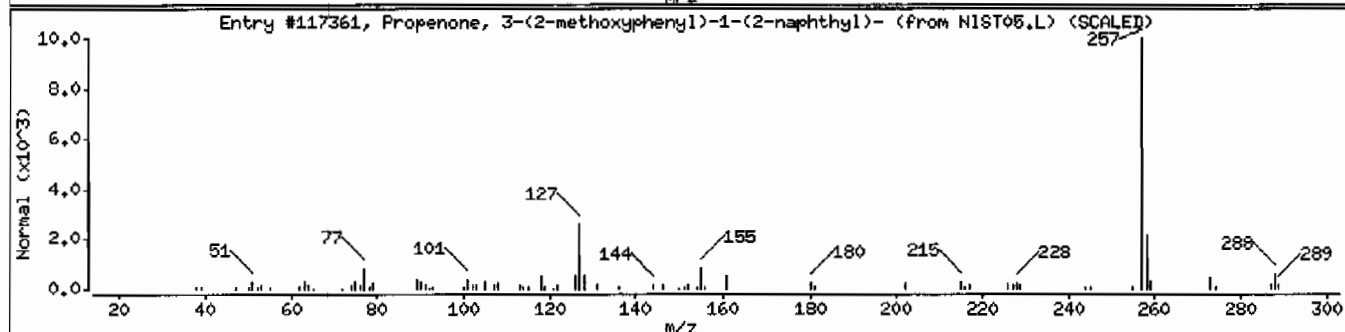
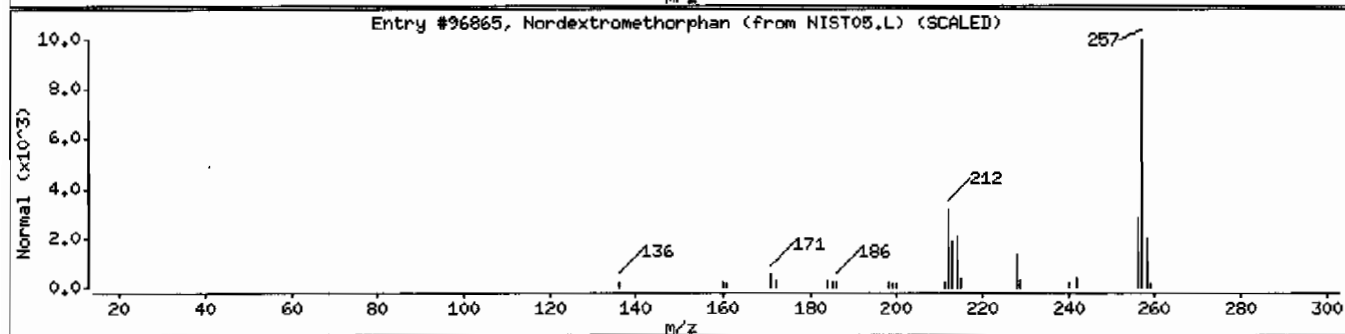
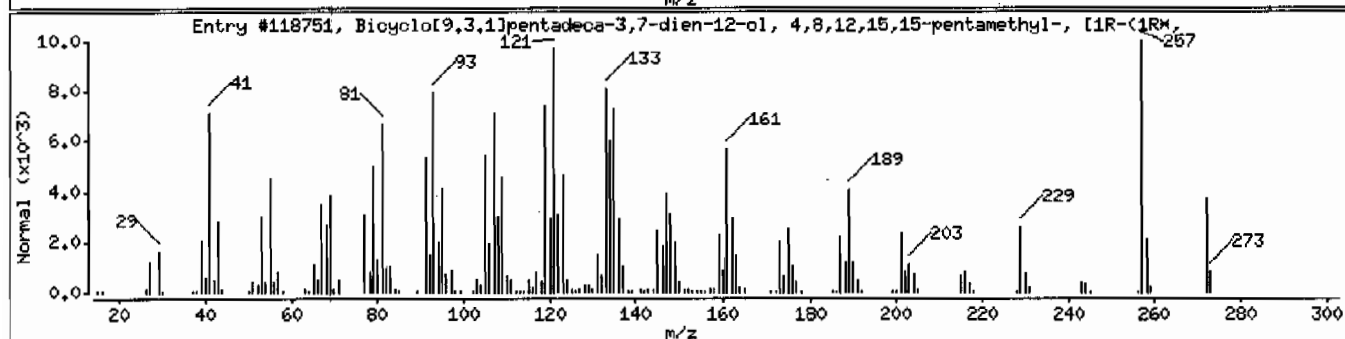
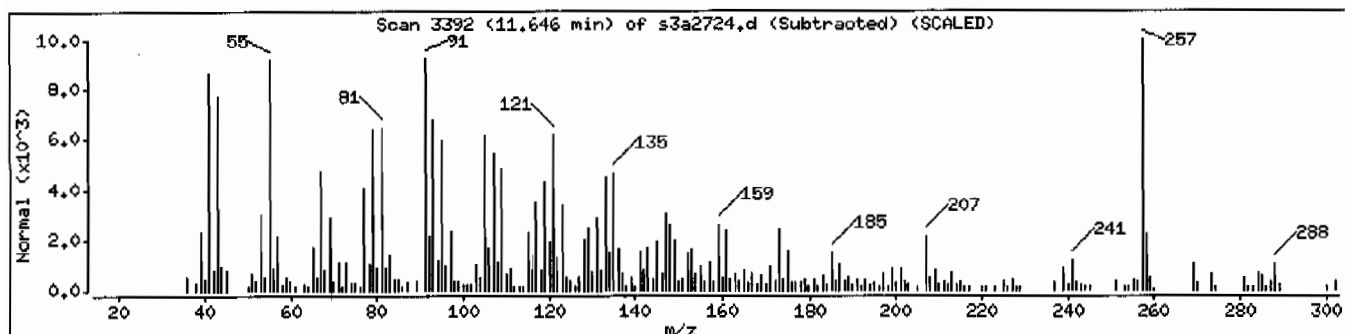
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| Unknown                                  |            |          |        |         |          |        |
| Bicyclo[9.3.1]pentadeca-3,7-dien-12-ol,  | 70000-19-0 | NIST05.L | 118751 | 72      | C20H34O  | 290    |
| Nordextromethorphan                      | 51195-74-5 | NIST05.L | 96865  | 59      | C17H23NO | 257    |
| Propenone, 3-(2-methoxyphenyl)-1-(2-naph | 52601-56-6 | NIST05.L | 117361 | 47      | C20H16O2 | 288    |



Date : 27-JAN-2010 18:53

Client ID: RE15-10-8425

Instrument: MSD3.i

Sample Info: 1245114007194487411ISVHF111LANL

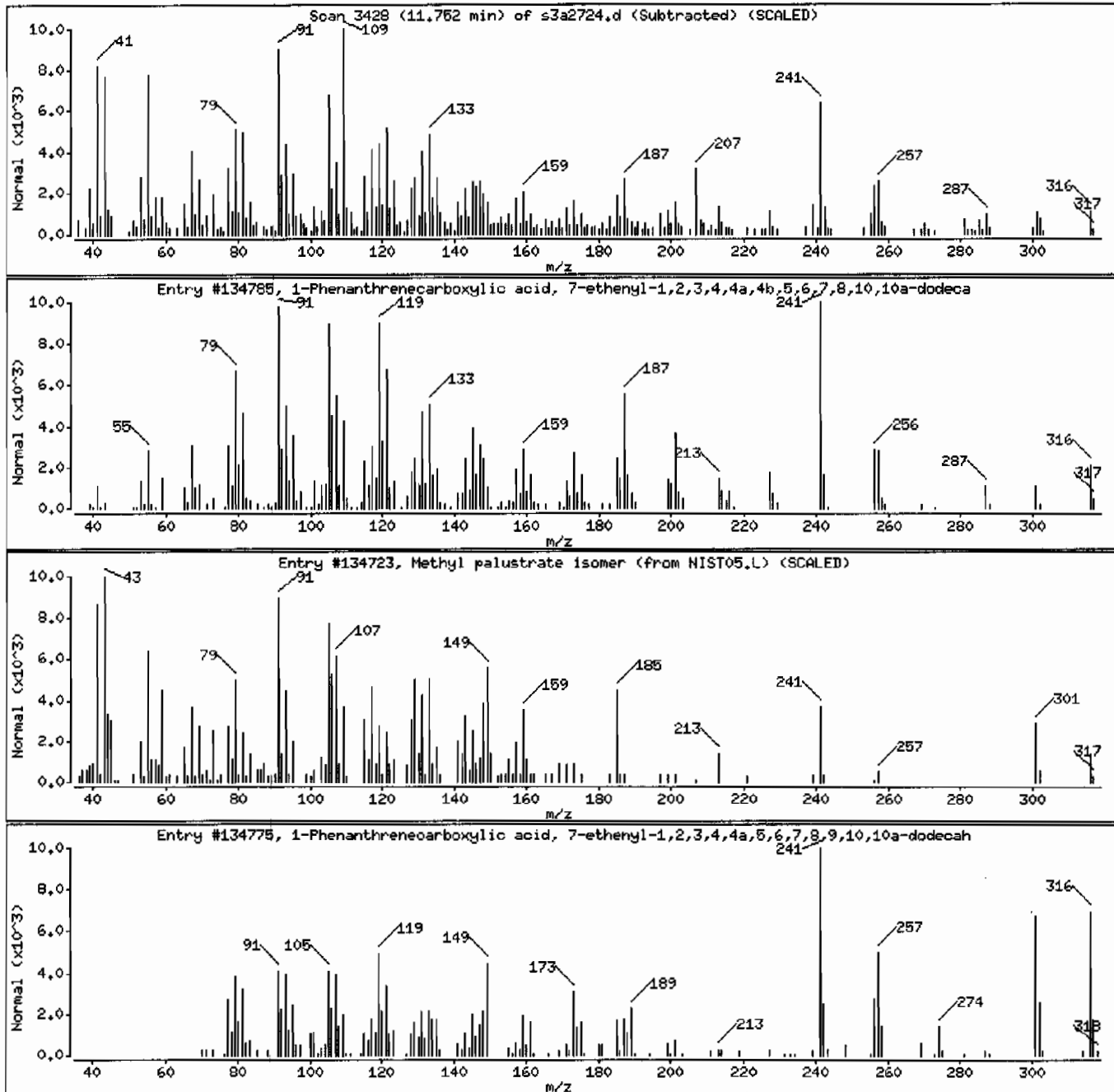
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| 1-Phenanthrenecarboxylic acid, 7-ethenyl | 1686-62-0  | NIST05.L | 134785 | 90      | C21H32O2 | 316    |
| Methyl palustrate isomer                 | 3310-94-9  | NIST05.L | 134723 | 46      | C21H32O2 | 316    |
| 1-Phenanthrenecarboxylic acid, 7-ethenyl | 3582-26-1  | NIST05.L | 134775 | 38      | C21H32O2 | 316    |





Date : 27-JAN-2010 18:53

Client ID: RE15-10-8425

Instrument: MSD3.i

Sample Info: 1245114007194487411SVHF111LANL

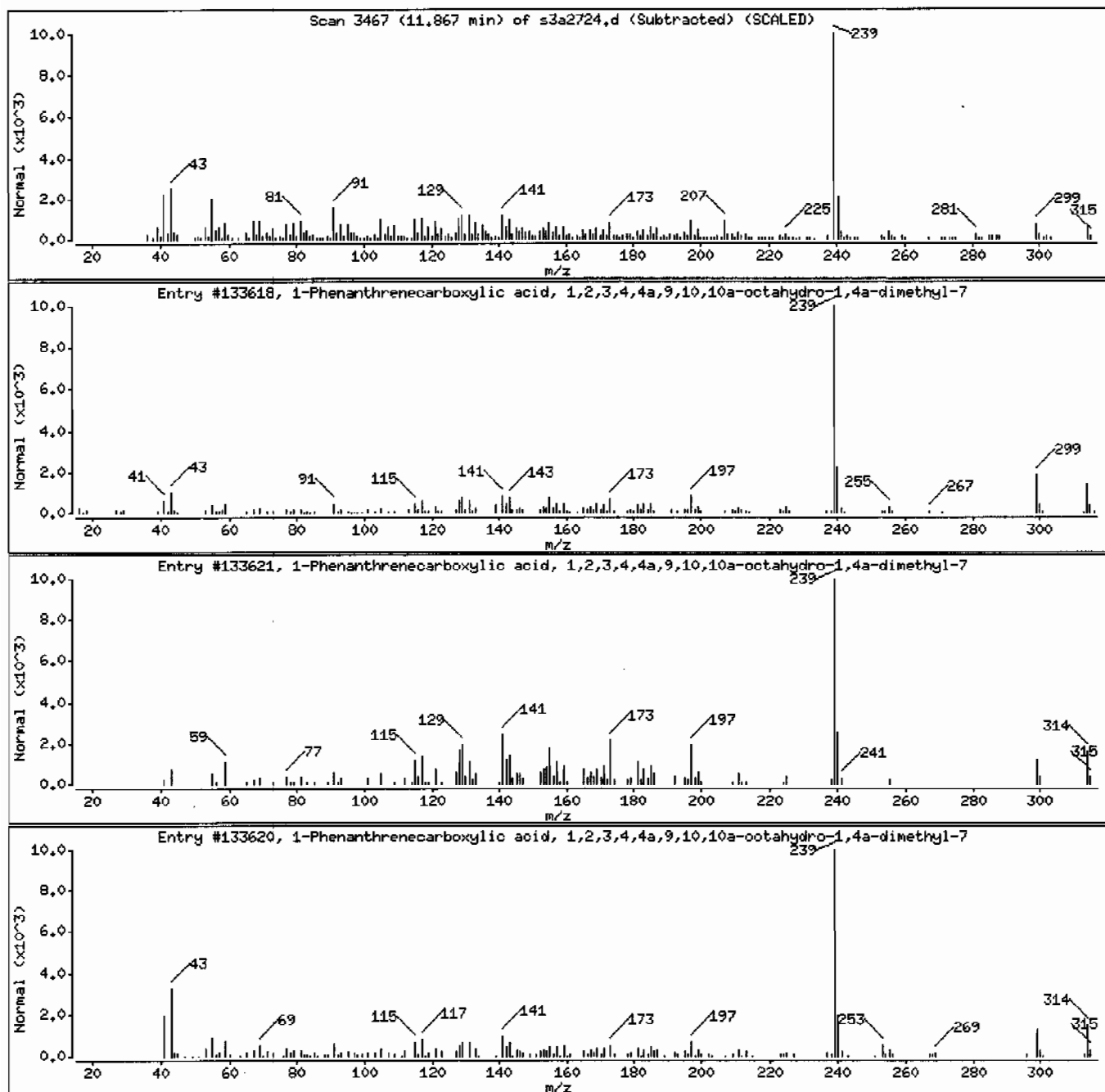
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05,L | 133618 | 98      | C21H30O2 | 314    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05,L | 133621 | 96      | C21H30O2 | 314    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05,L | 133620 | 93      | C21H30O2 | 314    |



Date: 27-JAN-2010 18:53

Client ID: RE15-10-8425

Instrument: MSD3.i

Sample Info: 1245114007194487411SVHF11|LANL

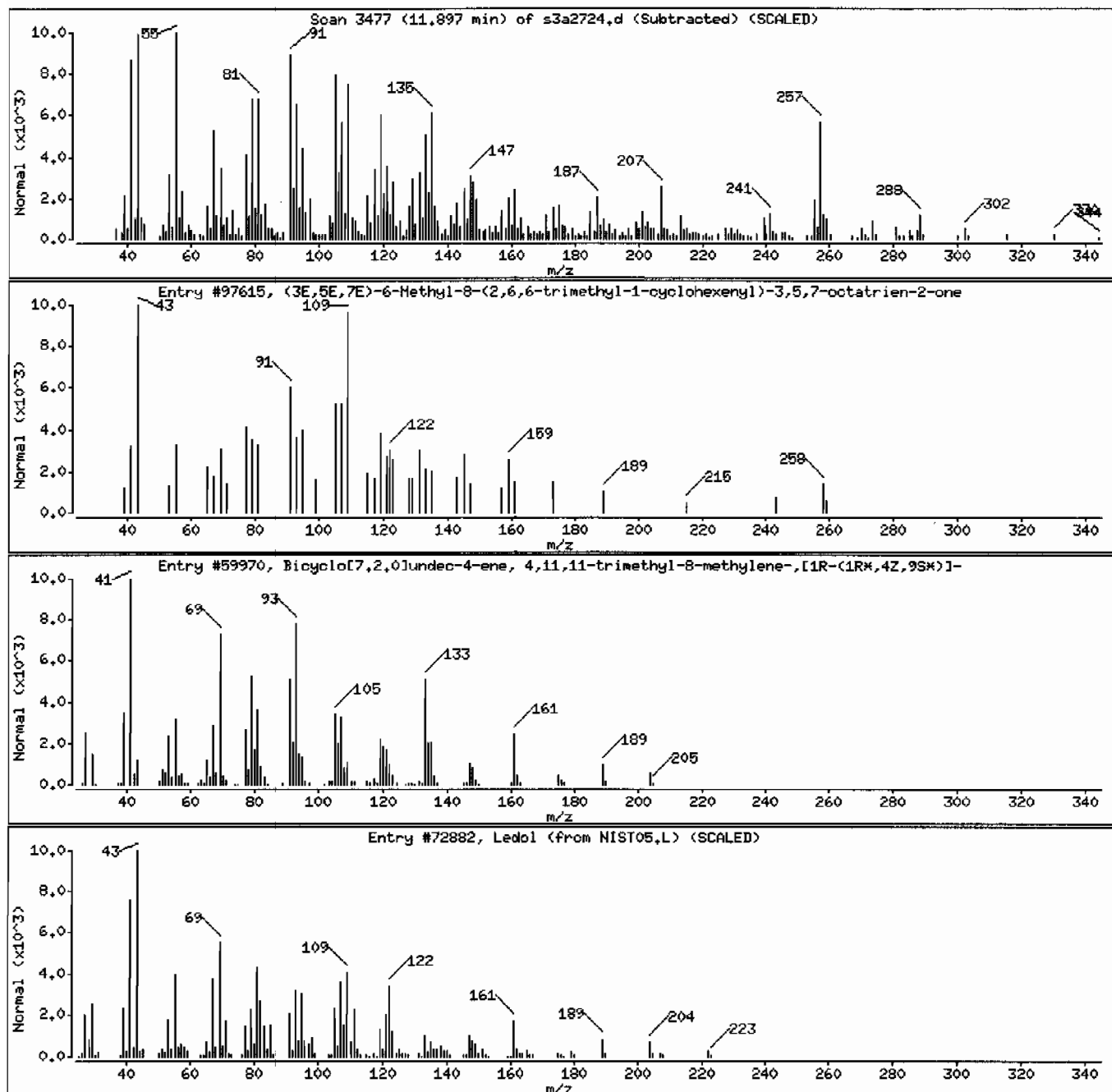
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--|------------|----------|-------|---------|---------|--------|
| (3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1 | 17974-57-1 | NIST05.L | 97615 | 90      | C18H26O | 258    |
| Bicyclo[7.2.0]undec-4-ene, 4,11,11-trime | 118-65-0   | NIST05.L | 59970 | 56      | C15H24  | 204    |
| Ledol                                    | 577-27-5   | NIST05.L | 72882 | 43      | C15H26O | 222    |



Date : 27-JAN-2010 18:53

Client ID: RE15-10-8425

Instrument: MSD3.i

Sample Info: 12451140071944874111SVHF111LANL

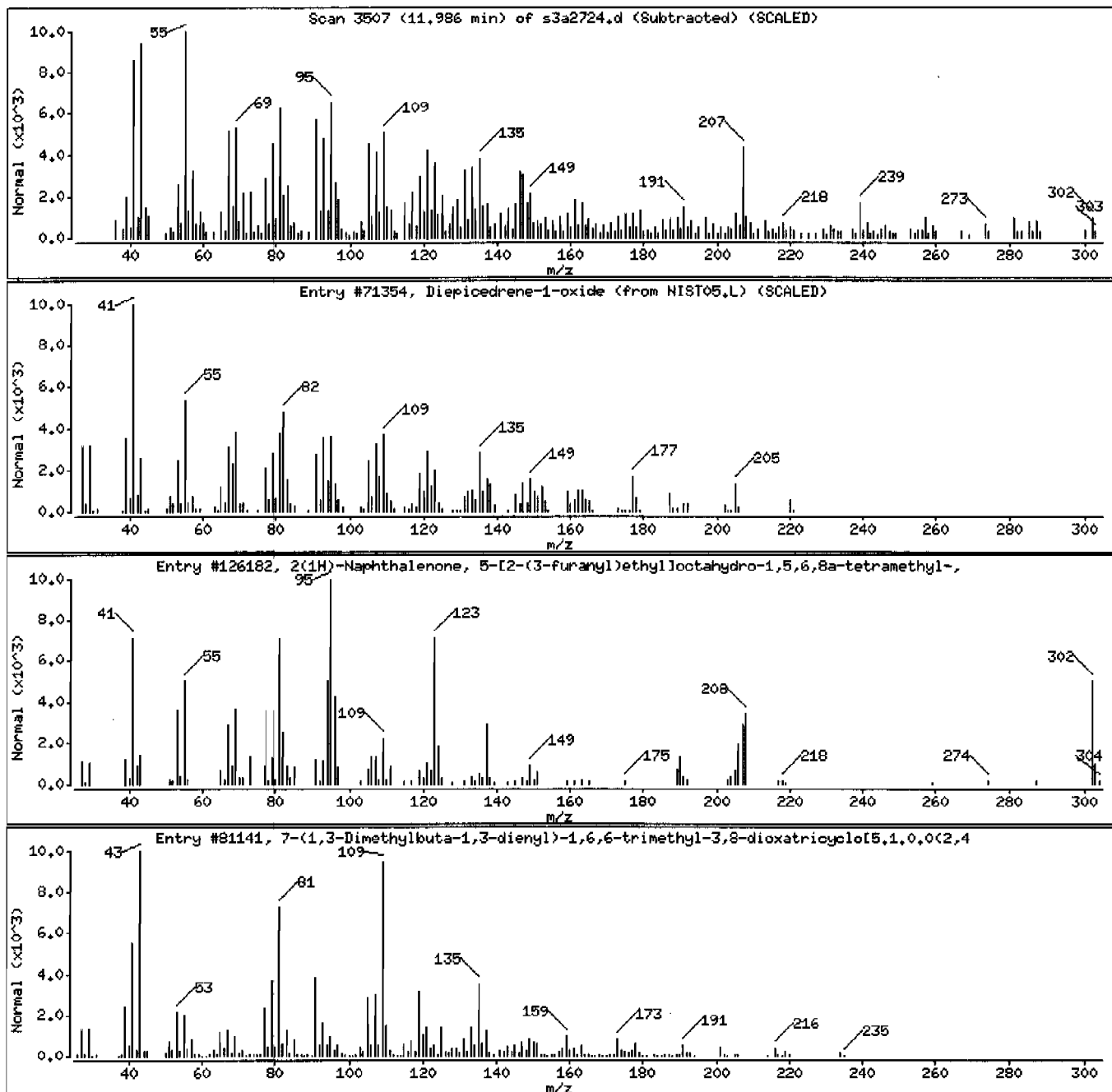
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match             | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|---|--------------|----------|--------|---------|----------|--------|
| Unknown                                   |              |          |        |         |          |        |
| Diepicedrene-1-oxide                      | 1000156-11-0 | NIST05.L | 71354  | 53      | C15H24O  | 220    |
| 2-(1H)-Naphthalenone, 5-[2-(3-furanyl)eth | 59742-40-4   | NIST05.L | 126182 | 47      | C20H30O2 | 302    |
| 7-(1,3-Dimethylbuta-1,3-dienyl)-1,6,6-tr  | 1000190-22-7 | NIST05.L | 81141  | 47      | C15H22O2 | 234    |



Date : 27-JAN-2010 18:53

Client ID: RE15-10-8426

Instrument: MSD3.i

Sample Info: 1245114007194487411SVHF111LANL

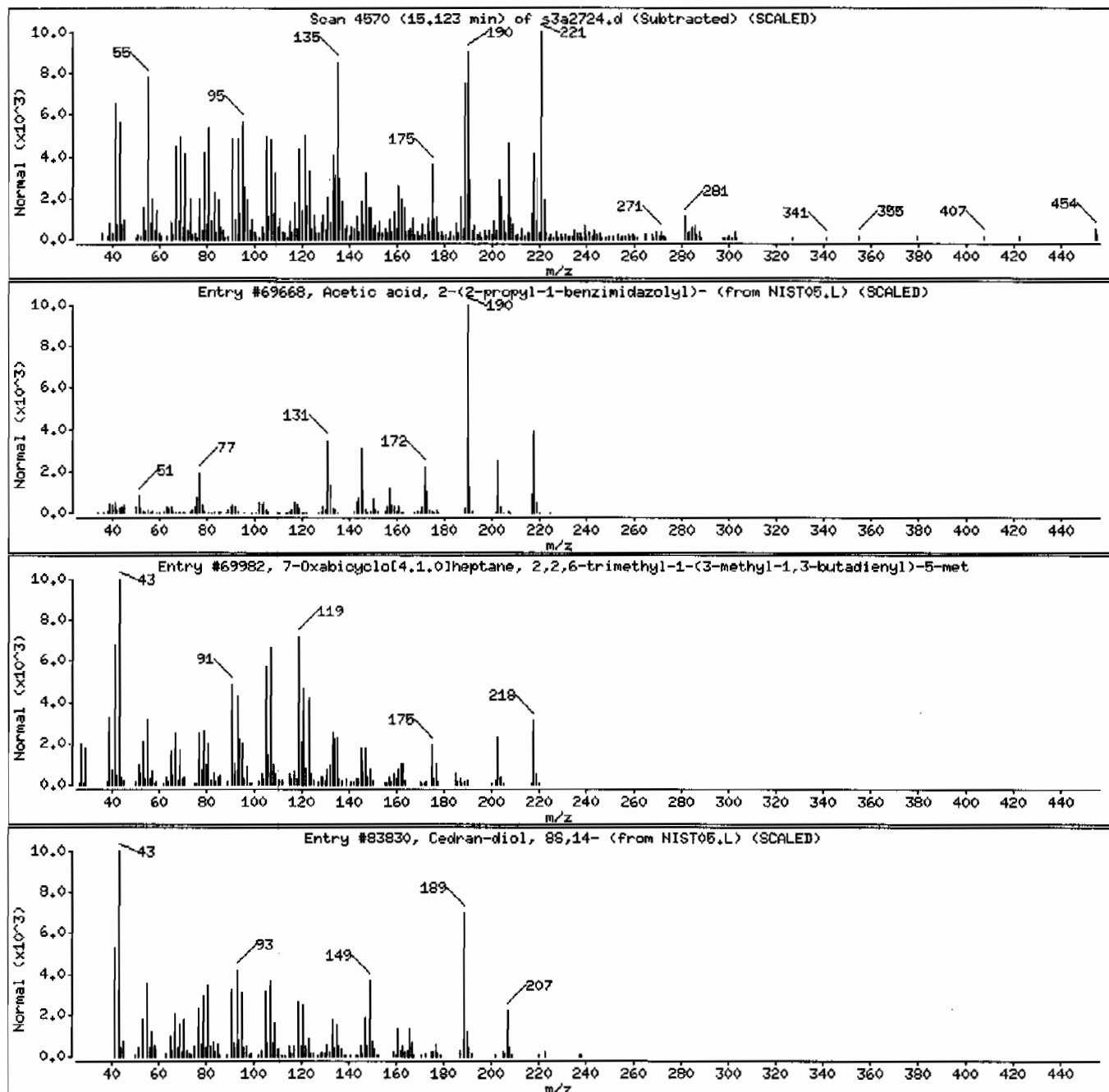
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match              | CAS Number  | Library  | Entry | Quality | Formula    | Weight |
|--|-------------|----------|-------|---------|------------|--------|
| Unknown                                    |             |          |       |         |            |        |
| Acetic acid, 2-(2-propyl-1-benzimidazolyl) | 331736-92-6 | NIST05.L | 69668 | 45      | C12H14N2O2 | 218    |
| 7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet   | 70038-20-9  | NIST05.L | 69982 | 40      | C15H22O    | 218    |
| Cedran-diol, 8S,14-                        | 62600-05-9  | NIST05.L | 83830 | 38      | C15H26O2   | 238    |



Date: 27-JAN-2010 18:53

Client ID: RE15-10-8425

Instrument: MSD3.i

Sample Info: 1245114007194487411SVHF111LANL

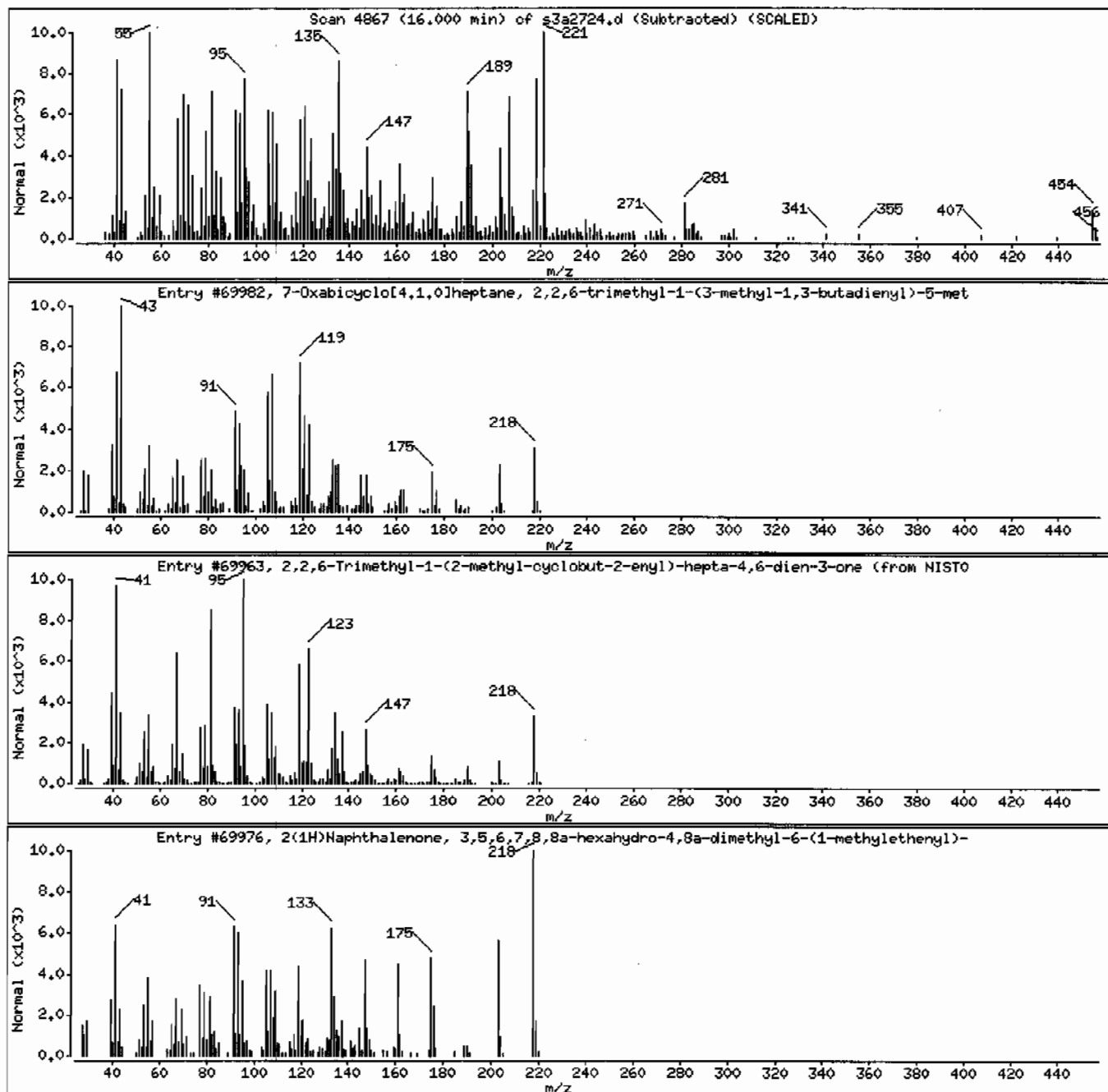
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula | Weight |
|--|--------------|----------|-------|---------|---------|--------|
| 7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet | 70038-20-9   | NIST05.L | 69982 | 91      | C15H22O | 218    |
| 2,2,6-Trimethyl-1-(2-methyl-cyclobut-2-e | 1000188-72-8 | NIST05.L | 69963 | 76      | C15H22O | 218    |
| 2(1H)Naphthalenone, 3,5,6,7,8,8a-hexahyd | 1000188-66-5 | NIST05.L | 69976 | 45      | C15H22O | 218    |



Date : 27-JAN-2010 18:53

Client ID: RE15-10-8425

Instrument: MSD3.i

Sample Info: 12451140071944874111SVHF111LANL

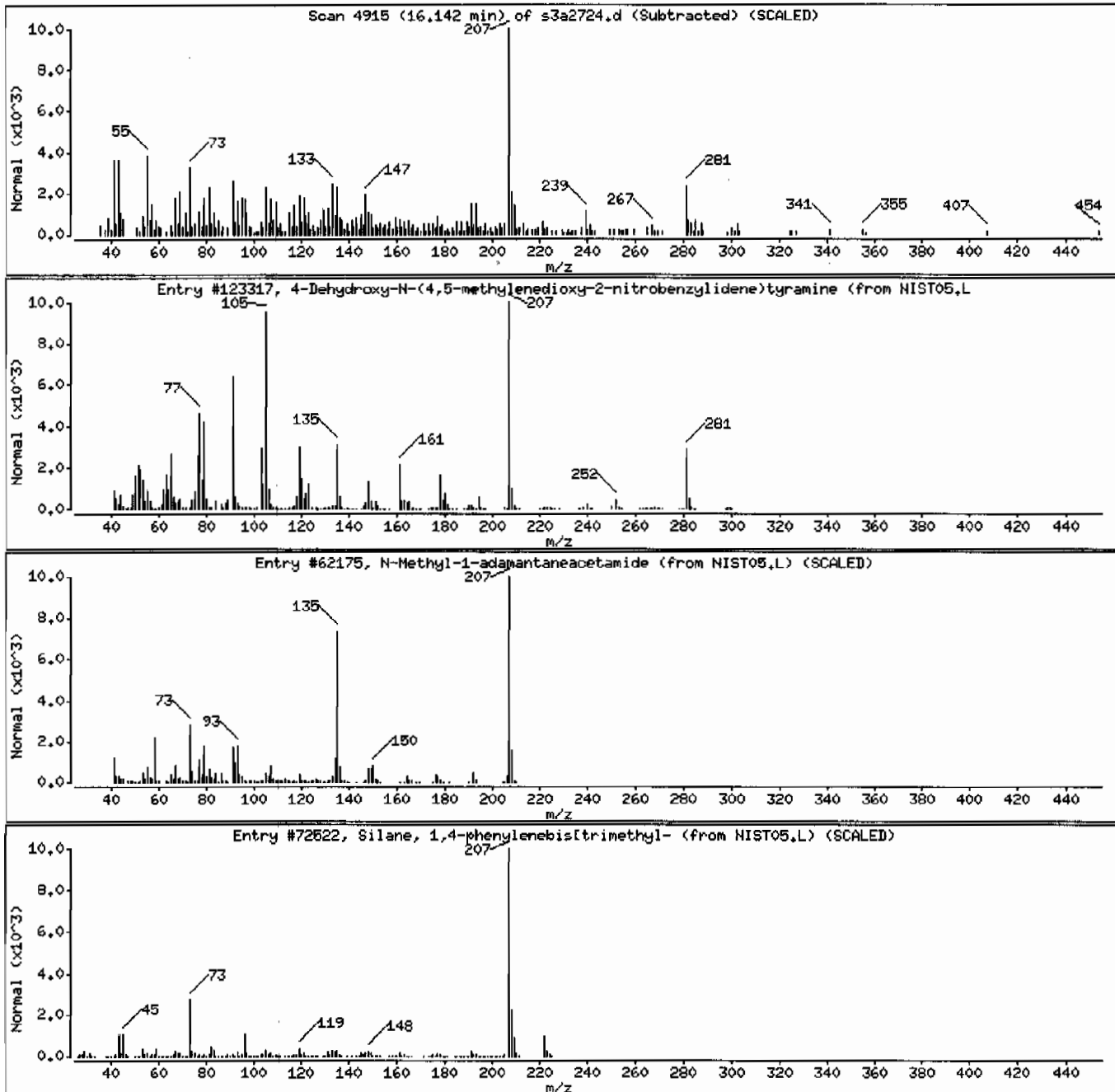
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula    | Weight |
|--|--------------|----------|--------|---------|------------|--------|
| Unknown                                  |              |          |        |         |            |        |
| 4-Dehydroxy-N-(4,5-methylenedioxy-2-nitr | 1000111-66-9 | NIST05.L | 123317 | 58      | C16H14N2O4 | 298    |
| N-Methyl-1-adamantaneacetamide           | 31897-93-5   | NIST05.L | 62175  | 53      | C13H21NO   | 207    |
| Silane, 1,4-phenylenebis(trimethyl-      | 13183-70-5   | NIST05.L | 72522  | 50      | C12H22Si2  | 222    |



Date: 27-JAN-2010 18:53

Client ID: RE15-10-8425

Instrument: MSD3.i

Sample Info: 1245114007194487411SVHF111LANL

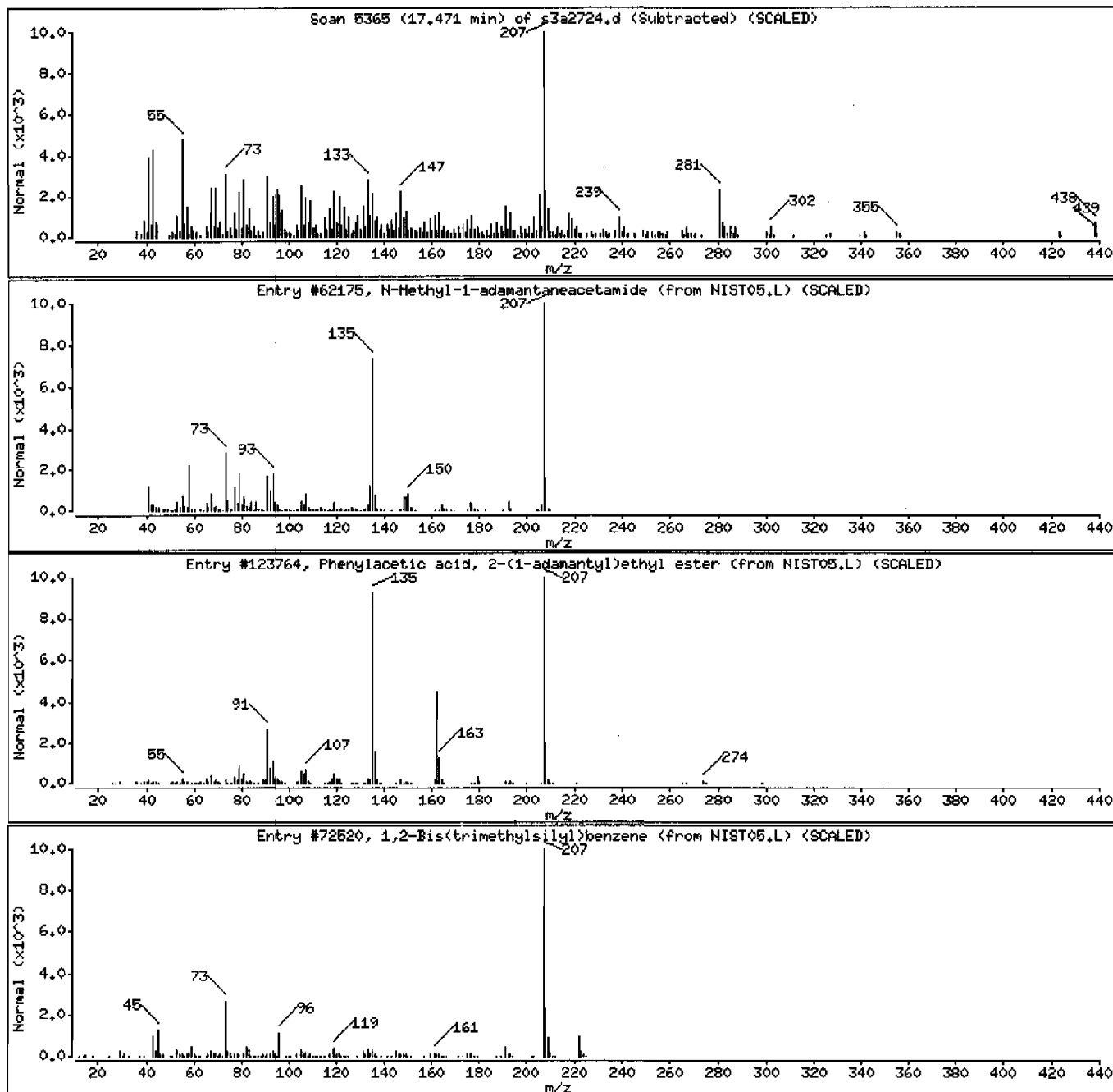
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match           | CAS Number   | Library  | Entry  | Quality | Formula   | Weight |
|---|--------------|----------|--------|---------|---|--------|
| Unknown                                 |              |          |        |         |   |        |
| N-Methyl-1-adamantaneacetamide          | 31897-93-5   | NIST05.L | 62175  | 42      | C <sub>13</sub> H <sub>21</sub> NO              | 207    |
| Phenylacetic acid, 2-(1-adamantyl)ethyl | 1000282-91-2 | NIST05.L | 123764 | 38      | C <sub>20</sub> H <sub>26</sub> O <sub>2</sub>  | 298    |
| 1,2-Bis(trimethylsilyl)benzene          | 17151-09-6   | NIST05.L | 72520  | 35      | C <sub>12</sub> H <sub>22</sub> Si <sub>2</sub> | 222    |



Date : 27-JAN-2010 18:53

Client ID: RE15-10-8425

Instrument: MSD3.1

Sample Info: 1245114007194487411SVHF111LANL

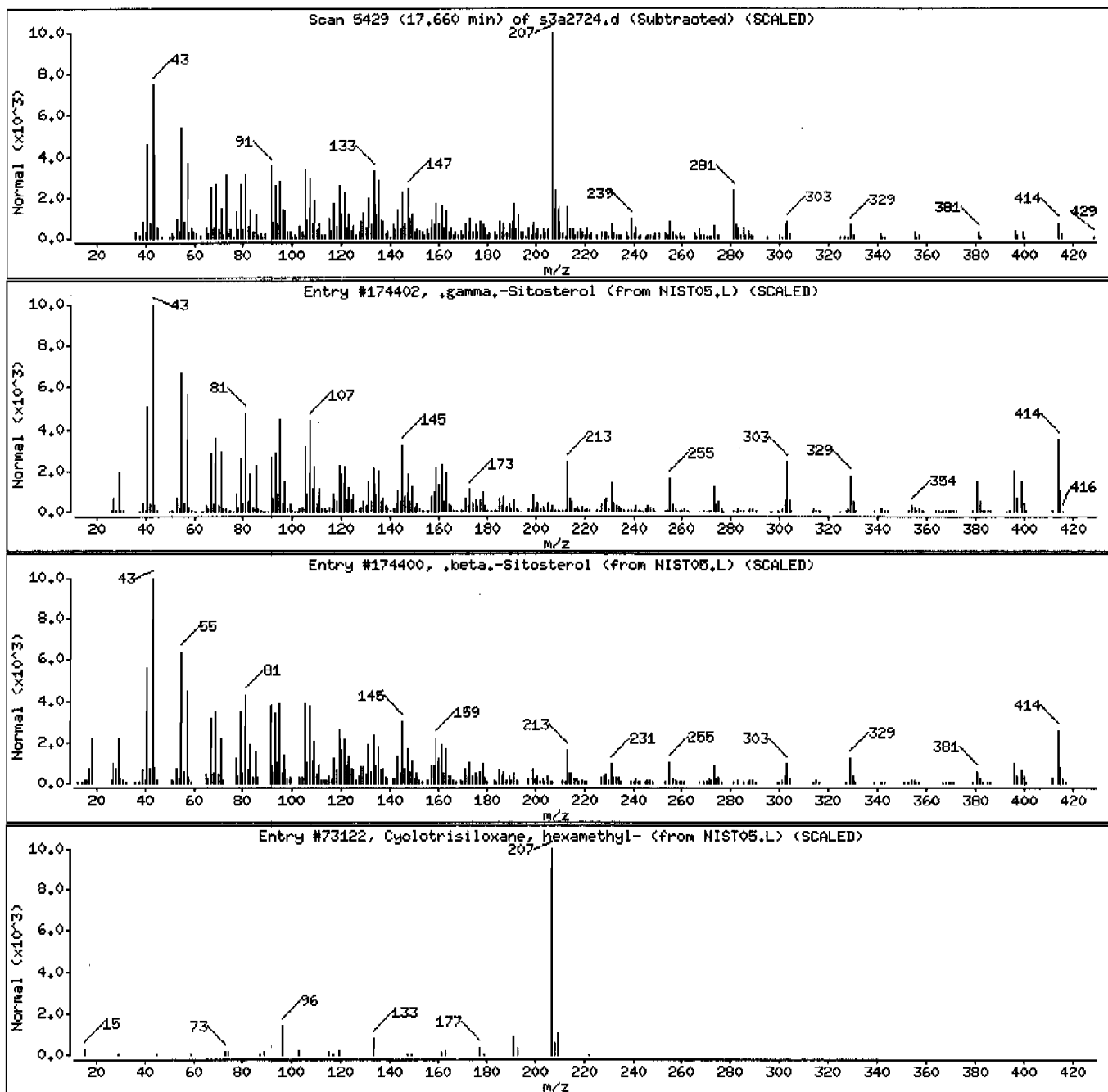
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry  | Quality | Formula    | Weight |
|-------------------------------|------------|----------|--------|---------|------------|--------|
| .gamma.-Sitosterol            | 83-47-6    | NIST05.L | 174402 | 91      | C29H50O    | 414    |
| .beta.-Sitosterol             | 83-46-5    | NIST05.L | 174400 | 90      | C29H50O    | 414    |
| Cyclotrisiloxane, hexamethyl- | 541-05-9   | NIST05.L | 73122  | 35      | C6H18O3Si3 | 222    |





Date : 27-JAN-2010 18:53

Client ID: RE15-10-8425

Instrument: MSD3.1

Sample Info: 1245114007/944874/11SVHF11/LANL

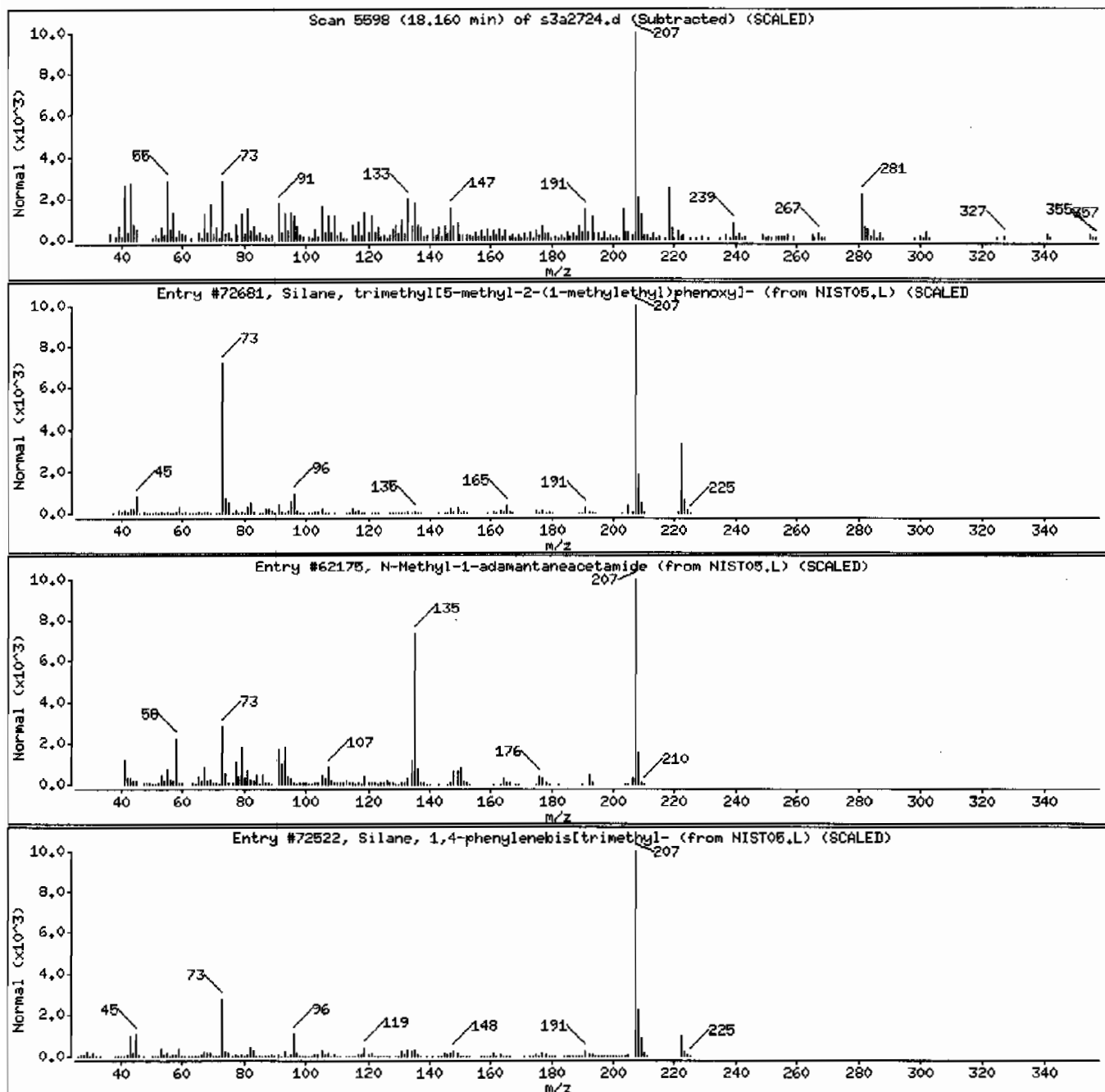
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula   | Weight |
|--|------------|----------|-------|---------|-----------|--------|
| Unknown                                  |            |          |       |         |           |        |
| Silane, trimethyl[5-methyl-2-(1-methylet | 55012-80-1 | NIST05.L | 72681 | 50      | C13H22OSi | 222    |
| N-Methyl-1-adamantaneacetamide           | 31897-93-5 | NIST05.L | 62175 | 50      | C13H21NO  | 207    |
| Silane, 1,4-phenylenebis[trimethyl-      | 13183-70-6 | NIST05.L | 72522 | 47      | C12H22Si2 | 222    |



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 3

SDG Number: 10-1324  
Lab Sample ID: 245114005

Client ID: RE15-10-8441  
Batch ID: 944874  
Run Date: 01/27/2010 16:44  
Prep Date: 01/25/2010 21:06  
Data File: s3a2719.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.12 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 367    | ug/kg | 73.4    | 367     |
| 108-95-2   | Phenol                        | U         | 367    | ug/kg | 73.4    | 367     |
| 95-57-8    | 2-Chlorophenol                | U         | 367    | ug/kg | 73.4    | 367     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 367    | ug/kg | 73.4    | 367     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 367    | ug/kg | 73.4    | 367     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 367    | ug/kg | 73.4    | 367     |
| 83-32-9    | Acenaphthene                  | U         | 36.7   | ug/kg | 12.1    | 36.7    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 367    | ug/kg | 36.7    | 367     |
| 100-02-7   | 4-Nitrophenol                 | U         | 367    | ug/kg | 121     | 367     |
| 87-86-5    | Pentachlorophenol             | U         | 367    | ug/kg | 91.8    | 367     |
| 129-00-0   | Pyrene                        | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 110-86-1   | Pyridine                      | U         | 367    | ug/kg | 73.4    | 367     |
| 62-53-3    | Aniline                       | U         | 367    | ug/kg | 110     | 367     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 367    | ug/kg | 73.4    | 367     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 367    | ug/kg | 73.4    | 367     |
| 100-51-6   | Benzyl alcohol                | U         | 367    | ug/kg | 110     | 367     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 367    | ug/kg | 73.4    | 367     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 367    | ug/kg | 73.4    | 367     |
| 95-48-7    | o-Cresol                      | U         | 367    | ug/kg | 73.4    | 367     |
| 65794-96-9 | m,p-Cresols                   | U         | 367    | ug/kg | 110     | 367     |
| 67-72-1    | Hexachloroethane              | U         | 367    | ug/kg | 73.4    | 367     |
| 98-95-3    | Nitrobenzene                  | U         | 367    | ug/kg | 73.4    | 367     |
| 78-59-1    | Isophorone                    | U         | 367    | ug/kg | 73.4    | 367     |
| 88-75-5    | 2-Nitrophenol                 | U         | 367    | ug/kg | 73.4    | 367     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 367    | ug/kg | 129     | 367     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 367    | ug/kg | 73.4    | 367     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 367    | ug/kg | 73.4    | 367     |
| 65-85-0    | Benzoic acid                  | U         | 734    | ug/kg | 184     | 734     |
| 91-20-3    | Naphthalene                   | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 106-47-8   | 4-Chloroaniline               | U         | 367    | ug/kg | 73.4    | 367     |
| 87-68-3    | Hexachlorobutadiene           | U         | 367    | ug/kg | 73.4    | 367     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 36.7   | ug/kg | 7.34    | 36.7    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 367    | ug/kg | 73.4    | 367     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 367    | ug/kg | 73.4    | 367     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 367    | ug/kg | 73.4    | 367     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 36.7   | ug/kg | 12.1    | 36.7    |
| 88-74-4    | 2-Nitroaniline                | U         | 367    | ug/kg | 73.4    | 367     |
| 99-09-2    | <i>o</i> -Nitroaniline        | U         | 367    | ug/kg | 73.4    | 367     |
|            | 3-Nitroaniline                |           |        |       |         |         |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114005

Client ID: RE15-10-8441  
Batch ID: 944874  
Run Date: 01/27/2010 16:44  
Prep Date: 01/25/2010 21:06  
Data File: s3a2719.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.12 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                   | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|----------------------------|-----------|--------|-------|---------|---------|
|           | <i>m</i> -Nitroaniline     |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate          | U         | 367    | ug/kg | 73.4    | 367     |
| 606-20-2  | 2,6-Dinitrotoluene         | U         | 367    | ug/kg | 36.7    | 367     |
| 208-96-8  | Acenaphthylene             | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 51-28-5   | 2,4-Dinitrophenol          | U         | 734    | ug/kg | 140     | 734     |
| 132-64-9  | Dibenzofuran               | U         | 367    | ug/kg | 73.4    | 367     |
| 84-66-2   | Diethylphthalate           | U         | 367    | ug/kg | 73.4    | 367     |
| 86-73-7   | Fluorene                   | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 7005-72-3 | 4-Chlorophenylphenylether  | U         | 367    | ug/kg | 73.4    | 367     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol | U         | 367    | ug/kg | 73.4    | 367     |
| 100-01-6  | 4-Nitroaniline             | U         | 367    | ug/kg | 110     | 367     |
|           | <i>p</i> -Nitroaniline     |           |        |       |         |         |
| 122-39-4  | Diphenylamine              | U         | 367    | ug/kg | 73.4    | 367     |
| 122-66-7  | Azobenzene                 | U         | 367    | ug/kg | 73.4    | 367     |
|           | 1,2-Diphenylhydrazine      |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether   | U         | 367    | ug/kg | 73.4    | 367     |
| 118-74-1  | Hexachlorobenzene          | U         | 367    | ug/kg | 73.4    | 367     |
| 85-01-8   | Phenanthrene               | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 120-12-7  | Anthracene                 | U         | 36.7   | ug/kg | 7.34    | 36.7    |
| 84-74-2   | Di-n-butylphthalate        | U         | 367    | ug/kg | 73.4    | 367     |
| 206-44-0  | Fluoranthene               | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 85-68-7   | Butylbenzylphthalate       | U         | 367    | ug/kg | 73.4    | 367     |
| 56-55-3   | Benzo(a)anthracene         | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 91-94-1   | 3,3'-Dichlorobenzidine     | U         | 367    | ug/kg | 110     | 367     |
| 218-01-9  | Chrysene                   | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate | U         | 367    | ug/kg | 73.4    | 367     |
| 117-84-0  | Di-n-octylphthalate        | U         | 367    | ug/kg | 73.4    | 367     |
| 205-99-2  | Benzo(b)fluoranthene       | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 207-08-9  | Benzo(k)fluoranthene       | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 50-32-8   | Benzo(a)pyrene             | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene     | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 53-70-3   | Dibenzo(a,h)anthracene     | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 191-24-2  | Benzo(ghi)perylene         | U         | 36.7   | ug/kg | 11.0    | 36.7    |
| 120-82-1  | 1,2,4-Trichlorobenzene     | U         | 367    | ug/kg | 73.4    | 367     |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 2.12 | 1540      | ug/kg |     | J    |
|         | Unknown                               | 2.3  | 150       | ug/kg |     | J    |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

|                             |                                  |                      |
|-----------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324         | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 245114005    | Date Received: 01/20/2010 08:45  | %Moisture: 9.6       |
|                             | Client: LANL010                  | Project: LANL01004   |
| Client ID: RE15-10-8441     | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Batch ID: 944874            | Inst: MSD3.I                     | Dilution: 1          |
| Run Date: 01/27/2010 16:44  | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Prep Date: 01/25/2010 21:06 | Aliquot: 30.12 g                 | Final Volume: 1 mL   |
| Data File: s3a2719.d        | Column: J&W DB-5MS               | Level: LOW           |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---------|----------|-----------|--------|-------|---------|---------|
|---------|----------|-----------|--------|-------|---------|---------|

| Tentatively Identified Compound Summary |                                       |       | Estimated |       |     |      |
|---|---------------------------------------|-------|-----------|-------|-----|------|
| CAS No.                                 | Tentatively Identified Compound (TIC) | RT    |           | Units | Fit | Qual |
|   | Unknown Aldol Condensate              | 3.41  | 180       | ug/kg |     | JA   |
| 7785-70-8                               | 1R-.alpha.-Pinene                     | 4.18  | 200       | ug/kg | 98  | NJ   |
|   | Unknown                               | 5.77  | 184       | ug/kg |     | J    |
|   | Unknown                               | 15.81 | 166       | ug/kg |     | J    |
|   | Unknown                               | 15.99 | 255       | ug/kg |     | J    |

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2719.d  
Lab Smp Id: 245114005 Client Smp ID: RE15-10-8441  
Inj Date : 27-JAN-2010 16:44  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |245114005|944874|1|SVMF|1|LANL  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m  
Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 19  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1324.sub  
Target Version: 3.50  
Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.12000  | weight of sample          |
| M    | 9.58090   | % moisture                |

Cpnd Variable Local Compound Variable

| Compounds                   | QUANT SIG |        |        |         | RESPONSE | CONCENTRATIONS |         |
|-----------------------------|-----------|--------|--------|---------|----------|----------------|---------|
|                             | MASS      | RT     | EXP RT | REL RT  |          | ON-COLUMN      | FINAL   |
|                             |           |        |        |         |          | (ng/ul)        | (ug/Kg) |
| * 10 1,4-Dichlorobenzene-d4 | 152       | 4.818  | 4.817  | (1.000) | 261983   | 40.0000        |         |
| * 29 Naphthalene-d8         | 136       | 6.101  | 6.100  | (1.000) | 1060897  | 40.0000        |         |
| * 46 Acenaphthene-d10       | 164       | 7.974  | 7.973  | (1.000) | 588808   | 40.0000        |         |
| * 67 Phenanthrene-d10       | 188       | 9.595  | 9.588  | (1.000) | 988251   | 40.0000        |         |
| * 91 Chrysene-d12           | 240       | 12.617 | 12.610 | (1.000) | 681078   | 40.0000        |         |
| * 98 Perylene-d12           | 264       | 14.961 | 14.945 | (1.000) | 349318   | 40.0000        |         |
| \$ 3 2-Fluorophenol         | 112       | 3.648  | 3.633  | (0.757) | 439198   | 64.4256        | 2360    |
| \$ 5 Phenol-d5              | 99        | 4.428  | 4.418  | (0.919) | 544253   | 63.5240        | 2330    |
| \$ 20 Nitrobenzene-d5       | 82        | 5.358  | 5.357  | (0.878) | 258421   | 32.9756        | 1210    |
| \$ 39 2-Fluorobiphenyl      | 172       | 7.228  | 7.227  | (0.906) | 579411   | 38.0704        | 1400    |
| \$ 60 2,4,6-Tribromophenol  | 329       | 8.833  | 8.825  | (1.108) | 159597   | 94.5508        | 3470    |
| \$ 81 p-Terphenyl-d14       | 244       | 11.304 | 11.297 | (0.896) | 600118   | 51.2639        | 1880    |

## ION RATIO REPORT

## SV REPORT

Data file: s3a2719.d

Report Date: 01/27/2010 17:25

Lab. ID: 245114005

SampleType: SAMPLE

Injection Date: 27-JAN-2010 16:44

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245114005|944874|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1324

Sample Matrix: SOIL

| MASS                      | RESPONSE | RT             | EXPECT RT | TARGET RANGE | RATIO | QUAL |
|---------------------------|----------|----------------|-----------|--------------|-------|------|
| =====                     |          |                |           |              |       |      |
| 4 Aniline                 |          | CAS#: 62-53-3  |           |              |       |      |
| 66                        | 31782    | 4.43           | 4.50      | 80-120       | 100   | (T)  |
| 93                        | 2918     | 4.48           | 4.50      | 205-265      | 9     | (Q)  |
| -----                     |          |                |           |              |       |      |
| 17 N-Nitrosodipropylamine |          | CAS#: 621-64-7 |           |              |       |      |
| 70                        | 37155    | 5.36           | 5.19      | 80-120       | 100   | (T)  |
| 42                        | 24695    | 5.36           | 5.19      | 43-103       | 66    | (T)  |
| -----                     |          |                |           |              |       |      |
| 44 2,6-Dinitrotoluene     |          | CAS#: 606-20-2 |           |              |       |      |
| 165                       | 77454    | 7.97           | 7.73      | 80-120       | 100   | (T)  |
| 63                        | 1317     | 7.97           | 7.73      | 35- 95       | 2     | (QT) |
| -----                     |          |                |           |              |       |      |
| 50 2,4-Dinitrotoluene     |          | CAS#: 121-14-2 |           |              |       |      |
| 165                       | 77454    | 7.97           | 8.16      | 80-120       | 100   | (T)  |
| 89                        | 1164     | 7.98           | 8.16      | 42-102       | 2     | (QT) |
| 63                        | 1317     | 7.97           | 8.16      | 20- 80       | 2     | (QT) |

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2719.d  
Lab Smp Id: 245114005 Client Smp ID: RE15-10-8441  
Inj Date : 27-JAN-2010 16:44  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |245114005|944874|1|SVMF|1|LANL  
Misc Info : |MSD8270 S|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m  
Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 19  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1324.sub  
Target Version: 3.50  
Processing Host: hpc1p1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.12000  | weight of sample          |
| M    | 9.58090   | % moisture                |

Cpnd Variable

Local Compound Variable

| ISTD                        | RT     | AREA    | AMOUNT |
|-----------------------------|--------|---------|--------|
| =====                       | =====  | =====   | =====  |
| * 10 1,4-Dichlorobenzene-d4 | 4.818  | 1662673 | 40.000 |
| * 29 Naphthalene-d8         | 6.101  | 2348615 | 40.000 |
| * 98 Perylene-d12           | 14.961 | 994010  | 40.000 |

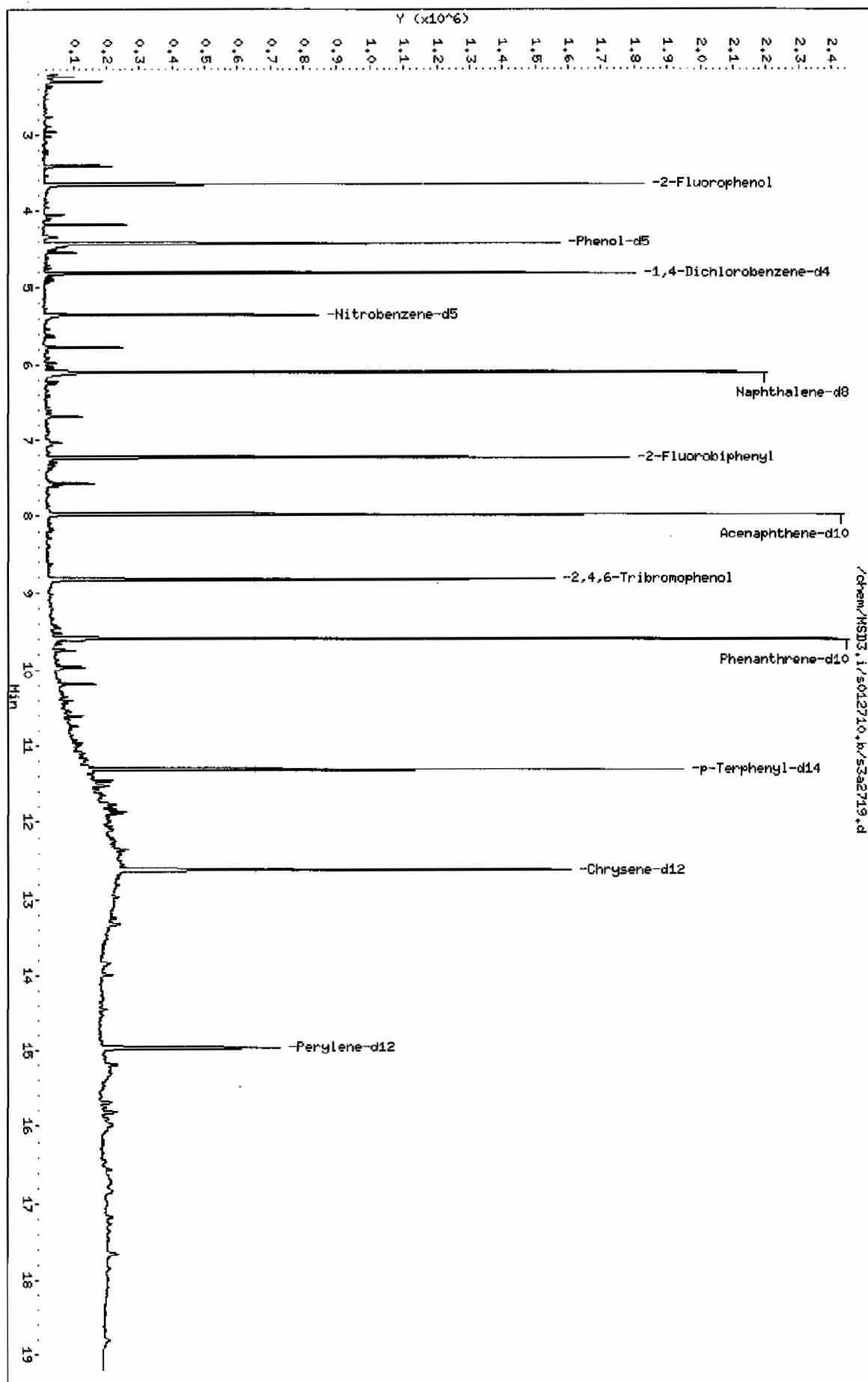
| CONCENTRATIONS |       |               |              | QUANT |         |           |        |
|----------------|-------|---------------|--------------|-------|---------|-----------|--------|
| RT             | AREA  | ON-COL(ng/ul) | FINAL(ug/Kg) | QUAL  | LIBRARY | LIB ENTRY | CPND # |
| =====          | ===== | =====         | =====        | ===== | =====   | =====     | =====  |

| RT                       | CONCENTRATIONS |               |              | QUAL             | QUANT    |           | CPND # |
|--------------------------|----------------|---------------|--------------|------------------|----------|-----------|--------|
|                          | AREA           | ON-COL(ng/ul) | FINAL(ug/Kg) |                  | LIBRARY  | LIB ENTRY |        |
| =====                    | =====          | =====         | =====        | =====            | =====    | =====     | =====  |
| Unknown                  |                |               |              | CAS #:           |          |           |        |
| 2.120                    | 1744872        | 41.9774979    | 1540         | 0                |          | 0         | 10     |
| Unknown                  |                |               |              | CAS #:           |          |           |        |
| 2.299                    | 169490         | 4.07753971    | 150          | 0                |          | 0         | 10     |
| Unknown Aldol Condensate |                |               |              | CAS #:           |          |           |        |
| 3.408                    | 203559         | 4.89715117    | 180          | 0                |          | 0         | 10     |
| 1R-.alpha.-Pinene        |                |               |              | CAS #: 7785-70-8 |          |           |        |
| 4.185                    | 226802         | 5.45631260    | 200          | 98               | NIST05.L | 15188     | 10     |
| Unknown                  |                |               |              | CAS #:           |          |           |        |
| 5.775                    | 293848         | 5.00461456    | 184          | 0                |          | 0         | 29     |
| Unknown                  |                |               |              | CAS #:           |          |           |        |
| 15.810                   | 112383         | 4.52239577    | 166          | 0                |          | 0         | 98     |
| Unknown                  |                |               |              | CAS #:           |          |           |        |
| 15.988                   | 172378         | 6.93667977    | 255          | 0                |          | 0         | 98     |



Data File: /chem/HSD3.1/5012710.b/s3a2719.d  
Date: 27-JUN-2010 16:44  
Client ID: RE15-10-8441  
Sample Info: 1245114005|94487411|SYNFI11LNL  
Volume Injected (uL): 0.5  
Column Phase: 38M DB-5HS

Instrument: HSD3.1  
Operator: JLD  
Column diameter: 0.20



Date : 27-JAN-2010 16:44

Client ID: RE15-10-8441

Instrument: MSD3.1

Sample Info: 1245114005194497411ISVHF11/LANL

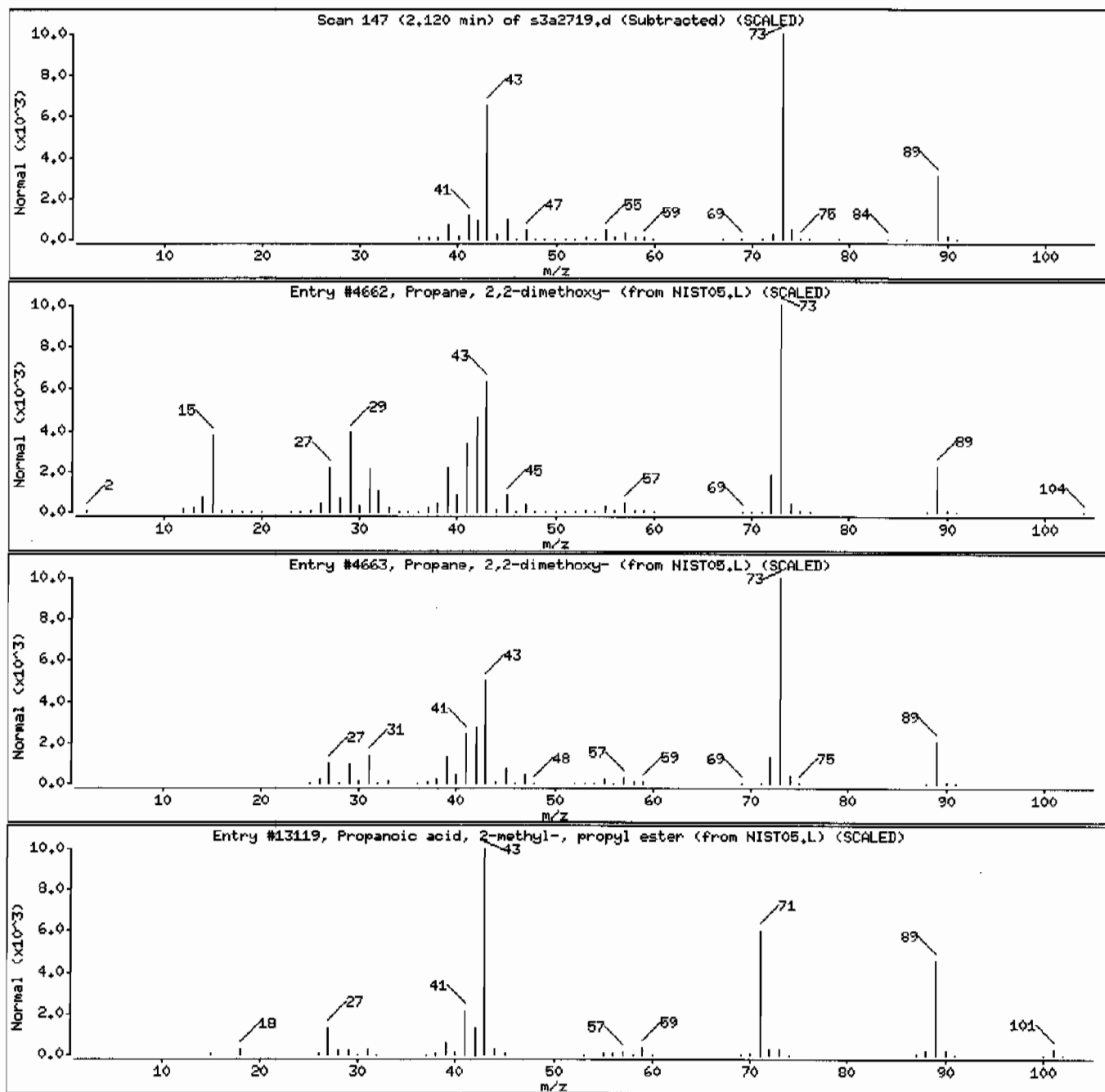
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match           | CAS Number | Library  | Entry | Quality | Formula | Weight |
|---|------------|----------|-------|---------|---------|--------|
| Unknown                                 |            |          |       |         |         |        |
| Propane, 2,2-dimethoxy-                 | 77-76-9    | NIST05.L | 4662  | 56      | C5H12O2 | 104    |
| Propane, 2,2-dimethoxy-                 | 77-76-9    | NIST05.L | 4663  | 43      | C5H12O2 | 104    |
| Propanoic acid, 2-methyl-, propyl ester | 644-49-5   | NIST05.L | 13119 | 17      | C7H14O2 | 130    |



Date : 27-JAN-2010 16:44

Client ID: RE15-10-8441

Instrument: MSD3.i

Sample Info: 1245114005194487411|SVHF11|LANL

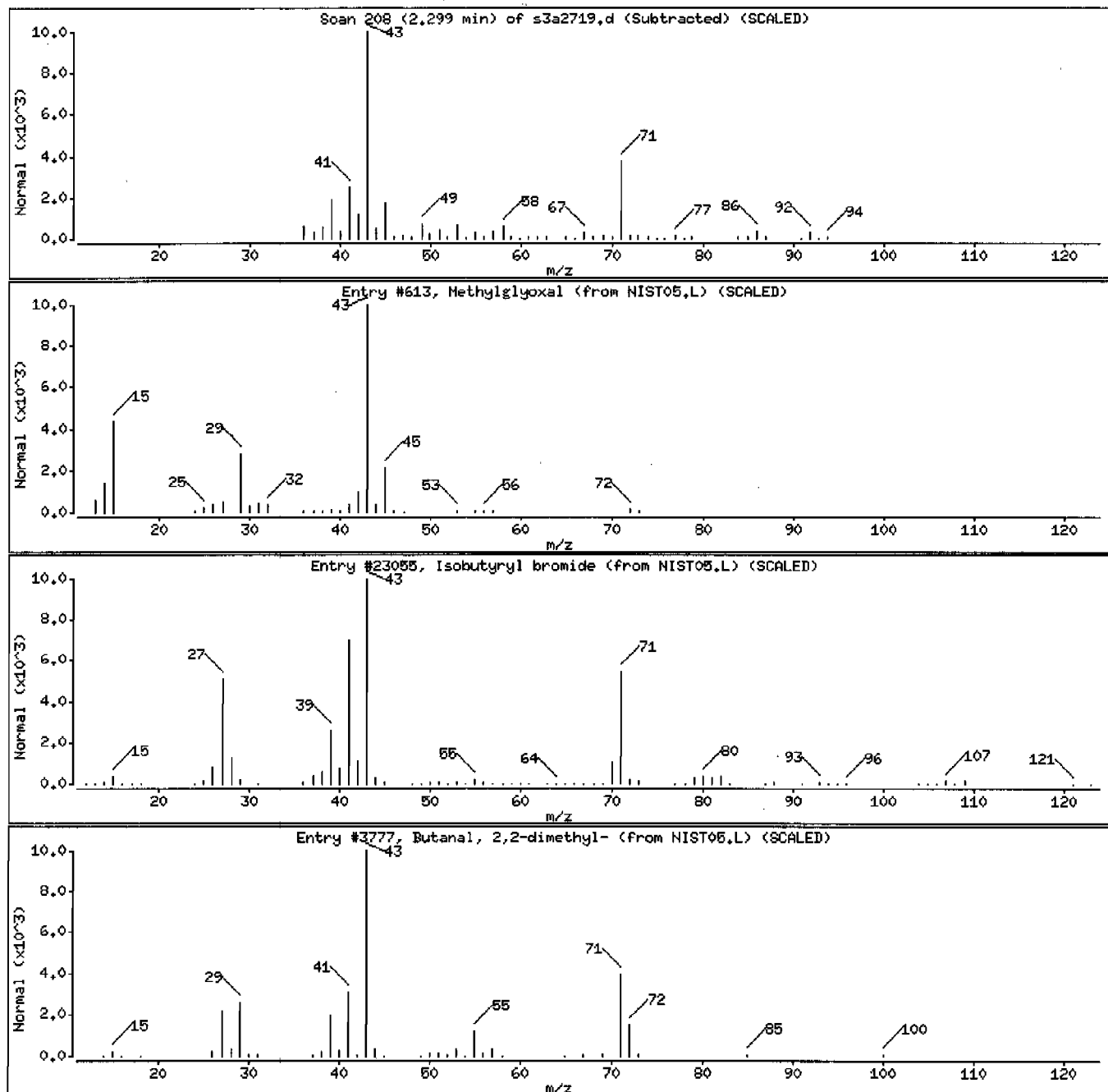
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown                       |            |          |       |         |         |        |
| Methylglyoxal                 | 78-98-8    | NIST05.L | 613   | 43      | C3H4O2  | 72     |
| Isobutyryl bromide            | 2736-37-0  | NIST05.L | 23055 | 40      | C4H7BrO | 150    |
| Butanal, 2,2-dimethyl-        | 2094-75-9  | NIST05.L | 3777  | 38      | C6H12O  | 100    |



Date: 27-JAN-2010 16:44

Client ID: RE15-10-8441

Instrument: MSD3.i

Sample Info: 1245114005194487411SVHF11ILANL

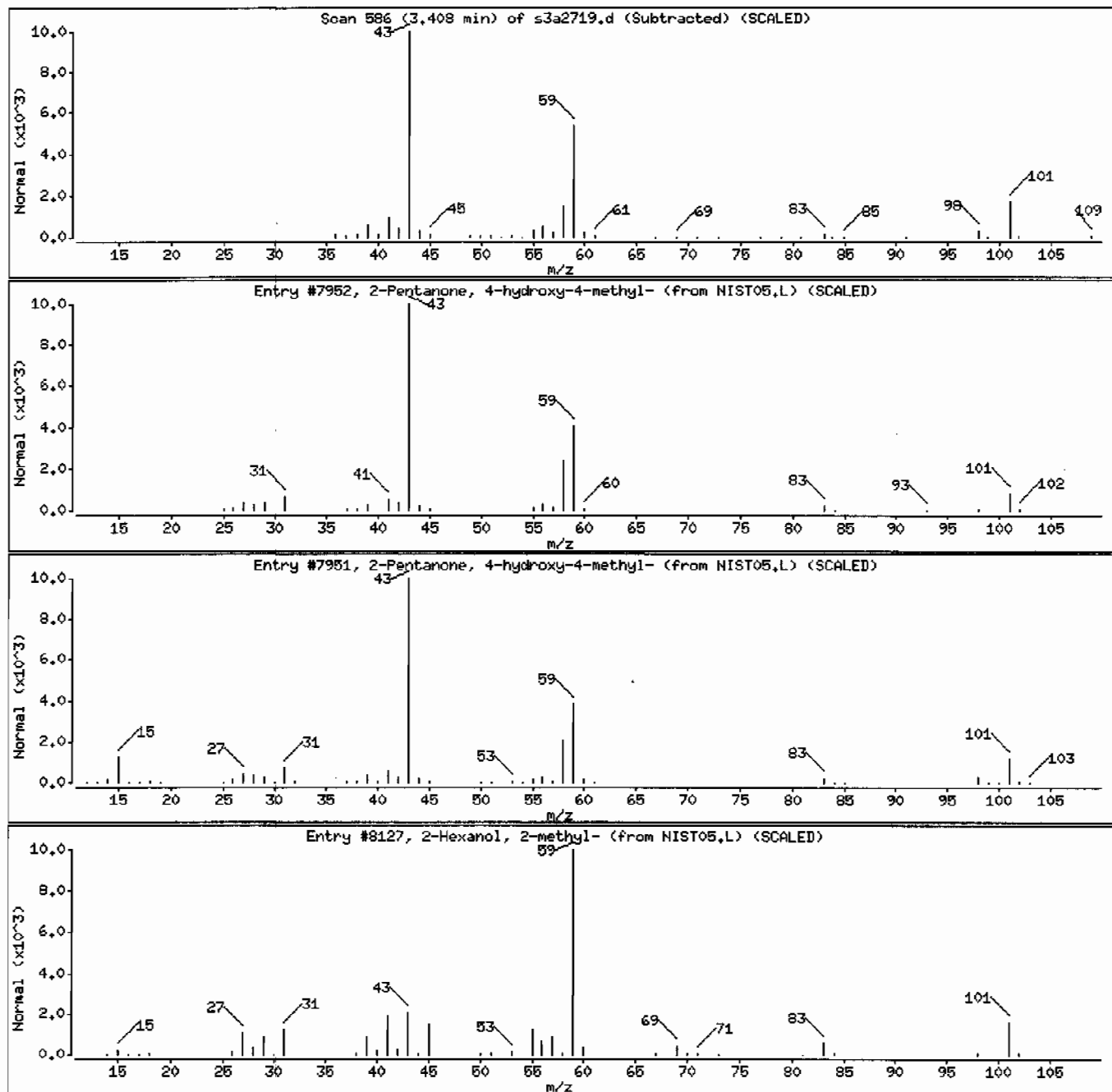
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match    | CAS Number | Library  | Entry | Quality | Formula | Weight |
|----------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown Aldol Condensate         |            |          |       |         |         |        |
| 2-Pentanone, 4-hydroxy-4-methyl- | 123-42-2   | NIST05.L | 7952  | 50      | C6H12O2 | 116    |
| 2-Pentanone, 4-hydroxy-4-methyl- | 123-42-2   | NIST05.L | 7951  | 45      | C6H12O2 | 116    |
| 2-Hexanol, 2-methyl-             | 625-23-0   | NIST05.L | 8127  | 28      | C7H16O  | 116    |



Date : 27-JAN-2010 16:44

Client ID: RE15-10-8441

Instrument: MSD3.i

Sample Info: 1245114005194487411ISVHF111LANL

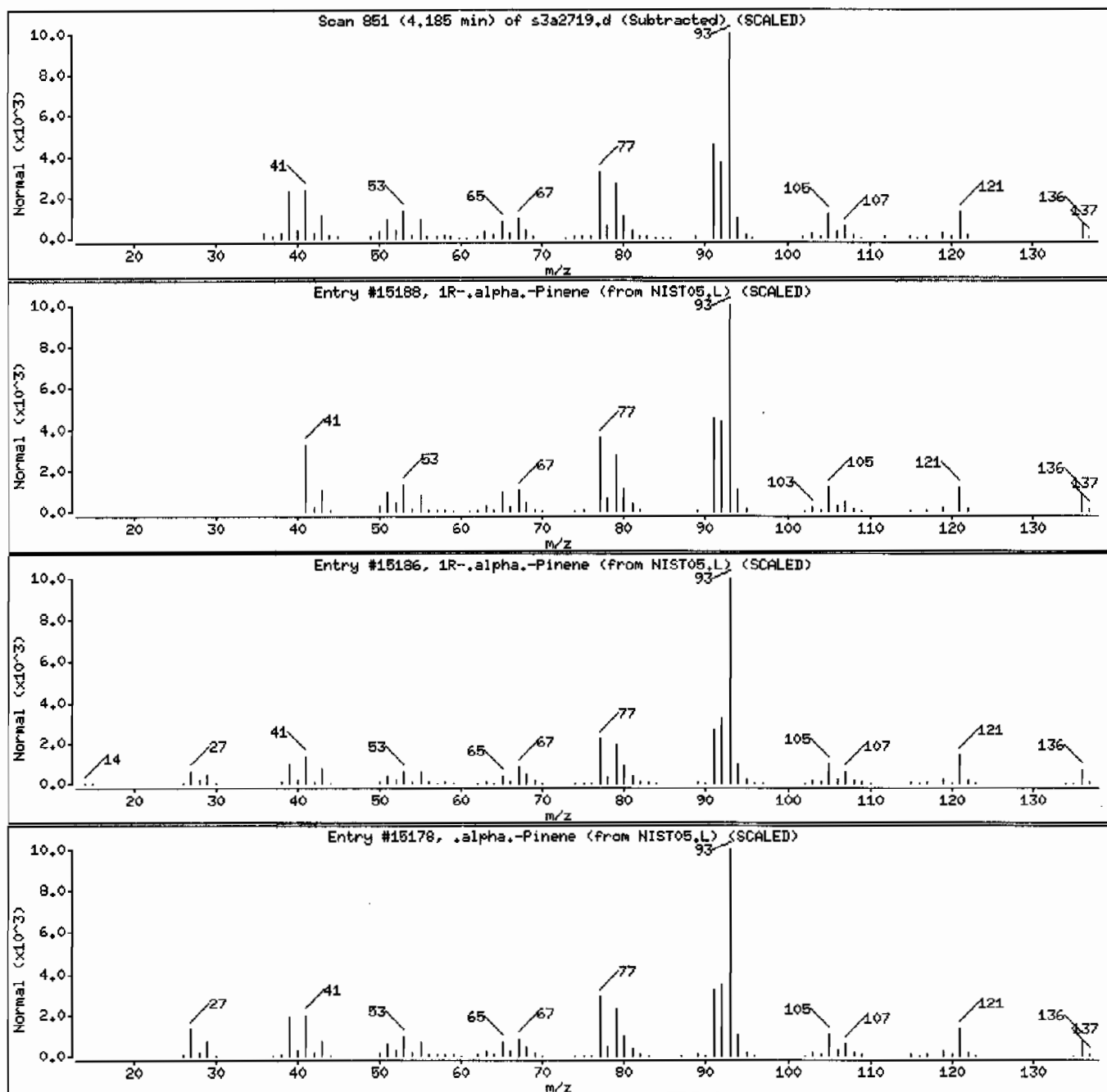
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| 1R-.alpha.-Pinene             | 7785-70-8  | NIST05.L | 15188 | 98      | C10H16  | 136    |
| 1R-.alpha.-Pinene             | 7785-70-8  | NIST05.L | 15186 | 96      | C10H16  | 136    |
| .alpha.-Pinene                | 80-56-8    | NIST05.L | 15178 | 96      | C10H16  | 136    |



Date: 27-JAN-2010 16:44

Client ID: RE15-10-8441

Instrument: MSD3.1

Sample Info: 1245114005194487411|SVMF11|LANL

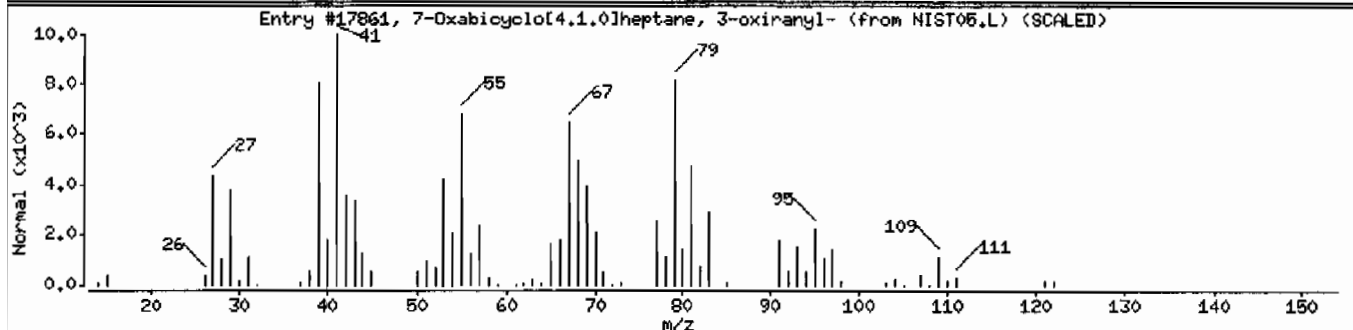
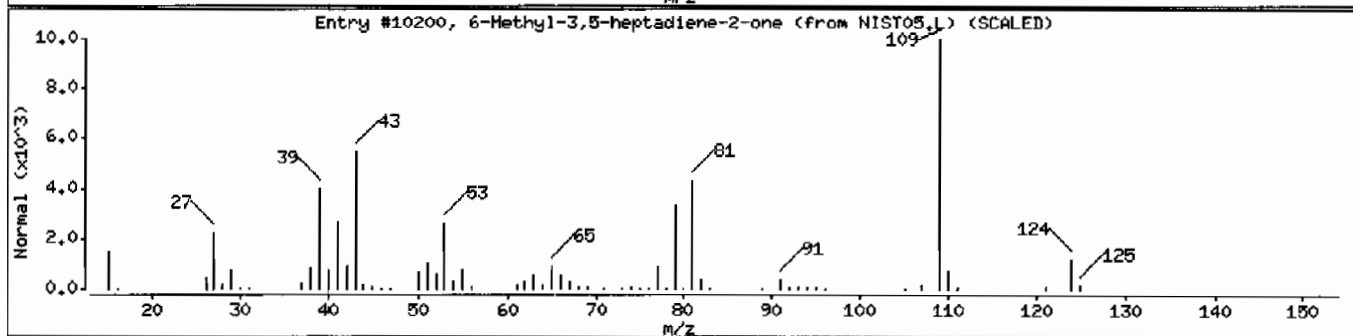
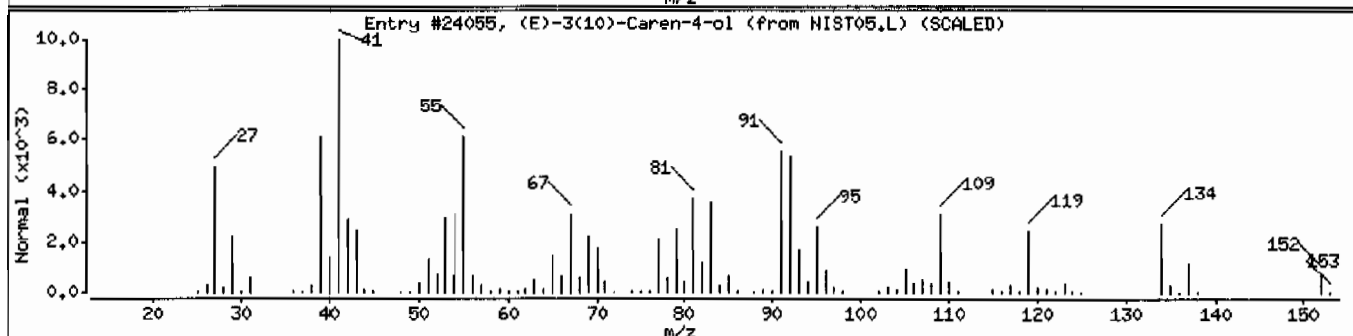
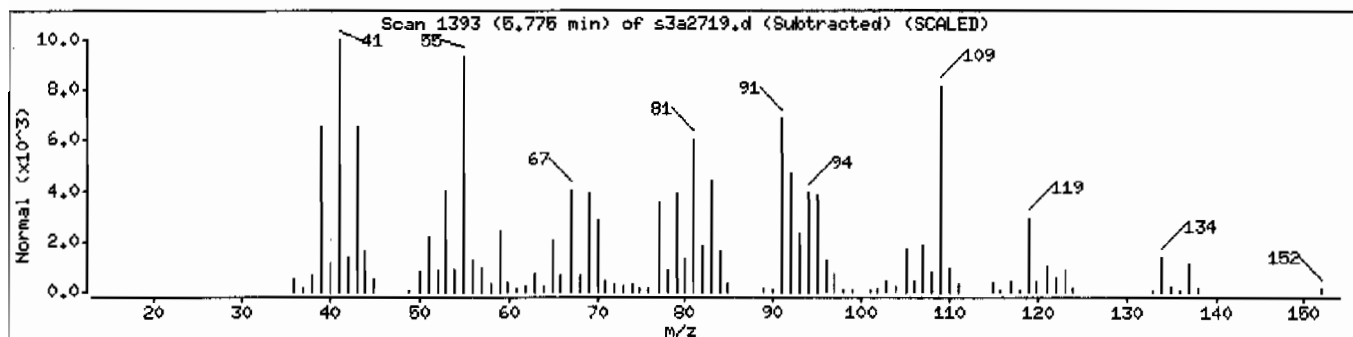
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match           | CAS Number | Library  | Entry | Quality | Formula | Weight |
|---|------------|----------|-------|---------|---------|--------|
| Unknown                                 |            |          |       |         |         |        |
| (E)-3(10)-Caren-4-ol                    | 1753-35-1  | NIST05.L | 24055 | 50      | C10H16O | 152    |
| 6-Methyl-3,5-heptadiene-2-one           | 1604-28-0  | NIST05.L | 10200 | 43      | C8H12O  | 124    |
| 7-Oxabicyclo[4.1.0]heptane, 3-oxiranyl- | 106-87-6   | NIST05.L | 17861 | 38      | C8H12O2 | 140    |



Date: 27-JAN-2010 16:44

Client ID: RE15-10-8441

Instrument: MSD3.1

Sample Info: 12451140051944874111SVMF111LANL

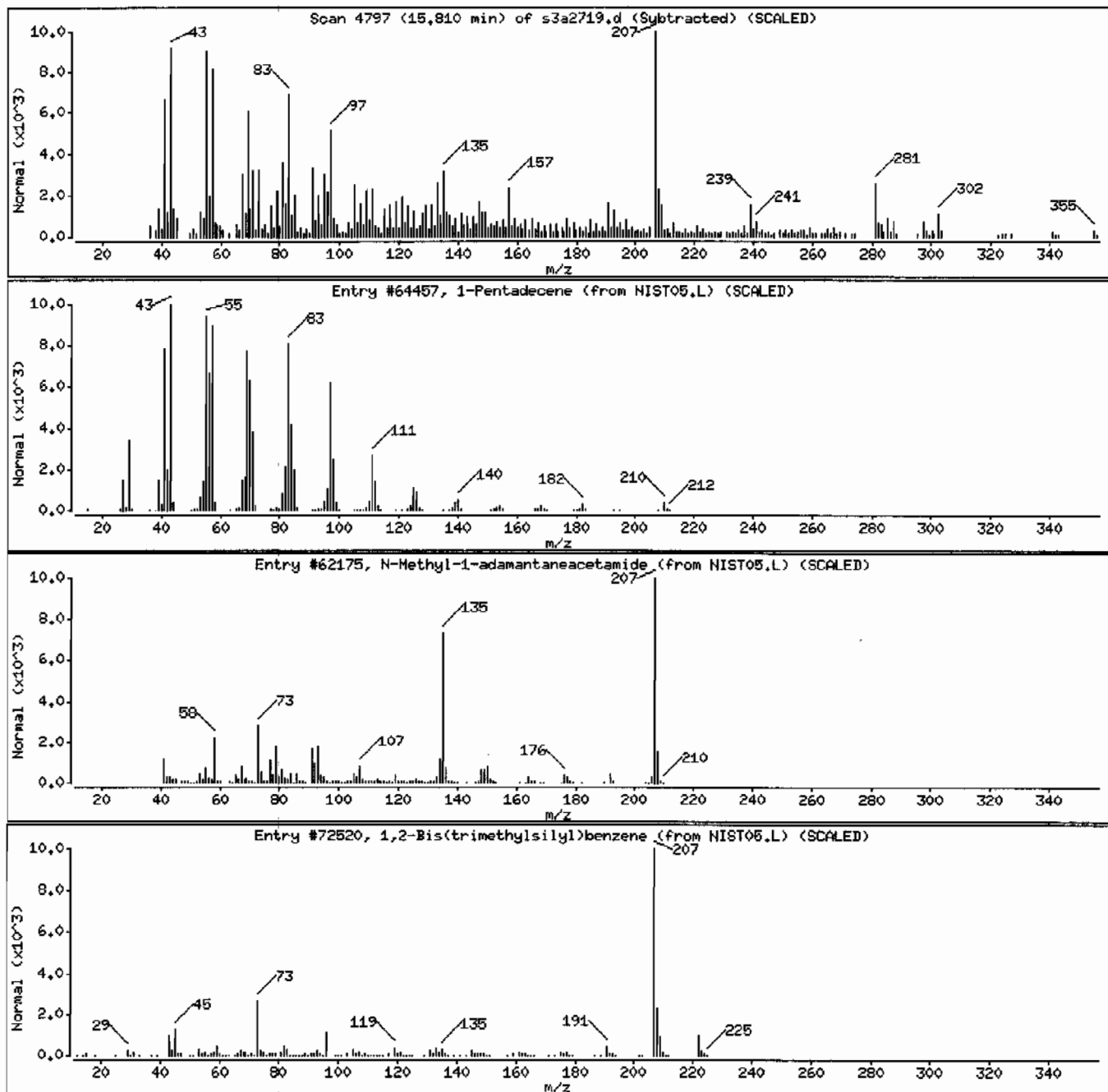
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match  | CAS Number | Library  | Entry | Quality | Formula   | Weight |
|--------------------------------|------------|----------|-------|---------|-----------|--------|
| Unknown                        |            |          |       |         |           |        |
| 1-Pentadecene                  | 13360-61-7 | NIST05.L | 64457 | 43      | C15H30    | 210    |
| N-Methyl-1-adamantaneacetamide | 31897-93-5 | NIST05.L | 62175 | 35      | C13H21NO  | 207    |
| 1,2-Bis(trimethylsilyl)benzene | 17151-09-6 | NIST05.L | 72520 | 30      | C12H22Si2 | 222    |



Date : 27-JAN-2010 16:44

Client ID: RE15-10-8441

Instrument: MSD3.i

Sample Info: 1245114005194487411SVHFI11LANL

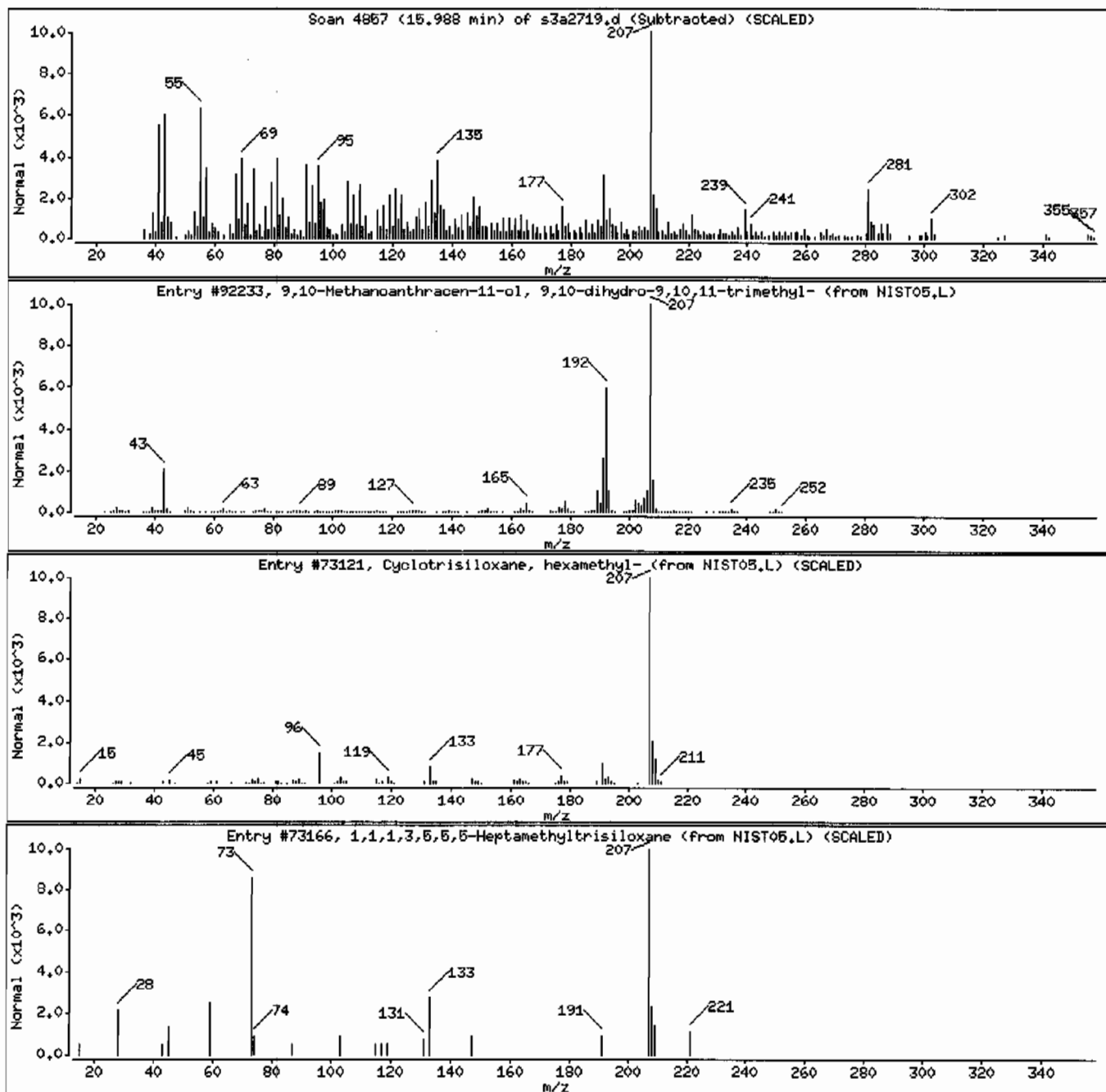
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number  | Library  | Entry | Quality | Formula    | Weight |
|--|-------------|----------|-------|---------|------------|--------|
| Unknown                                  |             |          |       |         |            |        |
| 9,10-Methanoanthracen-11-ol, 9,10-dihydr | 126615-74-5 | NIST05.L | 92233 | 46      | C18H18O    | 250    |
| Cyclotrisiloxane, hexamethyl-            | 541-05-9    | NIST05.L | 73121 | 46      | C6H18O3Si3 | 222    |
| 1,1,1,3,5,5-Heptamethyltrisiloxane       | 1873-88-7   | NIST05.L | 73166 | 38      | C7H22O2Si3 | 222    |





# Standard Data

| SW846 8270/EPA 625                            |         |         |         |          |         |         |         |         |
|---|---------|---------|---------|----------|---------|---------|---------|---------|
| Calibration Standard Concentration Levels*    |         |         |         |          |         |         |         |         |
| MEGA MIX                                      | Level 1 | Level 2 | Level 3 | Level 4# | Level 5 | Level 6 | Level 7 | Level 8 |
| 1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)    |         |         |         |          |         |         |         |         |
| Naphthalene-d8 (INTERNAL STANDARD)            |         |         |         |          |         |         |         |         |
| Acenaphthene-d10 (INTERNAL STANDARD)          |         |         |         |          |         |         |         |         |
| Phenanthrene-d10 (INTERNAL STANDARD)          |         |         |         |          |         |         |         |         |
| Chrysene-d12 (INTERNAL STANDARD)              |         |         |         |          |         |         |         |         |
| Perylene-d12 (INTERNAL STANDARD)              |         |         |         |          |         |         |         |         |
| 2-Fluorophenol (SURROGATE)                    |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Phenol-d5 (SURROGATE)                         |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 2-Chlorophenol-d4 (CLP SURROGATE)             |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 1,2-Dichlorobenzene-d4 (CLP SURROGATE)        |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Nitrobenzene-d5 (SURROGATE)                   |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 2-Fluorobiphenyl (SURROGATE)                  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 2,4,6-Tribromophenol (SURROGATE)              |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| p-Terphenyl-d14 (SURROGATE)                   |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| N-Nitrosodimethylamine                        | 1**     | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Pyridine                                      |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Aniline                                       |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Phenol  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| bis(2-Chloroethyl)ether                       |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 2-Chlorophenol                                |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| n-Decane                                      |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 1,3-Dichlorobenzene                           |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 1,4-Dichlorobenzene                           |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Benzyl Alcohol                                |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 1,2-Dichlorobenzene                           |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| bis(2-Chloroisopropyl)ether                   |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| o-Cresol (2-Methylphenol)                     |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| N-Nitrosodipropylamine                        | 1**     | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| m,p-Cresols (3-Methylphenol & 4-Methylphenol) |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Hexachloroethane                              |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Nitrobenzene                                  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Isophorone                                    |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 2-Nitrophenol                                 |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 2,4-Dimethylphenol                            |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| bis(2-Chloroethoxy)methane                    |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 2,4-Dichlorophenol                            |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Benzoic Acid                                  |         |         | 20      | 40       | 50      | 80      | 100     | 120     |
| 1,2,4-Trichlorobenzene                        |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Naphthalene                                   | 1       | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| alpha-Terpineol                               |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 4-Chloroaniline                               |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |

| SW846 8270/EPA 625                         |         |         |         |          |         |         |         |         |
|--|---------|---------|---------|----------|---------|---------|---------|---------|
| Calibration Standard Concentration Levels* |         |         |         |          |         |         |         |         |
| MEGA MIX                                   | Level 1 | Level 2 | Level 3 | Level 4# | Level 5 | Level 6 | Level 7 | Level 8 |
| Hexachlorobutadiene                        |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 4-Chloro-3-methylphenol                    |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 2-Methylnaphthalene                        | 1       | 10      | 20      | 40       | 50      | 80      | 100     | 120     |

|                              |     |    |    |    |    |    |     |     |
|------------------------------|-----|----|----|----|----|----|-----|-----|
| 1-Methylnaphthalene          | 1   | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Hexachlorocyclopentadiene    |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| 2,3-Dichloroaniline          |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| 2,4,6-Trichlorophenol        |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| 2,4,5-Trichlorophenol        |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| 2-Chloronaphthalene          | 1   | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| o-Nitroaniline               |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| m-Nitroaniline               |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Dimethylphthalate            | 1** | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| 2,6-Dinitrotoluene           |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Acenaphthylene               | 1   | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Acenaphthene                 | 1   | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| 2,4-Dinitrophenol            |     |    | 20 | 40 | 50 | 80 | 100 | 120 |
| Dibenzofuran                 |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| 2,4-Dinitrotoluene           |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Diethylphthalate             | 1** | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| 4-Nitrophenol                |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Fluorene                     | 1   | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| 4-Chlorophenyl phenyl ether  |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| 2-Methyl-4,6-dinitrophenol   |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| p-Nitroaniline               |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Diphenylamine                |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| 1,2-Diphenylhydrazine        |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| 4-Bromophenyl phenylether    |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Hexachlorobenzene            |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Pentachlorophenol            |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| n-Octadecane                 |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Phenanthrene                 | 1   | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Anthracene                   | 1   | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Di-n-butylphthalate          | 1** | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Fluoranthene                 | 1   | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Pyrene                       | 1   | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Butylbenzylphthalate         | 1** | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Benzo(a)anthracene           | 1   | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Chrysene                     | 1   | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| bis (2-Ethylhexyl) phthalate | 1   | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Di-n-octylphthalate          | 1** | 10 | 20 | 40 | 50 | 80 | 100 | 120 |

| SW846 8270/EPA 625                         |         |         |         |          |         |         |         |         |
|--|---------|---------|---------|----------|---------|---------|---------|---------|
| Calibration Standard Concentration Levels* |         |         |         |          |         |         |         |         |
| MEGA MIX                                   | Level 1 | Level 2 | Level 3 | Level 4# | Level 5 | Level 6 | Level 7 | Level 8 |
| Benzo(b)fluoranthene                       | 1       | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Benzo(k)fluoranthene                       | 1       | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Benzo(a)pyrene                             | 1       | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Indeno-(1,2,3-cd)pyrene                    | 1       | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Dibenzo(a,h)anthracene                     | 1       | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Benzo(ghi)perylene                         | 1       | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| m-Dinitrobenzene                           |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 2,3,4,6-Tetrachlorophenol                  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Dinoseb                                    |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Carbazole                                  | 1       | 10      | 20      | 40       | 50      | 80      | 100     | 120     |

|                               |     |    |    |    |    |    |     |     |
|-------------------------------|-----|----|----|----|----|----|-----|-----|
| p-Benzoquinone                |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Methoxychlor                  | 1** | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| p-Toluidine                   |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| m-Toluidine                   |     | 10 | 20 | 40 | 50 | 80 | 10  | 120 |
| 1,4-Dinitrobenzene            |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| 2-Ethoxyethanol               |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Phthalic anhydride            |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Methylenebis(2-chloroaniline) |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Dibenzo(a,e)pyrene            |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |

| SW846 8270/EPA 625                         |  |         |         |         |          |         |         |         |         |
|--|--|---------|---------|---------|----------|---------|---------|---------|---------|
| Calibration Standard Concentration Levels* |  |         |         |         |          |         |         |         |         |
| AP MIX                                     |  | Level 1 | Level 2 | Level 3 | Level 4# | Level 5 | Level 6 | Level 7 | Level 8 |
| Benzaldehyde                               |  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Acetophenone                               |  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Caprolactam                                |  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 1,1'-Biphenyl                              |  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Atrazine                                   |  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Benzidine                                  |  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 3,3'-Dichlorobenzidine                     |  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 1,4-Dioxane                                |  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Methyl methacrylate                        |  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Ethyl methacrylate                         |  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 2-Picoline                                 |  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| N-Nitrosomethylethylamine                  |  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Methyl methanesulfonate                    |  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| N-Nitrosodiethylamine                      |  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Ethyl methanesulfonate                     |  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Pentachloroethane                          |  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| N-Nitrosopyrrolidine                       |  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| N-Nitrosomorpholine                        |  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| o-Toluidine                                |  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| N-Nitrosopiperidine                        |  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| a,a-Dimethylphenethylamine                 |  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 2,6-Dichlorophenol                         |  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |

| SW846 8270/EPA 625                         |         |         |         |          |         |         |         |         |  |
|--|---------|---------|---------|----------|---------|---------|---------|---------|--|
| Calibration Standard Concentration Levels* |         |         |         |          |         |         |         |         |  |
| AP MIX                                     | Level 1 | Level 2 | Level 3 | Level 4# | Level 5 | Level 6 | Level 7 | Level 8 |  |
| Hexachloropropene                          | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |  |
| p-Phenylenediamine                         | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |  |
| N-Nitrosodi-n-butylamine                   | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |  |
| Safrole                                    | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |  |
| 1,2,4,5-Tetrachlorobenzene                 | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |  |
| Isosafrole                                 | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |  |
| 1,4-Naphthoquinone                         | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |  |
| Pentachlorobenzene                         | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |  |
| 1-Naphthylamine                            | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |  |
| 2-Naphthylamine                            | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |  |
| 5-Nitro-o-toluidine                        | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |  |
| 1,3,5-Trinitrobenzene                      | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |  |
| Phenacetin                                 | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |  |
| Diallate                                   | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |  |
| cis-Diallate                               | 1.5     | 3       | 6       | 7.5      | 12      | 15      | 18      |         |  |
| trans-Diallate                             | 8.5     | 17      | 34      | 42       | 68      | 85      | 102     |         |  |
| 4-Aminobiphenyl                            | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |  |

|                                |     |    |    |    |    |    |     |     |
|--------------------------------|-----|----|----|----|----|----|-----|-----|
| Pentachloronitrobenzene        |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Pronamide                      |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| 4-Nitroquinoline oxide         |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Methapyrilene                  | 1** | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Isodrin                        | 1** | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Aramite                        |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Kepone                         | 1** | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| p-(Dimethylamino)azobenzene    |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| Chlorobenzilate                |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| 3,3'-Dimethylbenzidine         |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| 2-Acetylaminofluorene          |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| 7,12-Dimethylbenz(a)anthracene |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
| 3-Methylcholanthrene           |     | 10 | 20 | 40 | 50 | 80 | 100 | 120 |

|  |         |         |         |          |         |         |         |         |
|--|---------|---------|---------|----------|---------|---------|---------|---------|
| SW846 8270/EPA 625                         |         |         |         |          |         |         |         |         |
| Calibration Standard Concentration Levels* |         |         |         |          |         |         |         |         |
|  | Level 1 | Level 2 | Level 3 | Level 4# | Level 5 | Level 6 | Level 7 | Level 8 |
| Hexachlorophene                            |         | 500     | 1000    | 1250     | 1500    | 1750    | 2000    |         |

|  |         |         |         |          |         |         |         |         |
|--|---------|---------|---------|----------|---------|---------|---------|---------|
| SW846 8270/EPA 625                         |         |         |         |          |         |         |         |         |
| Calibration Standard Concentration Levels* |         |         |         |          |         |         |         |         |
| PEST MIX                                   | Level 1 | Level 2 | Level 3 | Level 4# | Level 5 | Level 6 | Level 7 | Level 8 |
| Tributylphosphate                          |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Triethylphosphorothioate                   |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Thionazin                                  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Sulfotepp                                  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Phorate                                    |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Dimethoate                                 |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Disulfoton                                 |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Methyl parathion                           |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Famphur                                    |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Parathion                                  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |

|  |         |         |         |          |         |         |         |         |
|--|---------|---------|---------|----------|---------|---------|---------|---------|
| SW846 8270/EPA 625                         |         |         |         |          |         |         |         |         |
| Calibration Standard Concentration Levels* |         |         |         |          |         |         |         |         |
| NEVADA MIX                                 | Level 1 | Level 2 | Level 3 | Level 4# | Level 5 | Level 6 | Level 7 | Level 8 |
| bis(Chloromethyl)ether                     |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 4-Chlorothiophenol                         |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 4-Chlorothioanisole                        |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Phthalic acid                              |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Hydroxymethyl phthalimide                  |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Diphenyl sulfide                           |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Diphenyl disulfide                         |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Phenyl sulfone                             |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Octachlorostyrene                          |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| Thiophenol                                 |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| 2,2'-Dichlorobenzil                        |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |
| bis(p-Chlorophenyl)disulfide               |         | 10      | 20      | 40       | 50      | 80      | 100     | 120     |

|                            |  |    |    |    |    |    |     |     |
|----------------------------|--|----|----|----|----|----|-----|-----|
| bis(p-Chlorophenyl)sulfone |  | 10 | 20 | 40 | 50 | 80 | 100 | 120 |
|----------------------------|--|----|----|----|----|----|-----|-----|

| SW846 8270C/8270D/EPA 625                  |         |         |         |          |         |         |         |         |
|--|---------|---------|---------|----------|---------|---------|---------|---------|
| Calibration Standard Concentration Levels* |         |         |         |          |         |         |         |         |
| BJCO MIX                                   | Level 1 | Level 2 | Level 3 | Level 4# | Level 5 | Level 6 | Level 7 | Level 8 |
| 1-Hexanol                                  | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |
| Quinoline                                  | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |
| 2,4-Toluene diisocyanate                   | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |
| 1-Nitropyrene                              | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |
| 5-Methylchrysene                           | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |
| Benzo(j)fluoranthene                       | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |
| Dibenzo(a,h)pyrene                         | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |
| Dibenzo(a,h)acridine                       | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |
| Dibenzo(a,i)acridine                       | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |
| Dibenzo(a,i)pyrene                         | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |
| Dibenzo(a,l)pyrene                         | 10      | 20      | 40      | 50       | 80      | 100     | 120     |         |
| 7H-Dibenzo(c,g)carbazole                   | 10      | 20      | 40      | 50       | 80      | 10      | 120     |         |

All values are mg/L without the prep factor.

# Indicates the calibration verification concentration level used

\* Usual calibration levels using SCAN methodology

\*\* This analyte included in this level at special client request.

(0210/Full list)

Report Date: 26-Jan-2010 13:39

### Calibration History

Method : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
Start Cal Date: 20-JAN-2010 17:59  
End Cal Date : 21-JAN-2010 23:34

#### Initial Calibration

| Injection Date                      | Sublist | Calibration File                  |
|-------------------------------------|---------|-----------------------------------|
| Cal Level: 1 , Cal Amount: 1.00000  |         |                                   |
| 20-JAN-2010 17:59                   | MEGAI   | /chem/MSD3.i/s012010a.b/s3a2015.d |
| Cal Level: 2 , Cal Amount: 10.00000 |         |                                   |
| 21-JAN-2010 20:38                   | BJCO    | /chem/MSD3.i/s012110.b/s3a2128.d  |
| 21-JAN-2010 16:14                   | NEV     | /chem/MSD3.i/s012110.b/s3a2118.d  |
| 21-JAN-2010 12:44                   | HEX     | /chem/MSD3.i/s012110.b/s3a2110.d  |
| 21-JAN-2010 09:39                   | PEST    | /chem/MSD3.i/s012110.b/s3a2103.d  |
| 20-JAN-2010 21:56                   | AP12    | /chem/MSD3.i/s012010a.b/s3a2023.d |
| 20-JAN-2010 18:29                   | MEGAI   | /chem/MSD3.i/s012010a.b/s3a2016.d |
| Cal Level: 3 , Cal Amount: 20.00000 |         |                                   |
| 21-JAN-2010 21:07                   | BJCO    | /chem/MSD3.i/s012110.b/s3a2129.d  |
| 21-JAN-2010 16:41                   | NEV     | /chem/MSD3.i/s012110.b/s3a2119.d  |
| 21-JAN-2010 13:10                   | HEX     | /chem/MSD3.i/s012110.b/s3a2111.d  |
| 21-JAN-2010 10:05                   | PEST    | /chem/MSD3.i/s012110.b/s3a2104.d  |
| 20-JAN-2010 22:22                   | AP12    | /chem/MSD3.i/s012010a.b/s3a2024.d |
| 20-JAN-2010 18:58                   | MEGAI   | /chem/MSD3.i/s012010a.b/s3a2017.d |
| Cal Level: 4 , Cal Amount: 40.00000 |         |                                   |
| 21-JAN-2010 21:36                   | BJCO    | /chem/MSD3.i/s012110.b/s3a2130.d  |
| 21-JAN-2010 17:07                   | NEV     | /chem/MSD3.i/s012110.b/s3a2120.d  |
| 21-JAN-2010 13:36                   | HEX     | /chem/MSD3.i/s012110.b/s3a2112.d  |
| 21-JAN-2010 10:31                   | PEST    | /chem/MSD3.i/s012110.b/s3a2105.d  |
| 20-JAN-2010 22:48                   | AP12    | /chem/MSD3.i/s012010a.b/s3a2025.d |
| 20-JAN-2010 19:28                   | MEGAI   | /chem/MSD3.i/s012010a.b/s3a2018.d |
| Cal Level: 5 , Cal Amount: 50.00000 |         |                                   |
| 21-JAN-2010 22:06                   | BJCO    | /chem/MSD3.i/s012110.b/s3a2131.d  |
| 21-JAN-2010 17:33                   | NEV     | /chem/MSD3.i/s012110.b/s3a2121.d  |
| 21-JAN-2010 14:03                   | HEX     | /chem/MSD3.i/s012110.b/s3a2113.d  |
| 21-JAN-2010 10:58                   | PEST    | /chem/MSD3.i/s012110.b/s3a2106.d  |
| 20-JAN-2010 23:15                   | AP12    | /chem/MSD3.i/s012010a.b/s3a2026.d |
| 20-JAN-2010 19:58                   | MEGAI   | /chem/MSD3.i/s012010a.b/s3a2019.d |
| Cal Level: 6 , Cal Amount: 80.00000 |         |                                   |
| 21-JAN-2010 22:35                   | BJCO    | /chem/MSD3.i/s012110.b/s3a2132.d  |
| 21-JAN-2010 17:59                   | NEV     | /chem/MSD3.i/s012110.b/s3a2122.d  |
| 21-JAN-2010 14:29                   | HEX     | /chem/MSD3.i/s012110.b/s3a2114.d  |
| 21-JAN-2010 11:24                   | PEST    | /chem/MSD3.i/s012110.b/s3a2107.d  |
| 20-JAN-2010 23:41                   | AP12    | /chem/MSD3.i/s012010a.b/s3a2027.d |
| 20-JAN-2010 20:27                   | MEGAI   | /chem/MSD3.i/s012010a.b/s3a2020.d |

| Cal Level: 7 , Cal Amount: 100.00000 |       |       |                                   |
|--------------------------------------|-------|-------|-----------------------------------|
| 21-JAN-2010                          | 23:05 | BJCO  | /chem/MSD3.i/s012110.b/s3a2133.d  |
| 21-JAN-2010                          | 18:26 | NEV   | /chem/MSD3.i/s012110.b/s3a2123.d  |
| 21-JAN-2010                          | 14:55 | HEX   | /chem/MSD3.i/s012110.b/s3a2115.d  |
| 21-JAN-2010                          | 11:51 | PEST  | /chem/MSD3.i/s012110.b/s3a2108.d  |
| 21-JAN-2010                          | 00:07 | AP12  | /chem/MSD3.i/s012010a.b/s3a2028.d |
| 20-JAN-2010                          | 20:57 | MEGAI | /chem/MSD3.i/s012010a.b/s3a2021.d |

| Cal Level: 8 , Cal Amount: 120.00000 |       |       |                                   |
|--------------------------------------|-------|-------|-----------------------------------|
| 21-JAN-2010                          | 23:34 | BJCO  | /chem/MSD3.i/s012110.b/s3a2134.d  |
| 21-JAN-2010                          | 18:52 | NEV   | /chem/MSD3.i/s012110.b/s3a2124.d  |
| 21-JAN-2010                          | 12:17 | PEST  | /chem/MSD3.i/s012110.b/s3a2109.d  |
| 21-JAN-2010                          | 00:33 | AP12  | /chem/MSD3.i/s012010a.b/s3a2029.d |
| 20-JAN-2010                          | 21:26 | MEGAI | /chem/MSD3.i/s012010a.b/s3a2022.d |



## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
 End Cal Date : 21-JAN-2010 23:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Cal Date : 26-Jan-2010 13:28 jen00986

## Calibration File Names:

Level 1: /chem/MSD3.i/s012010a.b/s3a2015.d  
 Level 2: /chem/MSD3.i/s012110.b/s3a2128.d  
 Level 3: /chem/MSD3.i/s012110.b/s3a2129.d  
 Level 4: /chem/MSD3.i/s012110.b/s3a2130.d  
 Level 5: /chem/MSD3.i/s012110.b/s3a2131.d  
 Level 6: /chem/MSD3.i/s012110.b/s3a2132.d  
 Level 7: /chem/MSD3.i/s012110.b/s3a2133.d  
 Level 8: /chem/MSD3.i/s012110.b/s3a2134.d

| Compound                         | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | Curve | b | Coefficients<br>ml | m2 | %RSD<br>or R <sup>2</sup> |
|----------------------------------|---------|---------|---------|---------|---------|---------|-------|---|--------------------|----|---------------------------|
| 1 N-Methyl-N-nitrosomethylamine: | ++++    | 0.74577 | 0.76146 | 0.72551 | 0.69783 | 0.73979 | AVRG  |   | 0.72841            |    | 3.01664                   |
|                                  | 0.71804 | 0.71044 |         |         |         |         |       |   |                    |    |                           |
| 2 Pyridine                       | ++++    | 0.79588 | 0.83002 | 0.81037 | 0.79171 | 0.84563 | AVRG  |   |                    |    |                           |
|                                  | 0.81224 | 0.81235 |         |         |         |         |       |   | 0.81403            |    | 2.29912                   |
| 4 Aniline                        | ++++    | 0.60427 | 0.61520 | 0.60118 | 0.58219 | 0.63983 | AVRG  |   |                    |    |                           |
|                                  | 0.61494 | 0.61068 |         |         |         |         |       |   | 0.60975            |    | 2.86056                   |
| 209 Benzaldehyde                 | ++++    | 1.05611 | 1.10141 | 1.06522 | 1.00879 | 0.97526 | AVRG  |   |                    |    |                           |
|                                  | 0.91392 | 0.90096 |         |         |         |         |       |   | 1.00310            |    | 7.67114                   |
| 6 Phenol                         | ++++    | 1.45109 | 1.47647 | 1.39073 | 1.32949 | 1.39749 | AVRG  |   |                    |    |                           |
|                                  | 1.32420 | 1.31412 |         |         |         |         |       |   | 1.38337            |    | 4.63856                   |

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
 End Cal Date : 21-JAN-2010 23:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Cal Date : 26-Jan-2010 13:28 jen00986

| Compound                        | 1<br>Level 1       | 10<br>Level 2      | 20<br>Level 3 | 40<br>Level 4 | 50<br>Level 5 | 80<br>Level 6 | Curve | b       | Coefficients<br>ml | m2 | %RSD<br>or R^2 |
|---------------------------------|--------------------|--------------------|---------------|---------------|---------------|---------------|-------|---------|--------------------|----|----------------|
| 7 bis(2-Chloroethyl) ether      | 1.29780<br>1.01762 | 1.13083<br>1.00099 | 1.13339       | 1.07640       | 1.02407       | 1.07371       | AVRG  | 1.09435 |                    |    | 8.77407        |
| 8 2-Chlorophenol                | ++++<br>0.99834    | 1.11214<br>0.99913 | 1.13276       | 1.05500       | 1.00421       | 1.05178       | AVRG  | 1.05048 |                    |    | 5.22731        |
| 203 n-Decane                    | ++++<br>1.17770    | 2.16402<br>1.12930 | 2.05496       | 1.72403       | 1.58287       | 1.33003       | AVRG  | 1.59470 |                    |    | 25.77078       |
| 9 1,3-Dichlorobenzene           | ++++<br>1.13505    | 1.30193<br>1.14162 | 1.31338       | 1.21877       | 1.16294       | 1.19332       | AVRG  | 1.20957 |                    |    | 6.03757        |
| 11 1,4-Dichlorobenzene          | ++++<br>1.15021    | 1.32370<br>1.15134 | 1.33377       | 1.23734       | 1.17929       | 1.20844       | AVRG  | 1.22630 |                    |    | 6.23668        |
| 12 Benzyl alcohol               | ++++<br>0.72663    | 0.71914<br>0.71449 | 0.75592       | 0.73787       | 0.70446       | 0.75970       | AVRG  | 0.73117 |                    |    | 2.86237        |
| 13 1,2-Dichlorobenzene          | ++++<br>1.08272    | 1.24142<br>1.07421 | 1.24897       | 1.16585       | 1.09982       | 1.13727       | AVRG  | 1.15004 |                    |    | 6.28599        |
| 14 bis(2-Chloroisopropyl) ether | ++++<br>2.27523    | 2.97224<br>2.17682 | 2.93925       | 2.70633       | 2.55941       | 2.50797       | AVRG  | 2.59104 |                    |    | 11.78103       |
| 15 o-Cresol                     | ++++<br>0.86852    | 0.93464<br>0.85370 | 0.94239       | 0.91543       | 0.86771       | 0.91509       | AVRG  | 0.89964 |                    |    | 3.96610        |

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
 End Cal Date : 21-JAN-2010 23:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Cal Date : 26-Jan-2010 13:28 jen00986

| Compound                      | 1<br>Level 1       | 10<br>Level 2      | 20<br>Level 3 | 40<br>Level 4 | 50<br>Level 5 | 80<br>Level 6 | Curve | b | Coefficients<br>m1 | m2 | %RSD<br>or R^2 |
|-------------------------------|--------------------|--------------------|---------------|---------------|---------------|---------------|-------|---|--------------------|----|----------------|
|                               | Level 7            | 120<br>Level 8     |               |               |               |               |       |   |                    |    |                |
| 16 Acetophenone               | ++++<br>1.22284    | 1.38007<br>1.21950 | 1.42805       | 1.39773       | 1.31853       | 1.28837       | AVRG  |   | 1.32216            |    | 6.31545        |
| 17 N-Nitrosodipropylamine     | 0.92182<br>0.87724 | 0.87489<br>0.85115 | 0.91703       | 0.89073       | 0.85524       | 0.92446       | AVRG  |   | 0.88907            |    | 3.30197        |
| 18 m,p-Cresols                | ++++<br>1.15036    | 1.17673<br>1.14193 | 1.22218       | 1.17299       | 1.11972       | 1.20881       | AVRG  |   | 1.17039            |    | 3.11662        |
| 19 Hexachloroethane           | ++++<br>0.50820    | 0.53827<br>0.50664 | 0.55727       | 0.52939       | 0.51037       | 0.53604       | AVRG  |   | 0.52660            |    | 3.61498        |
| 21 Nitrobenzene               | ++++<br>0.27913    | 0.34106<br>0.26801 | 0.34935       | 0.32421       | 0.30872       | 0.30431       | AVRG  |   | 0.31068            |    | 9.71142        |
| 22 Isophorone                 | ++++<br>0.51082    | 0.59931<br>0.47987 | 0.60707       | 0.56759       | 0.54067       | 0.54924       | AVRG  |   | 0.55065            |    | 8.30085        |
| 23 2-Nitrophenol              | ++++<br>0.12796    | 0.18445<br>0.12201 | 0.14902       | 0.14104       | 0.13526       | 0.13811       | AVRG  |   | 0.14255            |    | 14.33925       |
| 24 2,4-Direthylphenol         | ++++<br>0.22363    | 0.27318<br>0.21300 | 0.27704       | 0.25586       | 0.24108       | 0.24128       | AVRG  |   | 0.24644            |    | 9.70792        |
| 25 Bis(2-Chloroethoxy)methane | ++++<br>0.28620    | 0.36537<br>0.27088 | 0.36244       | 0.33070       | 0.31239       | 0.30990       | AVRG  |   | 0.31970            |    | 11.19776       |

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
 End Cal Date : 21-JAN-2010 23:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Cal Date : 26-Jan-2010 13:28 jen00986

| Compound                   | 1<br>Level 1    | 10<br>Level 2      | 20<br>Level 3      | 40<br>Level 4      | 50<br>Level 5      | 80<br>Level 6      | Curve        | b       | Coefficients<br>m1 | m2 | %RSD<br>or R^2 |
|----------------------------|-----------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------|---------|--------------------|----|----------------|
| 26 2,4-Dichlorophenol      | ++++<br>0.19076 | 0.22327<br>0.18158 | 0.23204<br>0.21422 | 0.21422<br>0.20393 | 0.20393<br>0.20591 | 0.20591<br>AVRG    | AVRG         |         | 0.20739            |    | 8.49755        |
| 27 Benzoic acid            | ++++<br>0.19403 | ++++<br>0.18846    | 0.13182<br>0.16272 | 0.16272<br>0.16509 | 0.16509<br>0.19870 | 0.19870<br>AVRG    | AVRG         |         | 0.17347            |    | 14.59461       |
| 28 1,2,4-Trichlorobenzene  | ++++<br>0.20734 | 0.26132<br>0.19936 | 0.26161<br>0.23595 | 0.23595<br>0.22435 | 0.22435<br>0.22238 | 0.22238<br>AVRG    | AVRG         |         | 0.23033            |    | 10.57200       |
| 30 Naphthalene             | 1.02686<br>++++ | 0.86157<br>++++    | 0.85332<br>++++    | 0.75506<br>++++    | 0.70931<br>++++    | ++++               | AVRG         |         | 0.84122            |    | 14.54030       |
| 204 alpha-Terpineol        | ++++<br>0.23859 | 0.31672<br>0.21885 | 0.31918<br>0.29694 | 0.29694<br>0.28376 | 0.28376<br>0.26561 | 0.26561<br>AVRG    | AVRG         |         |                    |    | 13.81104       |
| 31 4-Chloroaniline         | ++++<br>1379044 | 72758<br>++++      | 242968<br>0.08980  | 529597<br>0.09255  | 626017<br>0.08930  | 1163354<br>0.08562 | AVRG<br>LINR | 0.01089 | 0.25718            |    | 0.99290        |
| 189 Caprolactam            | ++++<br>0.08130 | 0.07902<br>0.08273 | 0.08980<br>0.13380 | 0.09255<br>0.12786 | 0.08930<br>0.13013 | 0.08562<br>0.13013 | AVRG         |         | 0.08576            |    | 5.82184        |
| 32 Hexachlorobutadiene     | ++++<br>0.12191 | 0.14410<br>0.11643 | 0.14601<br>0.26138 | 0.13380<br>0.24440 | 0.12786<br>0.23250 | 0.13013<br>0.23425 | AVRG         |         | 0.13446            |    | 8.26801        |
| 33 4-Chloro-3-methylphenol | ++++<br>0.21751 | 0.25053<br>0.20470 | 0.26138<br>0.20470 | 0.24440<br>0.23250 | 0.23250<br>0.23504 | 0.23425<br>0.23504 | AVRG         |         | 0.23504            |    | 8.25058        |

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
 End Cal Date : 21-JAN-2010 23:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Cal Date : 26-Jan-2010 13:28 jen00986

| Compound                     | 1<br>Level 1       | 10<br>Level 2      | 20<br>Level 3 | 40<br>Level 4 | 50<br>Level 5 | 80<br>Level 6 | Curve | b | Coefficients<br>m1 | m2 | SRSD<br>or R^2 |
|------------------------------|--------------------|--------------------|---------------|---------------|---------------|---------------|-------|---|--------------------|----|----------------|
| 34 2-Methylnaphthalene       | 0.63264<br>0.41605 | 0.54425<br>++++    | 0.54385       | 0.48947       | 0.46292       | 0.45129       | AVRG  |   | 0.50578            |    | 14.47183       |
| 35 1-Methylnaphthalene       | 0.62882<br>++++    | 0.53834<br>++++    | 0.53831       | 0.48101       | 0.45128       | 0.44067       | AVRG  |   | 0.51307            |    | 13.71568       |
| 36 Hexachlorocyclopentadiene | ++++<br>0.21973    | 0.22113<br>0.21336 | 0.23923       | 0.23488       | 0.22522       | 0.24003       | AVRG  |   | 0.22766            |    | 4.58941        |
| 208 1,1'-Biphenyl            | ++++<br>1.12738    | 1.34163<br>1.09426 | 1.32307       | 1.25148       | 1.18543       | 1.14943       | AVRG  |   | 1.21038            |    | 8.00473        |
| 205 2,3-Dichloroaniline      | ++++<br>0.48856    | 0.54650<br>0.48828 | 0.55336       | 0.50388       | 0.48092       | 0.50829       | AVRG  |   | 0.50997            |    | 5.67758        |
| 37 2,4,6-Trichlorophenol     | ++++<br>0.28898    | 0.27875<br>0.29197 | 0.29479       | 0.28152       | 0.27265       | 0.29824       | AVRG  |   | 0.28670            |    | 3.24410        |
| 38 2,4,5-Trichlorophenol     | ++++<br>0.31122    | 0.29964<br>0.30377 | 0.32339       | 0.31035       | 0.29888       | 0.32105       | AVRG  |   | 0.30976            |    | 3.15349        |
| 40 2-Chloronaphthalene       | 1.09282<br>0.87595 | 0.98378<br>0.87244 | 0.99396       | 0.93198       | 0.88980       | 0.91989       | AVRG  |   | 0.94508            |    | 7.96150        |
| 42 o-Nitroaniline            | ++++<br>0.37301    | 0.35292<br>0.36862 | 0.37905       | 0.37354       | 0.35917       | 0.39187       | AVRG  |   | 0.37117            |    | 3.44867        |

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
 End Cal Date : 21-JAN-2010 23:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Cal Date : 26-Jan-2010 13:28 jen00986

| Compound              | 1<br>Level 1 | 10<br>Level 2 | 20<br>Level 3 | 40<br>Level 4 | 50<br>Level 5 | 80<br>Level 6 | Curve  | b       | Coefficients<br>m1 | m2 | %RSD<br>or R^2 |
|-----------------------|--------------|---------------|---------------|---------------|---------------|---------------|--------|---------|--------------------|----|----------------|
|                       | 100          | 120           |               |               |               |               |        |         |                    |    |                |
|                       | Level 7      | Level 8       |               |               |               |               |        |         |                    |    |                |
| 41 m-Nitroaniline     | ++++         | 24160         | 84099         | 223402        | 264703        | 508263        |        |         |                    |    |                |
|                       | 595969       | 653033        |               |               |               |               | LINEAR | 0.10772 | 0.24761            |    | 0.99638        |
| 43 Dimethylphthalate  | ++++         | 1.15017       | 1.17429       | 1.09296       | 1.04860       | 1.08333       |        |         |                    |    |                |
|                       | 1.04210      | 1.00230       |               |               |               |               | AVRG   | 1.08482 |                    |    | 5.61871        |
| 44 2,6-Dinitrotoluene | ++++         | 0.26127       | 0.27649       | 0.26356       | 0.25029       | 0.26094       |        |         |                    |    |                |
|                       | 0.24973      | 0.24227       |               |               |               |               | AVRG   | 0.25779 |                    |    | 4.38601        |
| 45 Acenaphthylene     | 1.71149      | 1.60018       | 1.60779       | 1.48849       | 1.41330       | 1.42295       |        |         |                    |    |                |
|                       | 1.34102      | 1.31035       |               |               |               |               | AVRG   | 1.48695 |                    |    | 9.50591        |
| 47 Acenaphthene       | 1.11629      | 0.96542       | 0.99725       | 0.93059       | 0.89065       | 0.92656       |        |         |                    |    |                |
|                       | 0.88661      | 0.86196       |               |               |               |               | AVRG   | 0.94692 |                    |    | 8.58539        |
| 48 2,4-Dinitrophenol  | ++++         | ++++          | 0.08845       | 0.10958       | 0.10655       | 0.13215       |        |         |                    |    |                |
|                       | 0.12947      | 0.12286       |               |               |               |               | AVRG   | 0.11484 |                    |    | 14.42064       |
| 49 Dibenzofuran       | ++++         | 1.32487       | 1.32975       | 1.22403       | 1.17119       | 1.20294       |        |         |                    |    |                |
|                       | 1.13932      | 1.10909       |               |               |               |               | AVRG   | 1.21446 |                    |    | 7.07746        |
| 50 2,4-Dinitrotoluene | ++++         | 0.31324       | 0.34041       | 0.32689       | 0.31515       | 0.32940       |        |         |                    |    |                |
|                       | 0.31737      | 0.30020       |               |               |               |               | AVRG   | 0.32038 |                    |    | 4.06899        |
| 51 Diethylphthalate   | ++++         | 1.15017       | 1.18217       | 1.09898       | 1.05156       | 1.06689       |        |         |                    |    |                |
|                       | 1.02940      | 0.96851       |               |               |               |               | AVRG   | 1.07824 |                    |    | 6.73832        |

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
 End Cal Date : 21-JAN-2010 23:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Cal Date : 26-Jan-2010 13:28 jen00986

| Compound                      | 1<br>Level 1       | 10<br>Level 2      | 20<br>Level 3      | 40<br>Level 4      | 50<br>Level 5      | 80<br>Level 6      | Curve | b       | Coefficients<br>m1 | m2 | %RSD<br>of R^2 |
|-------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------|---------|--------------------|----|----------------|
| 52 4-Nitrophenol              | ++++<br>0.19482    | 0.14809<br>0.18715 | 0.18079<br>0.18079 | 0.18484<br>0.18484 | 0.18183<br>0.18183 | 0.20200<br>0.20200 | AVRG  |         | 0.18279            |    | 9.33220        |
| 53 Fluorene                   | 1.23652<br>0.95224 | 1.08915<br>0.90970 | 1.09417<br>0.99304 | 0.99304<br>0.99304 | 0.94867<br>0.94867 | 0.98295<br>0.98295 | AVRG  |         | 1.02579            |    | 10.47717       |
| 54 4-Chlorophenylphenylether  | ++++<br>0.47769    | 0.50916<br>0.46080 | 0.50927<br>0.50927 | 0.47449<br>0.47449 | 0.45641<br>0.45641 | 0.48845<br>0.48845 | AVRG  |         | 0.48232            |    | 4.39927        |
| 55 2-Methyl-4,6-dinitrophenol | ++++<br>0.11208    | 0.07609<br>0.10901 | 0.09887<br>0.10901 | 0.10491<br>0.10491 | 0.10417<br>0.10417 | 0.11609<br>0.11609 | AVRG  |         | 0.10303            |    | 12.75423       |
| 56 p-Nitroaniline             | ++++<br>601084     | 34121<br>638900    | 79188<br>638900    | 198035<br>198035   | 248695<br>248695   | 506405<br>506405   | LINR  | 0.13043 | 0.24657            |    | 0.99437        |
| 133 Diphenylamine             | ++++<br>0.52356    | 0.55707<br>0.52539 | 0.53334<br>0.53334 | 0.51872<br>0.51872 | 0.50649<br>0.50649 | 0.54589<br>0.54589 | AVRG  |         | 0.53006            |    | 3.21154        |
| 58 1,2-Diphenylhydrazine      | ++++<br>0.74423    | 0.82487<br>0.74173 | 0.83334<br>0.83334 | 0.77782<br>0.77782 | 0.75952<br>0.75952 | 0.78845<br>0.78845 | AVRG  |         | 0.78142            |    | 4.69737        |
| 59 Tributylphosphate          | ++++<br>1.09555    | 1.32216<br>1.12968 | 1.18297<br>1.18297 | 1.12399<br>1.12399 | 1.17926<br>1.17926 | 1.10515<br>1.10515 | AVRG  |         | 1.16268            |    | 6.71052        |
| 61 4-Bromophenylphenylether   | ++++<br>0.17775    | 0.16761<br>0.17588 | 0.17020<br>0.17020 | 0.16317<br>0.16317 | 0.16052<br>0.16052 | 0.17788<br>0.17788 | AVRG  |         | 0.17043            |    | 4.13286        |

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
 End Cal Date : 21-JAN-2010 23:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Cal Date : 26-Jan-2010 13:28 jen00986

| Compound               | 1<br>Level 1       | 10<br>Level 2      | 20<br>Level 3      | 40<br>Level 4      | 50<br>Level 5      | 80<br>Level 6      | Curve | b       | Coefficients<br>m1 | m2 | %RSD<br>or R^2 |
|------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------|---------|--------------------|----|----------------|
| 63 Hexachlorobenzene   | ++++<br>0.18616    | 0.17615<br>0.18291 | 0.17524<br>0.16870 | 0.16870<br>0.16457 | 0.16457<br>0.18527 | 0.18527<br>AVRG    | AVRG  |         | 0.17700            |    | 4.69442        |
| 207 Atrazine           | ++++<br>0.04175    | 0.04948<br>0.03993 | 0.05167<br>0.04892 | 0.04892<br>0.04705 | 0.04705<br>0.04516 | 0.04516<br>AVRG    | AVRG  |         | 0.04628            |    | 9.21030        |
| 65 Pentachlorophenol   | ++++<br>0.11029    | 0.07673<br>0.10862 | 0.09660<br>0.10008 | 0.10008<br>0.09851 | 0.09851<br>0.11103 | 0.11103<br>AVRG    | AVRG  |         | 0.10027            |    | 11.91792       |
| 206 n-Octadecane       | ++++<br>0.55457    | 0.77057<br>0.53533 | 0.76149<br>0.67942 | 0.67942<br>0.64819 | 0.64819<br>0.61274 | 0.61274<br>AVRG    | AVRG  |         | 0.65176            |    | 14.20920       |
| 68 Phenanthrene        | 1.09161<br>0.80188 | 0.93858<br>0.77958 | 0.93460<br>0.77958 | 0.84726<br>0.85644 | 0.80961<br>0.83100 | 0.83068<br>0.84315 | AVRG  |         | 0.87923            |    | 11.83793       |
| 69 Anthracene          | 0.98204<br>0.82966 | 0.92939<br>0.81107 | 0.93865<br>0.81107 | 0.85644<br>1.09849 | 0.83100<br>1.03930 | 0.84315<br>1.01395 | AVRG  |         | 0.87768            |    | 7.18623        |
| 72 Di-n-butylphthalate | ++++<br>0.96977    | 1.11683<br>0.93322 | 1.20960<br>0.90049 | 1.09849<br>0.78704 | 1.03930<br>0.74569 | 1.01395<br>0.73752 | AVRG  |         | 1.06159            |    | 9.57727        |
| 76 Fluoranthene        | 0.90108<br>0.72012 | 0.87949<br>0.72879 | 0.90049<br>0.72879 | 0.78704<br>0.72879 | 0.74569<br>0.72879 | 0.73752<br>0.72879 | AVRG  |         | 0.80003            |    | 10.03388       |
| 77 Benzidine           | ++++<br>1242269    | 68247<br>1396665   | 157088<br>1396665  | 368997<br>1396665  | 517823<br>1396665  | 799002<br>1396665  | AVRG  | 0.18762 | 0.43103            |    | 0.99259        |



## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
 End Cal Date : 21-JAN-2010 23:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Cal Date : 26-Jan-2010 13:28 jen00986

| Compound                      | 1<br>Level 1       | 10<br>Level 2      | 20<br>Level 3 | 40<br>Level 4 | 50<br>Level 5 | 80<br>Level 6 | Curve | b       | Coefficients<br>ml | m2 | %RSD<br>or R^2 |
|-------------------------------|--------------------|--------------------|---------------|---------------|---------------|---------------|-------|---------|--------------------|----|----------------|
|                               | 100<br>Level 7     | 120<br>Level 8     |               |               |               |               |       |         |                    |    |                |
| 79 Pyrene                     | 1.20782<br>1.10515 | 1.17367<br>1.07728 | 1.19363       | 1.15436       | 1.14505       | 1.11019       | AVRG  |         | 1.14589            |    | 3.98562        |
| 85 Butylbenzylphthalate       | ++++<br>0.57757    | 0.53315<br>0.57218 | 0.59279       | 0.58620       | 0.57351       | 0.57865       | AVRG  |         | 0.57344            |    | 3.34401        |
| 89 Benzo(a)anthracene         | 1.04947<br>0.89123 | 0.92578<br>0.87778 | 0.93249       | 0.87547       | 0.85953       | 0.91526       | AVRG  |         | 0.91588            |    | 6.53649        |
| 90 3,3'-Dichlorobenzidine     | ++++<br>870778     | 50313<br>992474    | 128838        | 311549        | 418224        | 630554        | LINR  | 0.08574 | 0.29947            |    | 0.99849        |
| 92 Chrysene                   | 0.97877<br>0.83239 | 0.87284<br>0.82524 | 0.88778       | 0.83077       | 0.81096       | 0.85332       | AVRG  |         | 0.86151            |    | 6.25094        |
| 93 bis(2-Ethylhexyl)phthalate | 0.64865<br>0.79914 | 0.80656<br>0.74447 | 0.85756       | 0.83189       | 0.81753       | 0.80790       | AVRG  |         | 0.78921            |    | 8.26795        |
| 94 Di-n-octylphthalate        | ++++<br>1.77023    | 1.35964<br>1.78288 | 1.60765       | 1.55720       | 1.51913       | 1.74200       | AVRG  |         | 1.61982            |    | 9.63152        |
| 95 Benzo(b)fluoranthene       | 0.80148<br>1.01895 | 0.90924<br>1.01572 | 0.94818       | 0.90443       | 0.89079       | 1.02086       | AVRG  |         | 0.93870            |    | 8.28907        |
| 96 Benzo(k)fluoranthene       | 0.88969<br>0.98776 | 0.97141<br>1.03666 | 1.01309       | 0.93213       | 0.93572       | 1.02950       | AVRG  |         | 0.97450            |    | 5.35398        |

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
 End Cal Date : 21-JAN-2010 23:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Cal Date : 26-Jan-2010 13:28 jen00986

| Compound                      | 1<br>Level 1 | 10<br>Level 2 | 20<br>Level 3 | 40<br>Level 4 | 50<br>Level 5 | 80<br>Level 6 | Curve | b       | Coefficients<br>m1 | m2 | SRSD<br>or R^2 |
|-------------------------------|--------------|---------------|---------------|---------------|---------------|---------------|-------|---------|--------------------|----|----------------|
| 97 Benzo(a)pyrene             | 0.63975      | 0.78545       | 0.85523       | 0.82144       | 0.81380       | 0.89384       | AVRG  | 0.81798 | 0.81798            |    | 9.78413        |
| 99 Indeno(1,2,3-cd)pyrene     | 0.53271      | 0.64912       | 0.78240       | 0.73167       | 0.69198       | 0.67705       | AVRG  | 0.66728 | 0.66728            |    | 11.19617       |
| 100 Dibenzo(a,h)anthracene    | 0.38835      | 0.51473       | 0.63534       | 0.59869       | 0.57749       | 0.56896       | AVRG  | 0.54458 | 0.54458            |    | 13.68691       |
| 101 Benzo(ghi)perylene        | 0.53024      | 0.55394       | 0.65192       | 0.60056       | 0.54802       | 0.52127       | AVRG  | 0.54772 | 0.54772            |    | 10.33074       |
| 102 1,4-Dioxane               | 0.33737      | 0.33393       | 0.40910       | 0.38885       | 0.36418       | 0.35721       | AVRG  | 0.37050 | 0.37050            |    | 8.19005        |
| 103 Methyl methacrylate       | 0.19656      | 0.22937       | 0.23413       | 0.22455       | 0.20925       | 0.20687       | AVRG  | 0.21351 | 0.21351            |    | 7.49623        |
| 104 Ethyl methacrylate        | 0.82833      | 0.81644       | 0.96408       | 0.94490       | 0.87906       | 0.87421       | AVRG  | 0.89246 | 0.89246            |    | 6.55903        |
| 105 2-Picoline                | 1.19098      | 1.17745       | 1.42601       | 1.37405       | 1.28232       | 1.25646       | AVRG  | 1.30074 | 1.30074            |    | 7.69147        |
| 106 N-Nitrosomethylethylamine | 0.56140      | 0.57250       | 0.60188       | 0.60267       | 0.57117       | 0.57548       | AVRG  | 0.57807 | 0.57807            |    | 3.00772        |

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
 End Cal Date : 21-JAN-2010 23:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Cal Date : 26-Jan-2010 13:28 jen00986

| Compound                       | 1<br>Level 1    | 10<br>Level 2      | 20<br>Level 3      | 40<br>Level 4      | 50<br>Level 5      | 80<br>Level 6      | Curve | b | Coefficients<br>m1 | m2 | %RSD<br>or R^2 |
|--------------------------------|-----------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------|---|--------------------|----|----------------|
|                                | Level 7         | Level 8            |                    |                    |                    |                    |       |   |                    |    |                |
| 107 Methyl methanesulfonate    | ++++<br>0.57075 | 0.61804<br>0.56788 | 0.63933<br>0.56788 | 0.63301<br>0.56788 | 0.60159<br>0.56788 | 0.59587<br>0.56788 | AVRG  |   | 0.60378            |    | 4.66950        |
| 108 N-Nitrosodiethylamine      | ++++<br>0.55646 | 0.58134<br>0.55701 | 0.61446<br>0.55701 | 0.60838<br>0.55701 | 0.57663<br>0.55701 | 0.57742<br>0.55701 | AVRG  |   | 0.58167            |    | 3.89262        |
| 109 Ethyl Methanesulfonate     | ++++<br>0.71730 | 0.75021<br>0.71916 | 0.78366<br>0.71916 | 0.77467<br>0.71916 | 0.73862<br>0.71916 | 0.74097<br>0.71916 | AVRG  |   | 0.74637            |    | 3.40767        |
| 110 Pentachloroethane          | ++++<br>0.30943 | 0.34206<br>0.30715 | 0.35291<br>0.30715 | 0.34546<br>0.30715 | 0.32303<br>0.30715 | 0.32328<br>0.30715 | AVRG  |   | 0.32905            |    | 5.46741        |
| 111 N-Nitrosopyrrolidine       | ++++<br>0.53121 | 0.60763<br>0.54193 | 0.65600<br>0.54193 | 0.64807<br>0.54193 | 0.62006<br>0.54193 | 0.59922<br>0.54193 | AVRG  |   | 0.60059            |    | 8.04589        |
| 113 N-Nitrosomorpholine        | ++++<br>0.87036 | 1.06306<br>0.83070 | 1.10704<br>0.83070 | 1.07185<br>0.83070 | 1.00687<br>0.83070 | 0.95244<br>0.83070 | AVRG  |   | 0.98604            |    | 10.71783       |
| 114 o-Toluidine                | ++++<br>1.67531 | 1.92126<br>1.65506 | 1.98267<br>1.65506 | 1.89353<br>1.65506 | 1.78515<br>1.65506 | 1.73854<br>1.65506 | AVRG  |   | 1.80736            |    | 7.03491        |
| 115 N-Nitrosopiperidine        | ++++<br>0.14519 | 0.15118<br>0.14450 | 0.15925<br>0.14450 | 0.15757<br>0.14450 | 0.14997<br>0.14450 | 0.14991<br>0.14450 | AVRG  |   | 0.15108            |    | 3.71838        |
| 116 a,a-Dimethylphenethylamine | ++++<br>1.14477 | 0.96436<br>1.14654 | 1.10317<br>1.14654 | 1.16948<br>1.14654 | 1.12786<br>1.14654 | 1.17544<br>1.14654 | AVRG  |   | 1.11880            |    | 6.46576        |

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
 End Cal Date : 21-JAN-2010 23:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Cal Date : 26-Jan-2010 13:28 jen00986

| Compound                       | 1<br>Level 1    | 10<br>Level 2      | 20<br>Level 3      | 40<br>Level 4      | 50<br>Level 5      | 80<br>Level 6      | Curve | b | Coefficients<br>m1 | m2 | %RSD<br>or R^2 |
|--------------------------------|-----------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------|---|--------------------|----|----------------|
| 117 Triethylphosphorothioate   | ++++<br>0.12504 | 0.14096<br>0.12852 | 0.12675<br>0.12675 | 0.12671<br>0.12671 | 0.12709<br>0.12709 | 0.12431<br>0.12431 | AVRG  |   | 0.12848            |    | 4.41389        |
| 118 2,6-Dichloropheno.         | ++++<br>0.21091 | 0.20730<br>0.20837 | 0.22246<br>0.22246 | 0.22551<br>0.22551 | 0.21620<br>0.21620 | 0.21642<br>0.21642 | AVRG  |   | 0.21531            |    | 3.22282        |
| 119 Hexachloropropene          | ++++<br>0.11936 | 0.10458<br>0.11763 | 0.11742<br>0.11742 | 0.12274<br>0.12274 | 0.11836<br>0.11836 | 0.11947<br>0.11947 | AVRG  |   | 0.11708            |    | 4.94585        |
| 120 p-Phenylenediamine         | ++++<br>0.21382 | 0.24630<br>0.20452 | 0.29054<br>0.29054 | 0.28023<br>0.28023 | 0.26426<br>0.26426 | 0.23686<br>0.23686 | AVRG  |   | 0.24808            |    | 13.05955       |
| 121 N-Nitrosodi-n-butylamine   | ++++<br>0.21235 | 0.26153<br>0.21050 | 0.27739<br>0.27739 | 0.24051<br>0.24051 | 0.22685<br>0.22685 | 0.22052<br>0.22052 | AVRG  |   | 0.23566            |    | 10.84221       |
| 122 Safrrole                   | ++++<br>0.18084 | 0.20311<br>0.17990 | 0.20717<br>0.20717 | 0.20248<br>0.20248 | 0.19097<br>0.19097 | 0.18811<br>0.18811 | AVRG  |   | 0.19323            |    | 5.74835        |
| 123 1,2,4,5-Tetrachlorobenzene | ++++<br>0.42012 | 0.44070<br>0.41536 | 0.44504<br>0.44504 | 0.42857<br>0.42857 | 0.41216<br>0.41216 | 0.41546<br>0.41546 | AVRG  |   | 0.42534            |    | 3.08394        |
| 124 Isosafrole                 | ++++<br>0.34682 | 0.36248<br>0.33695 | 0.37728<br>0.37728 | 0.36959<br>0.36959 | 0.35298<br>0.35298 | 0.34957<br>0.34957 | AVRG  |   | 0.35652            |    | 3.92605        |
| 125 1,4-Naphthoquinone         | ++++<br>++++    | 0.35549<br>++++    | 0.38126<br>0.38126 | 0.33900<br>0.33900 | 0.32053<br>0.32053 | 0.28095<br>0.28095 | AVRG  |   | 0.33545            |    | 11.25882       |

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
 End Cal Date : 21-JAN-2010 23:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Cal Date : 26-Jan-2010 13:28 jen00986

| Compound                      | 1<br>Level 1    | 10<br>Level 2      | 20<br>Level 3 | 40<br>Level 4 | 50<br>Level 5 | 80<br>Level 6 | Curve | b | Coefficients<br>m1 | m2 | %RSD<br>or R^2 |
|-------------------------------|-----------------|--------------------|---------------|---------------|---------------|---------------|-------|---|--------------------|----|----------------|
| 126 m-Dinitrobenzene          | ++++<br>0.18723 | 0.17442<br>0.18207 | 0.19169       | 0.18527       | 0.18037       | 0.19440       | AVRG  |   | 0.18506            |    | 3.69258        |
| 127 Pentachlorobenzene        | ++++<br>0.36872 | 0.37423<br>0.37073 | 0.37911       | 0.37490       | 0.35909       | 0.36746       | AVRG  |   | 0.37060            |    | 1.74192        |
| 128 1-Naphthylamine           | ++++<br>0.87269 | 0.89660<br>0.85274 | 0.97285       | 0.96776       | 0.92853       | 0.89575       | AVRG  |   | 0.91242            |    | 5.03087        |
| 129 2-Naphthylamine           | ++++<br>0.94805 | 1.05353<br>0.92273 | 1.06610       | 1.04929       | 1.01007       | 0.96861       | AVRG  |   | 1.00263            |    | 5.66741        |
| 130 2,3,4,6-Tetrachlorophenol | ++++<br>0.24841 | 0.23053<br>0.24174 | 0.25006       | 0.24208       | 0.23646       | 0.25408       | AVRG  |   | 0.24334            |    | 3.36290        |
| 131 5-Nitro-o-toluidine       | ++++<br>0.29827 | 0.26341<br>0.29683 | 0.29456       | 0.30662       | 0.30452       | 0.30310       | AVRG  |   | 0.29533            |    | 4.98830        |
| 132 Thionazin                 | ++++<br>0.16225 | 0.18286<br>0.16825 | 0.16965       | 0.16716       | 0.17350       | 0.16496       | AVRG  |   | 0.16981            |    | 3.97911        |
| 134 Sulfurepp                 | ++++<br>0.09338 | 0.08201<br>0.10136 | 0.07661       | 0.07979       | 0.08274       | 0.08803       | AVRG  |   | 0.08627            |    | 10.00671       |
| 135 Phorate                   | ++++<br>0.39466 | 0.45434<br>0.37860 | 0.42143       | 0.42115       | 0.40948       | 0.39752       | AVRG  |   | 0.41103            |    | 5.95211        |

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
 End Cal Date : 21-JAN-2010 23:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Cal Date : 26-Jan-2010 13:28 jen00986

| Compound                    | 1<br>Level 1    | 10<br>Level 2      | 20<br>Level 3      | 40<br>Level 4      | 50<br>Level 5      | 80<br>Level 6      | Curve | b | Coefficients<br>m1 | m2 | %RSD<br>or R^2 |
|-----------------------------|-----------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------|---|--------------------|----|----------------|
| 136 1,3,5-Trinitrobenzene   | ++++<br>0.14789 | 0.11115<br>0.15095 | 0.15254<br>0.16071 | 0.16238<br>0.15691 | 0.16238<br>0.15691 | 0.15691<br>0.15691 | AVRG  |   | 0.14894            |    | 11.72228       |
| 137 Phenacetin              | ++++<br>0.33711 | 0.29223<br>0.33088 | 0.32768<br>0.33875 | 0.34208<br>0.35004 | 0.34208<br>0.35004 | 0.35004<br>0.35004 | AVRG  |   | 0.33125            |    | 5.64272        |
| 138 Diallate                | ++++<br>0.29918 | 0.33060<br>0.29006 | 0.34769<br>0.33140 | 0.31546<br>0.31296 | 0.31546<br>0.31296 | 0.31296<br>0.31296 | AVRG  |   | 0.31820            |    | 6.26753        |
| 139 Dimethoate              | ++++<br>0.24875 | 0.26282<br>0.26233 | 0.24782<br>0.25053 | 0.25122<br>0.25122 | 0.25122<br>0.25122 | 0.25122<br>0.25122 | AVRG  |   | 0.25594            |    | 3.21186        |
| 140 4-Aminobiphenyl         | ++++<br>0.63808 | 0.60889<br>0.62249 | 0.60889<br>0.60889 | 0.65926<br>0.65686 | 0.65686<br>0.65614 | 0.65614<br>0.65614 | AVRG  |   | 0.63580            |    | 3.53941        |
| 141 Pentachloronitrobenzene | ++++<br>0.07382 | 0.07920<br>0.07181 | 0.08536<br>0.08536 | 0.08213<br>0.07899 | 0.07899<br>0.07836 | 0.07836<br>0.07836 | AVRG  |   | 0.07853            |    | 5.87331        |
| 142 Pronamide               | ++++<br>0.27884 | 0.30210<br>0.27568 | 0.31704<br>0.31704 | 0.29794<br>0.29794 | 0.29794<br>0.29432 | 0.29432<br>0.29432 | AVRG  |   | 0.29619            |    | 5.01473        |
| 143 Dinoseb                 | ++++<br>0.15547 | 0.10128<br>0.14836 | 0.13894<br>0.13894 | 0.14777<br>0.14435 | 0.14435<br>0.15742 | 0.15742<br>0.15742 | AVRG  |   | 0.14194            |    | 13.38497       |
| 144 Disulfoton              | ++++<br>0.32392 | 0.38381<br>0.32137 | 0.35580<br>0.35580 | 0.34624<br>0.34548 | 0.34548<br>0.32535 | 0.32535<br>0.32535 | AVRG  |   | 0.34314            |    | 6.50461        |

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
 End Cal Date : 21-JAN-2010 23:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Cal Date : 26-Jan-2010 13:28 jen00986

| Compound                        | 1<br>Level 1    | 10<br>Level 2      | 20<br>Level 3 | 40<br>Level 4 | 50<br>Level 5 | 80<br>Level 6 | Curve | b       | Coefficients<br>m1 | m2 | %RSD<br>or R^2 |
|---------------------------------|-----------------|--------------------|---------------|---------------|---------------|---------------|-------|---------|--------------------|----|----------------|
| 145 Methyl parathion            | ++++<br>0.19984 | 0.18112<br>0.21607 | 0.18572       | 0.19503       | 0.21595       | 0.20096       | AVRG  | 0.19924 | 0.19924            |    | 6.77966        |
| 146 4-Nitroquinoline-1-oxide    | ++++<br>0.03400 | 0.03400            | 0.03957       | 0.03524       | 0.03285       | 0.02772       | AVRG  | 0.03387 | 0.03387            |    | 12.63095       |
| 147 Methapyrilene               | ++++<br>0.45174 | 0.56834<br>0.43613 | 0.60091       | 0.57196       | 0.54842       | 0.50433       | AVRG  | 0.52598 | 0.52598            |    | 12.04463       |
| 148 Isodrin                     | ++++<br>0.10509 | 0.11363<br>0.10547 | 0.11886       | 0.11337       | 0.11000       | 0.11015       | AVRG  | 0.11094 | 0.11094            |    | 4.37564        |
| 149 Aramite                     | ++++<br>0.04447 | 0.04104<br>0.04376 | 0.04681       | 0.04847       | 0.04868       | 0.04772       | AVRG  | 0.04585 | 0.04585            |    | 6.21308        |
| 150 Kepone                      | ++++<br>0.06744 | 0.06390<br>0.06910 | 0.07066       | 0.06797       | 0.06703       | 0.06757       | AVRG  | 0.06767 | 0.06767            |    | 3.06053        |
| 151 p-(Dimethylamino)azobenzene | ++++<br>0.38016 | 0.38603<br>0.37647 | 0.41569       | 0.41479       | 0.39936       | 0.40281       | AVRG  | 0.39647 | 0.39647            |    | 4.02605        |
| 152 Chlorobenzilate             | ++++<br>0.32216 | 0.29852<br>0.33106 | 0.32418       | 0.32853       | 0.31604       | 0.33558       | AVRG  | 0.32229 | 0.32229            |    | 3.80049        |
| 153 3,3'-Dimethylbenzidine      | ++++<br>0.54403 | 0.44454<br>0.52456 | 0.51712       | 0.52940       | 0.52712       | 0.53071       | AVRG  | 0.51678 | 0.51678            |    | 6.36003        |

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
 End Cal Date : 21-JAN-2010 23:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Cal Date : 26-Jan-2010 13:28 jen00986

| Compound                          | 1<br>Level 1    | 10<br>Level 2      | 20<br>Level 3      | 40<br>Level 4      | 50<br>Level 5 | 80<br>Level 6 | Curve | b       | Coefficients<br>m1 | m2 | %RSD<br>or R^2 |
|-----------------------------------|-----------------|--------------------|--------------------|--------------------|---------------|---------------|-------|---------|--------------------|----|----------------|
| 154 Farphur                       | ++++<br>0.37941 | 0.37855<br>0.37565 | 0.36235<br>0.37553 | 0.38371<br>0.37553 | 0.38280       | AVRG          |       |         | 0.37686            |    | 1.89344        |
| 155 2-Acetylaminofluorene         | ++++<br>1039733 | 54358<br>1181312   | 146603             | 347782             | 471601        | 730946        | LINR  | 0.12725 | 0.36004            |    | 0.99818        |
| 157 7,12Dimethylbenz(a)anthracene | ++++<br>0.52084 | 0.49065<br>0.52780 | 0.53222            | 0.55091            | 0.53464       | 0.55350       | AVRG  |         | 0.53008            |    | 3.96662        |
| 158 3-Methylcholanthrene          | ++++<br>0.40379 | 0.32173<br>0.39477 | 0.36538            | 0.39456            | 0.39877       | 0.41088       | AVRG  |         | 0.38427            |    | 8.07973        |
| 26 Phthalic anhydride             | ++++<br>0.10937 | 0.09112<br>++++    | 0.08833            | 0.11036            | 0.11415       | 0.11552       | AVRG  |         | 0.10481            |    | 11.38965       |
| 173 Carbazole                     | 0.86479         | 0.71586            | 0.64023            | 0.67237            | 0.68439       | 0.73157       | AVRG  |         | 0.71254            |    | 9.46599        |
| 174 Hexachlorophene               | ++++<br>0.07477 | 0.68929<br>0.06527 | 0.07987            | 0.07491            | 0.07520       | 0.06851       | AVRG  |         | 0.07309            |    | 7.20745        |
| 179 Dibenzo(a,e)pyrene            | ++++<br>0.23424 | 0.20398<br>0.20708 | 0.30269            | 0.26880            | 0.22289       | 0.23884       | AVRG  |         | 0.23979            |    | 14.71273       |
| 185 (2,3-Dibromopropyl)phosphate  | ++++<br>++++    | ++++<br>++++       | ++++               | ++++               | ++++          | ++++          | AVRG  |         | 0.000e+00          |    | 0.000e+00      |



## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
 End Cal Date : 21-JAN-2010 23:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Cal Date : 26-Jan-2010 13:28 jen00986

| Compound               | i       | Level 1 | 10      | Level 2 | 20      | Level 3 | 40      | Level 4 | 50 | Level 5 | 80 | Curve | b | Coefficients<br>ml | m2 | %RSD<br>or R <sup>2</sup> |
|------------------------|---------|---------|---------|---------|---------|---------|---------|---------|----|---------|----|-------|---|--------------------|----|---------------------------|
|                        |         | Level 7 | 100     | Level 8 | 120     |         |         |         |    |         |    |       |   |                    |    |                           |
| 184 p-Benzquinone      | ++++    |         | 0.05055 | 0.06219 | 0.08664 | 0.08181 | 0.11534 |         |    |         |    |       |   |                    |    |                           |
|                        | 0.11632 | 0.13440 |         |         |         |         |         |         |    |         |    | AVRG  |   | 0.09247            |    | 33.25064                  |
| 191 Parathion          | ++++    |         | 0.05232 | 0.05250 | 0.05390 | 0.06077 | 0.05809 |         |    |         |    |       |   |                    |    |                           |
|                        | 0.05929 | 0.06990 |         |         |         |         |         |         |    |         |    | AVRG  |   | 0.05811            |    | 10.65746                  |
| 192 Methoxychlor       | ++++    |         | 0.47888 | 0.55020 | 0.54492 | 0.52330 | 0.52850 |         |    |         |    |       |   |                    |    |                           |
|                        | 0.50867 | 0.48210 |         |         |         |         |         |         |    |         |    | AVRG  |   | 0.51665            |    | 5.47062                   |
| 210 m-Toluidine        | ++++    |         | 1.20660 | 1.13863 | 1.34833 | 1.30013 | 1.34859 |         |    |         |    |       |   |                    |    |                           |
|                        | 1.42086 | 1.35651 |         |         |         |         |         |         |    |         |    | AVRG  |   | 1.30281            |    | 7.49486                   |
| 211 p-Toluidine        | ++++    |         | 0.82792 | 0.92751 | 0.95009 | 0.93687 | 0.99354 |         |    |         |    |       |   |                    |    |                           |
|                        | 0.87001 | 0.88427 |         |         |         |         |         |         |    |         |    | AVRG  |   | 0.91289            |    | 6.09139                   |
| 212 Cis Diallate       | ++++    |         | 0.32530 | 0.35061 | 0.34315 | 0.33383 | 0.34948 |         |    |         |    |       |   |                    |    |                           |
|                        | 0.33303 | 0.32933 |         |         |         |         |         |         |    |         |    | AVRG  |   | 0.33782            |    | 2.94956                   |
| 213 Trans Diallate     | ++++    |         | 0.38895 | 0.40905 | 0.38989 | 0.37113 | 0.36819 |         |    |         |    |       |   |                    |    |                           |
|                        | 0.35198 | 0.34125 |         |         |         |         |         |         |    |         |    | AVRG  |   | 0.37435            |    | 6.26753                   |
| 214 1,4-Dinitrobenzene | ++++    |         | 0.19443 | 0.21635 | 0.21508 | 0.21009 | 0.22936 |         |    |         |    |       |   |                    |    |                           |
|                        | 0.22066 | 0.21678 |         |         |         |         |         |         |    |         |    | AVRG  |   | 0.21468            |    | 4.99410                   |
| 215 2-Ethoxyethanol    | ++++    |         | 0.87726 | 0.90209 | 0.85383 | 0.83647 | 0.85701 |         |    |         |    |       |   |                    |    |                           |
|                        | 0.80779 | 0.81374 |         |         |         |         |         |         |    |         |    | AVRG  |   | 0.84974            |    | 3.96160                   |

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
 End Cal Date : 21-JAN-2010 23:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Cal Date : 26-Jan-2010 13:28 jen00986

| Compound                          | 1<br>Level 1    | 10<br>Level 2      | 20<br>Level 3 | 40<br>Level 4 | 50<br>Level 5 | 80<br>Level 6 | Curve | b       | Coefficients<br>m1 | m2 | %RSD<br>or R^2 |
|-----------------------------------|-----------------|--------------------|---------------|---------------|---------------|---------------|-------|---------|--------------------|----|----------------|
| 216 Methylenebis(2-chloroaniline) | ++++<br>0.13842 | 0.06616<br>0.13549 | 0.07608       | 0.09079       | 0.10448       | 0.14208       | AVRG  |         | 0.10764            |    | 29.17866       |
| 229 2,2'-Dichlorobenzil           | ++++<br>0.76403 | 0.77468<br>0.70142 | 0.81672       | 0.78001       | 0.77122       | ++++          | AVRG  |         | 0.76801            |    | 4.87929        |
| 230 4-Chlorothiobanisole          | ++++<br>0.24233 | 0.21750<br>0.23147 | 0.22713       | 0.23458       | 0.23450       | ++++          | AVRG  |         | 0.23125            |    | 3.61952        |
| 231 4-Chlorothiophenol            | ++++<br>1322620 | 13915<br>1786788   | 145785        | 449073        | 465253        | ++++          | LINR  | 0.27132 | 0.21350            |    | 0.99388        |
| 232 bis(p-Chlorophenyl)sulfone    | ++++<br>0.40821 | 0.47388<br>0.37583 | 0.45390       | 0.41761       | 0.41127       | ++++          | AVRG  |         | 0.42345            |    | 8.28402        |
| 233 bis(p-Chlorophenyl)disulfide  | ++++<br>0.17420 | 0.19441<br>0.16308 | 0.19838       | 0.17851       | 0.21138       | ++++          | AVRG  |         | 0.18666            |    | 9.54234        |
| 234 Diphenyl disulfide            | ++++<br>0.24334 | 0.28343<br>0.23143 | 0.27802       | 0.26242       | 0.26450       | ++++          | AVRG  |         | 0.26052            |    | 7.66126        |
| 235 Diphenyl sulfide              | ++++<br>0.68944 | 0.77450<br>0.64311 | 0.73432       | 0.69665       | 0.69787       | ++++          | AVRG  |         | 0.70598            |    | 6.29545        |
| 236 Phenyl sulfone                | ++++<br>0.42641 | 0.49686<br>0.40051 | 0.45278       | 0.45366       | 0.44706       | ++++          | AVRG  |         | 0.44621            |    | 7.18905        |

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
 End Cal Date : 21-JAN-2010 23:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Cal Date : 26-Jan-2010 13:28 jen00986

| Compound                      | i<br>Level 1    | 10<br>Level 2      | 20<br>Level 3 | 40<br>Level 4 | 50<br>Level 5 | 80<br>Level 6 | Curve | b        | Coefficients<br>m1 | m2 | %RSD<br>or R^2 |
|-------------------------------|-----------------|--------------------|---------------|---------------|---------------|---------------|-------|----------|--------------------|----|----------------|
| 237 Hydroxymethyl phthalimide | ++++<br>338664  | 43061<br>++++      | 70788         | 158625        | 184195        | ++++          | LINR  | -0.20385 | 0.08483            |    | 0.99591        |
| 238 Phthalic acid             | ++++<br>817425  | 17549<br>1057677   | 67240         | 222077        | 286654        | ++++          | LINR  | 0.30649  | 0.13018            |    | 0.99095        |
| 239 Thiophenol                | ++++<br>1859333 | 40472<br>2488746   | 249069        | 669124        | 791770        | ++++          | LINR  | 0.17391  | 1.07612            |    | 0.99866        |
| 240 bis(Chloromethyl)ether    | ++++<br>0.69380 | 0.92896<br>0.63914 | 0.78750       | 0.71357       | 0.72008       | ++++          | AVRG  |          | 0.74718            |    | 13.52417       |
| 241 Octachlorostyrene         | ++++<br>0.07623 | 0.07090<br>0.07200 | 0.06572       | 0.06994       | 0.07114       | ++++          | AVRG  |          | 0.07099            |    | 4.77390        |
| 243 Dibenzo(a,h)pyrene        | ++++<br>251537  | 19398<br>++++      | 48052         | 105592        | 115067        | ++++          | LINR  | 0.12801  | 0.15800            |    | 0.99595        |
| 244 Benzo(j)fluoranthene      | ++++<br>0.97135 | 0.84035<br>0.96350 | 0.90941       | 0.90195       | 0.92608       | ++++          | AVRG  |          | 0.91877            |    | 5.8322         |
| 245 Dibenzo(a,j)acridine      | ++++<br>0.46183 | 0.37913<br>0.45797 | 0.43749       | 0.45831       | 0.44770       | ++++          | AVRG  |          | 0.44041            |    | 7.11174        |
| 246 Dibenzo(a,h)acridine      | ++++<br>0.43627 | 0.36614<br>0.43845 | 0.42944       | 0.44947       | 0.42727       | ++++          | AVRG  |          | 0.42451            |    | 6.98435        |

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
 End Cal Date : 21-JAN-2010 23:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Cal Date : 26-Jan-2010 13:28 jen00986

| Compound                     | 1<br>Level 1    | 10<br>Level 2      | 20<br>Level 3 | 40<br>Level 4 | 50<br>Level 5 | 80<br>Level 6 | Curve | b       | Coefficients<br>m1 | m2 | %RSD<br>or R^2 |
|------------------------------|-----------------|--------------------|---------------|---------------|---------------|---------------|-------|---------|--------------------|----|----------------|
| 247 Quinoline                | ++++<br>0.49755 | 0.53898<br>0.48463 | 0.55312       | 0.52678       | 0.51137       | ++++          | AVRG  |         | 0.51874            |    | 4.96956        |
| 248 2,4-Toluene Diisocyanate | ++++<br>0.36246 | 0.35575<br>0.35475 | 0.37703       | 0.36901       | 0.37246       | ++++          | AVRG  |         | 0.36524            |    | 2.48889        |
| 249 Dibenzo(a,i)pyrene       | ++++<br>161637  | 5679<br>++++       | 25971         | 55431         | 70235         | ++++          | LINR  | 0.23477 | 0.10559            |    | 0.99436        |
| 250 1-Nitropyrene            | ++++<br>501845  | 14872<br>593928    | 57017         | 155998        | 206454        | ++++          | LINR  | 0.22707 | 0.19061            |    | 0.99890        |
| 251 5-Methylchrysene         | ++++<br>0.52982 | 0.50185<br>0.51942 | 0.53453       | 0.53426       | 0.53672       | ++++          | AVRG  |         | 0.52610            |    | 2.54612        |
| 252 Dibenzo(a,l)pyrene       | ++++<br>0.17464 | 0.14160<br>0.18728 | 0.15863       | 0.16539       | 0.15589       | ++++          | AVRG  |         | 0.16390            |    | 9.65826        |
| 253 7H-Dibenzo(c,g)carbazole | ++++<br>0.28764 | 0.21831<br>0.29107 | 0.25109       | 0.27176       | 0.25676       | ++++          | AVRG  |         | 0.26277            |    | 10.28110       |
| 254 1-Hexanol                | ++++<br>1.14723 | 1.09335<br>1.09030 | 1.25596       | 1.22589       | 1.22960       | ++++          | AVRG  |         | 1.17372            |    | 6.22929        |
| 255 Propylene glycol         | ++++<br>1873680 | 82158<br>2256352   | 335628        | 729477        | 911671        | ++++          | LINR  | 0.11619 | 1.48305            |    | 0.99956        |

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
 End Cal Date : 21-JAN-2010 23:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Cal Date : 26-Jan-2010 13:28 jen00986

| Compound                      | 1<br>Level 1       | 10<br>Level 2      | 20<br>Level 3 | 40<br>Level 4 | 50<br>Level 5 | 80<br>Level 6 | Curve | b | Coefficients<br>ml | m2 | %RSD<br>or R^2 |
|-------------------------------|--------------------|--------------------|---------------|---------------|---------------|---------------|-------|---|--------------------|----|----------------|
|                               | 100<br>Level 7     | 120<br>Level 8     |               |               |               |               |       |   |                    |    |                |
| M 225 Trichlorophenols        | ++++<br>0.30010    | 0.28920<br>0.29787 | 0.30909       | 0.29593       | 0.28576       | 0.30965       | AVRG  |   | 0.29823            |    | 3.04328 <=     |
| M 226 Tetrachlorophenols      | ++++<br>0.24841    | 0.23053<br>0.24174 | 0.25006       | 0.24208       | 0.23646       | 0.25408       | AVRG  |   | 0.24334            |    | 3.36290        |
| M 227 Benzo(b,k)fluoranthene  | 0.84558<br>1.00336 | 0.94032<br>1.02619 | 0.98063       | 0.91828       | 0.91325       | 1.02518       | AVRG  |   | 0.95660            |    | 6.64057        |
| M 228 TIO Sur Semivolatiles   | ++++<br>++++       | ++++<br>++++       | ++++          | ++++          | ++++          | ++++          | AVRG  |   | 0.000e+00          |    | 0.000e+00 <=   |
| \$ 3 2-Fluorophenol           | ++++<br>0.99425    | 1.07851<br>0.99990 | 1.11123       | 1.04855       | 1.00806       | 1.04516       | AVRG  |   | 1.04085            |    | 4.18326        |
| \$ 5 Phenol-d5                | ++++<br>1.26953    | 1.34878<br>1.26451 | 1.37895       | 1.30637       | 1.25573       | 1.33301       | AVRG  |   | 1.30813            |    | 3.61651        |
| \$ 187 2-Chlorophenol-d4      | ++++<br>++++       | ++++<br>++++       | ++++          | ++++          | ++++          | ++++          | AVRG  |   | 0.000e+00          |    | 0.000e+00 <=   |
| \$ 188 1,2-Dichlorobenzene-d4 | ++++<br>++++       | ++++<br>++++       | ++++          | ++++          | ++++          | ++++          | AVRG  |   | 0.000e+00          |    | 0.000e+00 <=   |
| \$ 20 Nitrobenzene-d5         | ++++<br>0.27418    | 0.31580<br>0.26353 | 0.32342       | 0.30479       | 0.29159       | 0.29502       | AVRG  |   | 0.29548            |    | 7.27263        |

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
 End Cal Date : 21-JAN-2010 23:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Cal Date : 26-Jan-2010 13:28 jen00986

| Compound                   | 1<br>Level 1    | 10<br>Level 2      | 20<br>Level 3 | 40<br>Level 4 | 50<br>Level 5 | 80<br>Level 6 | Curve | b | Coefficients<br>ml | m2 | %RSD<br>or R^2 |
|----------------------------|-----------------|--------------------|---------------|---------------|---------------|---------------|-------|---|--------------------|----|----------------|
|                            | 100<br>Level 7  | 120<br>Level 8     |               |               |               |               |       |   |                    |    |                |
| \$ 39 2-Fluorobiphenyl     | ++++<br>0.97352 | 1.12515<br>0.96556 | 1.12690       | 1.04189       | 0.99112       | 1.01327       | AVRG  |   | 1.03392            |    | 6.56122        |
| \$ 60 2,4,6-Tribromophenol | ++++<br>0.12894 | 0.09835<br>0.12196 | 0.11081       | 0.10988       | 0.10815       | 0.12459       | AVRG  |   | 0.11467            |    | 9.43255        |
| \$ 81 p-Terphenyl-d14      | ++++<br>0.70914 | 0.66516<br>0.69369 | 0.69226       | 0.68049       | 0.68287       | 0.68906       | AVRG  |   | 0.68752            |    | 1.97038        |

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59  
End Cal Date : 21-JAN-2010 23:34  
Quant Method : ISTD  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
Cal Date : 26-Jan-2010 13:28 jen00986

| Curve    | Formula          | Units    |
|----------|------------------|----------|
| Averaged | Amt = Rsp/ml     | Response |
| Linear   | Amt = b + Rsp/ml | Response |

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 21-JAN-2010 00:59  
Lab File ID: s3a2030.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010  
Analysis Type: Init. Cal. Times: 17:59 00:33  
Lab Sample ID: WBN100106-09.3 Quant Type: ISTD  
Method: /chem/MSD3.i/s012010a.b/MSD3-8270R-AQA-012010.m

| COMPOUND                       | RRF / AMOUNT | RF40     | CCAL<br>RRF40 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE    |
|--------------------------------|--------------|----------|---------------|------------|-------------|--------------------|---------------|
| \$ 3 2-Fluorophenol            | 1.04085      | 1.06783  | 1.06783       | 0.000      | 2.59199     | 60.00000           | Averaged      |
| \$ 5 Phenol-d5                 | 1.30813      | 1.30677  | 1.30677       | 0.000      | -0.10402    | 60.00000           | Averaged      |
| \$ 20 Nitrobenzene-d5          | 0.29548      | 0.31664  | 0.31664       | 0.000      | 7.16229     | 60.00000           | Averaged      |
| \$ 39 2-Fluorobiphenyl         | 1.03392      | 1.08338  | 1.08338       | 0.000      | 4.78365     | 60.00000           | Averaged      |
| \$ 60 2,4,6-Tribromophenol     | 0.11467      | 0.11591  | 0.11591       | 0.000      | 1.08552     | 60.00000           | Averaged      |
| \$ 81 p-Terphenyl-d14          | 0.68752      | 0.74803  | 0.74803       | 0.000      | 8.80081     | 60.00000           | Averaged      |
| 1 N-Methyl-N-nitrosomethylami  | 0.72841      | 0.71079  | 0.71079       | 0.000      | -2.41905    | 60.00000           | Averaged      |
| 2 Pyridine                     | 0.81403      | 0.88918  | 0.88918       | 0.000      | 9.23243     | 60.00000           | Averaged      |
| 4 Aniline                      | 0.60975      | 0.61910  | 0.61910       | 0.000      | 1.53283     | 60.00000           | Averaged      |
| 6 Phenol                       | 1.38337      | 1.37047  | 1.37047       | 0.001      | -0.93241    | 20.00000           | Averaged ccc  |
| 7 bis(2-Chloroethyl) ether     | 1.09435      | 1.02455  | 1.02455       | 0.000      | -6.37835    | 60.00000           | Averaged      |
| 8 2-Chlorophenol               | 1.05048      | 1.03520  | 1.03520       | 0.000      | -1.45436    | 60.00000           | Averaged      |
| 203 n-Decane                   | 1.59470      | 1.65263  | 1.65263       | 0.000      | 3.63239     | 60.00000           | Averaged      |
| 9 1,3-Dichlorobenzene          | 1.20957      | 1.21368  | 1.21368       | 0.000      | 0.33934     | 60.00000           | Averaged      |
| 11 1,4-Dichlorobenzene         | 1.22630      | 1.21738  | 1.21738       | 0.001      | -0.72770    | 20.00000           | Averaged ccc  |
| 13 1,2-Dichlorobenzene         | 1.15004      | 1.15443  | 1.15443       | 0.000      | 0.38143     | 60.00000           | Averaged      |
| 14 bis(2-Chloroisopropyl)ether | 2.59104      | 2.64106  | 2.64106       | 0.000      | 1.93048     | 60.00000           | Averaged      |
| 12 Benzyl alcohol              | 0.73117      | 0.73463  | 0.73463       | 0.000      | 0.47315     | 60.00000           | Averaged      |
| 15 o-Cresol                    | 0.89964      | 0.91779  | 0.91779       | 0.000      | 2.01760     | 60.00000           | Averaged      |
| 18 m,p-Cresols                 | 1.17039      | 1.20984  | 1.20984       | 0.000      | 3.37103     | 60.00000           | Averaged      |
| 17 N-Nitrosodipropylamine      | 0.88907      | 0.89937  | 0.89937       | 0.050      | 1.15804     | 60.00000           | Averaged spcc |
| 19 Hexachloroethane            | 0.52660      | 0.50914  | 0.50914       | 0.000      | -3.31499    | 60.00000           | Averaged      |
| 21 Nitrobenzene                | 0.31068      | 0.33352  | 0.33352       | 0.000      | 7.35138     | 60.00000           | Averaged      |
| 22 Isophorone                  | 0.55065      | 0.57659  | 0.57659       | 0.000      | 4.71165     | 60.00000           | Averaged      |
| 23 2-Nitrophenol               | 0.14255      | 0.14316  | 0.14316       | 0.001      | 0.42846     | 20.00000           | Averaged ccc  |
| 24 2,4-Dimethylphenol          | 0.24644      | 0.25783  | 0.25783       | 0.000      | 4.62060     | 60.00000           | Averaged      |
| 25 bis(2-Chloroethoxy)methane  | 0.31970      | 0.32968  | 0.32968       | 0.000      | 3.12270     | 60.00000           | Averaged      |
| 26 2,4-Dichlorophenol          | 0.20739      | 0.21530  | 0.21530       | 0.001      | 3.81337     | 20.00000           | Averaged ccc  |
| 27 Benzoic acid                | 0.17347      | 0.18935  | 0.18935       | 0.000      | 9.15625     | 60.00000           | Averaged      |
| 28 1,2,4-Trichlorobenzene      | 0.23033      | 0.23735  | 0.23735       | 0.000      | 3.04924     | 60.00000           | Averaged      |
| 30 Naphthalene                 | 0.84122      | 0.82716  | 0.82716       | 0.000      | -1.67175    | 60.00000           | Averaged      |
| 204 alpha-Terpineol            | 0.27709      | 0.27641  | 0.27641       | 0.000      | -0.24655    | 60.00000           | Averaged      |
| 31 4-Chloroaniline             | 45.06758     | 40.00000 | 0.28696       | 0.000      | 12.66895    | 60.00000           | Linear        |
| 32 Hexachlorobutadiene         | 0.13146      | 0.13632  | 0.13632       | 0.001      | 3.69370     | 20.00000           | Averaged ccc  |
| 33 4-Chloro-3-methylphenol     | 0.23504      | 0.24535  | 0.24535       | 0.001      | 4.38906     | 20.00000           | Averaged ccc  |
| 34 2-Methylnaphthalene         | 0.50578      | 0.56566  | 0.56566       | 0.000      | 11.83960    | 60.00000           | Averaged      |



## GEL Laboratories LLC

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 21-JAN-2010 00:59  
Lab File ID: s3a2030.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010  
Analysis Type: Init. Cal. Times: 17:59 00:33  
Lab Sample ID: WBN100106-09.3 Quant Type: ISTD  
Method: /chem/MSD3.i/s012010a.b/MSD3-8270R-AQA-012010.m

| COMPOUND                      | RRF / AMOUNT | RF40     | CCAL<br>RRF40 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE    |
|-------------------------------|--------------|----------|---------------|------------|-------------|--------------------|---------------|
| 35 1-Methylnaphthalene        | 0.51307      | 0.53284  | 0.53284       | 0.000      | 3.85247     | 60.00000           | Averaged      |
| 36 Hexachlorocyclopentadiene  | 0.22766      | 0.19950  | 0.19950       | 0.050      | -12.36610   | 60.00000           | Averaged spcc |
| 205 2,3-Dichloroaniline       | 0.50997      | 0.51708  | 0.51708       | 0.000      | 1.39502     | 60.00000           | Averaged      |
| 37 2,4,6-Trichlorophenol      | 0.28670      | 0.27613  | 0.27613       | 0.001      | -3.68730    | 20.00000           | Averaged ccc  |
| 38 2,4,5-Trichlorophenol      | 0.30976      | 0.33054  | 0.33054       | 0.000      | 6.70890     | 60.00000           | Averaged      |
| 40 2-Chloronaphthalene        | 0.94508      | 0.94123  | 0.94123       | 0.000      | -0.40707    | 60.00000           | Averaged      |
| 42 o-Nitroaniline             | 0.37117      | 0.37692  | 0.37692       | 0.000      | 1.55024     | 60.00000           | Averaged      |
| 41 m-Nitroaniline             | 44.14116     | 40.00000 | 0.24658       | 0.000      | 10.35290    | 60.00000           | Linear        |
| 43 Dimethylphthalate          | 1.08482      | 1.16081  | 1.16081       | 0.000      | 7.00511     | 60.00000           | Averaged      |
| 44 2,6-Dinitrotoluene         | 0.25779      | 0.27155  | 0.27155       | 0.000      | 5.33431     | 60.00000           | Averaged      |
| 50 2,4-Dinitrotoluene         | 0.32038      | 0.35318  | 0.35318       | 0.000      | 10.23660    | 60.00000           | Averaged      |
| 45 Acenaphthylene             | 1.48695      | 1.67702  | 1.67702       | 0.000      | 12.78290    | 60.00000           | Averaged      |
| 47 Acenaphthene               | 0.94692      | 1.00401  | 1.00401       | 0.001      | 6.02959     | 20.00000           | Averaged ccc  |
| 48 2,4-Dinitrophenol          | 0.11484      | 0.10141  | 0.10141       | 0.050      | -11.69404   | 60.00000           | Averaged spcc |
| 49 Dibenzofuran               | 1.21446      | 1.27596  | 1.27596       | 0.000      | 5.06408     | 60.00000           | Averaged      |
| 51 Diethylphthalate           | 1.07824      | 1.17796  | 1.17796       | 0.000      | 9.24894     | 60.00000           | Averaged      |
| 52 4-Nitrophenol              | 0.18279      | 0.19161  | 0.19161       | 0.050      | 4.82259     | 60.00000           | Averaged spcc |
| 53 Fluorene                   | 1.02579      | 1.11808  | 1.11808       | 0.000      | 8.99688     | 60.00000           | Averaged      |
| 54 4-Chlorophenylphenylether  | 0.48232      | 0.49999  | 0.49999       | 0.000      | 3.66212     | 60.00000           | Averaged      |
| 55 2-Methyl-4,6-dinitrophenol | 0.10303      | 0.13047  | 0.13047       | 0.000      | 26.63294    | 60.00000           | Averaged      |
| 56 p-Nitroaniline             | 40.51800     | 40.00000 | 0.21760       | 0.000      | 1.29499     | 60.00000           | Linear        |
| 133 Diphenylamine             | 0.53006      | 0.53974  | 0.53974       | 0.001      | 1.82484     | 20.00000           | Averaged ccc  |
| 58 1,2-Diphenylhydrazine      | 0.78142      | 0.80468  | 0.80468       | 0.000      | 2.97642     | 60.00000           | Averaged      |
| 61 4-Bromophenylphenylether   | 0.17043      | 0.16965  | 0.16965       | 0.000      | -0.46057    | 60.00000           | Averaged      |
| 63 Hexachlorobenzene          | 0.17700      | 0.17250  | 0.17250       | 0.000      | -2.54123    | 60.00000           | Averaged      |
| 65 Pentachlorophenol          | 0.10027      | 0.10278  | 0.10278       | 0.001      | 2.51088     | 20.00000           | Averaged ccc  |
| 206 n-Octadecane              | 0.65176      | 0.65600  | 0.65600       | 0.000      | 0.65012     | 60.00000           | Averaged      |
| 68 Phenanthrene               | 0.87923      | 0.94546  | 0.94546       | 0.000      | 7.53310     | 60.00000           | Averaged      |
| 69 Anthracene                 | 0.87768      | 0.98015  | 0.98015       | 0.000      | 11.67622    | 60.00000           | Averaged      |
| 72 Di-n-butylphthalate        | 1.06159      | 1.15927  | 1.15927       | 0.000      | 9.20088     | 60.00000           | Averaged      |
| 76 Fluoranthene               | 0.80003      | 0.91399  | 0.91399       | 0.001      | 14.24505    | 20.00000           | Averaged ccc  |
| 79 Pyrene                     | 1.14589      | 1.22409  | 1.22409       | 0.000      | 6.82447     | 60.00000           | Averaged      |
| 85 Butylbenzylphthalate       | 0.57344      | 0.61854  | 0.61854       | 0.000      | 7.86585     | 60.00000           | Averaged      |
| 89 Benzo(a)anthracene         | 0.91588      | 1.00476  | 1.00476       | 0.000      | 9.70420     | 60.00000           | Averaged      |
| 92 Chrysene                   | 0.86151      | 0.94852  | 0.94852       | 0.000      | 10.09975    | 60.00000           | Averaged      |
| 93 bis(2-Ethylhexyl)phthalate | 0.78921      | 0.85269  | 0.85269       | 0.000      | 8.04326     | 60.00000           | Averaged      |

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 21-JAN-2010 00:59  
Lab File ID: s3a2030.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010  
Analysis Type: Init. Cal. Times: 17:59 00:33  
Lab Sample ID: WBN100106-09.3 Quant Type: ISTD  
Method: /chem/MSD3.i/s012010a.b/MSD3-8270R-AQA-012010.m

| COMPOUND                        | RRF / AMOUNT | RF40    | CCAL<br>RRF40 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE   |
|---------------------------------|--------------|---------|---------------|------------|-------------|--------------------|--------------|
| 94 Di-n-octylphthalate          | 1.61982      | 1.70872 | 1.70872       | 0.001      | 5.48833     | 20.00000           | Averaged ccc |
| 95 Benzo(b)fluoranthene         | 0.93870      | 1.09274 | 1.09274       | 0.000      | 16.40938    | 60.00000           | Averaged     |
| 96 Benzo(k)fluoranthene         | 0.97450      | 1.10633 | 1.10633       | 0.000      | 13.52818    | 60.00000           | Averaged     |
| 97 Benzo(a)pyrene               | 0.81798      | 0.96500 | 0.96500       | 0.001      | 17.97377    | 20.00000           | Averaged ccc |
| 99 Indeno(1,2,3-cd)pyrene       | 0.66728      | 0.80721 | 0.80721       | 0.000      | 20.96896    | 60.00000           | Averaged     |
| 100 Dibenzo(a,h)anthracene      | 0.54458      | 0.66537 | 0.66537       | 0.000      | 22.17901    | 60.00000           | Averaged     |
| 101 Benzo(ghi)perylene          | 0.54772      | 0.65631 | 0.65631       | 0.000      | 19.82602    | 60.00000           | Averaged     |
| 126 m-Dinitrobenzene            | 0.18506      | 0.19464 | 0.19464       | 0.000      | 5.17721     | 60.00000           | Averaged     |
| 130 2,3,4,6-Tetrachlorophenol   | 0.24334      | 0.24186 | 0.24186       | 0.000      | -0.60826    | 60.00000           | Averaged     |
| 143 Dinoseb                     | 0.14194      | 0.14693 | 0.14693       | 0.000      | 3.51444     | 60.00000           | Averaged     |
| 173 Carbazole                   | 0.71254      | 0.72438 | 0.72438       | 0.000      | 1.66242     | 60.00000           | Averaged     |
| 184 p-Benzoquinone              | 0.09247      | 0.17801 | 0.17801       | 0.000      | 92.51512    | 60.00000           | Averaged <-  |
| 192 Methoxychlor                | 0.51665      | 0.57043 | 0.57043       | 0.000      | 10.40900    | 60.00000           | Averaged     |
| 211 p-Toluidine                 | 0.91289      | 0.99695 | 0.99695       | 0.000      | 9.20880     | 60.00000           | Averaged     |
| 210 m-Toluidine                 | 1.30281      | 1.16582 | 1.16582       | 0.000      | -10.51463   | 60.00000           | Averaged     |
| 26 Phthalic anhydride           | 0.10481      | 0.13887 | 0.13887       | 0.000      | 32.49582    | 60.00000           | Averaged     |
| 179 Dibenzo(a,e)pyrene          | 0.23979      | 0.19603 | 0.19603       | 0.000      | -18.24896   | 60.00000           | Averaged     |
| 214 1,4-Dinitrobenzene          | 0.21468      | 0.22373 | 0.22373       | 0.000      | 4.21365     | 60.00000           | Averaged     |
| 215 2-Ethoxyethanol             | 0.84974      | 0.88902 | 0.88902       | 0.000      | 4.62255     | 60.00000           | Averaged     |
| 216 Methylenebis(2-chloroanilin | 0.10764      | 0.13594 | 0.13594       | 0.000      | 26.28659    | 60.00000           | Averaged     |
| M 225 Trichlorophenols          | 0.29823      | 0.30333 | 0.30333       | 0.000      | 1.71173     | 60.00000           | Averaged     |
| M 226 Tetrachlorophenols        | 0.24334      | 0.24186 | 0.24186       | 0.000      | -0.60826    | 60.00000           | Averaged     |
| M 227 Benzo(b,k)fluoranthene    | 0.95660      | 1.09953 | 1.09953       | 0.000      | 14.94183    | 60.00000           | Averaged     |

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012010a.b/s3a2030.d  
Lab Smp Id: WBN100106-09.3 Client Smp ID: MEGAICV  
Inj Date : 21-JAN-2010 00:59  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |WBN100106-09.3|40PPM|1|SVMF|1|MEGAICV  
Misc Info : |MSD8270|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012010a.b/MSD3-8270R-AQA-012010.m  
Meth Date : 21-Jan-2010 09:23 jen00986 Quant Type: ISTD  
Cal Date : 20-JAN-2010 21:56 Cal File: s3a2023.d  
Als bottle: 11 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: MEGAII.sub  
Target Version: 3.50  
Processing Host: hpc1p1

| Compounds                       | QUANT SIG |        |        |         | RESPONSE | AMOUNTS            |                   |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                 | MASS      | RT     | EXP RT | REL RT  |          | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| * 10 1,4-Dichlorobenzene-d4     | 152       | 4.782  | 4.782  | (1.000) | 478316   | 40.0000            |                   |
| * 29 Naphthalene-d8             | 136       | 6.065  | 6.065  | (1.000) | 1900671  | 40.0000            |                   |
| * 46 Acenaphthene-d10           | 164       | 7.942  | 7.942  | (1.000) | 949249   | 40.0000            |                   |
| * 67 Phenanthrene-d10           | 188       | 9.555  | 9.555  | (1.000) | 1476723  | 40.0000            |                   |
| * 91 Chrysene-d12               | 240       | 12.577 | 12.577 | (1.000) | 1131079  | 40.0000            |                   |
| * 98 Perylene-d12               | 264       | 14.896 | 14.896 | (1.000) | 833917   | 40.0000            |                   |
| \$ 3 2-Fluorophenol             | 112       | 3.592  | 3.592  | (0.751) | 510760   | 40.0000            | 41.0              |
| \$ 5 Phenol-d5                  | 99        | 4.380  | 4.380  | (0.916) | 625047   | 40.0000            | 40.0              |
| \$ 20 Nitrobenzene-d5           | 82        | 5.322  | 5.322  | (0.878) | 601825   | 40.0000            | 42.9              |
| \$ 39 2-Fluorobiphenyl          | 172       | 7.193  | 7.193  | (0.906) | 1028393  | 40.0000            | 41.9              |
| \$ 60 2,4,6-Tribromophenol      | 329       | 8.791  | 8.791  | (1.107) | 110031   | 40.0000            | 40.4              |
| \$ 81 p-Terphenyl-d14           | 244       | 11.270 | 11.270 | (0.896) | 846084   | 40.0000            | 43.5              |
| 1 N-Methyl-N-nitrosomethylamine | 74        | 2.601  | 2.601  | (0.544) | 339980   | 40.0000            | 39.0              |
| 2 Pyridine                      | 79        | 2.642  | 2.642  | (0.552) | 425311   | 40.0000            | 43.7              |
| 4 Aniline                       | 66        | 4.468  | 4.468  | (0.934) | 296126   | 40.0000            | 40.6              |
| 6 Phenol                        | 94        | 4.395  | 4.395  | (0.919) | 655519   | 40.0000            | 39.6(Q)           |
| 7 bis(2-Chloroethyl) ether      | 63        | 4.506  | 4.506  | (0.942) | 490059   | 40.0000            | 37.4              |
| 8 2-Chlorophenol                | 128       | 4.577  | 4.577  | (0.957) | 495153   | 40.0000            | 39.4              |
| 203 n-Decane                    | 43        | 4.583  | 4.583  | (0.958) | 790478   | 40.0000            | 41.4              |
| 9 1,3-Dichlorobenzene           | 146       | 4.729  | 4.729  | (0.989) | 580521   | 40.0000            | 40.1              |
| 11 1,4-Dichlorobenzene          | 146       | 4.800  | 4.800  | (1.004) | 582290   | 40.0000            | 39.7              |
| 13 1,2-Dichlorobenzene          | 146       | 4.947  | 4.947  | (1.034) | 552180   | 40.0000            | 40.2              |
| 14 bis(2-Chloroisopropyl)ether  | 45        | 5.014  | 5.014  | (1.048) | 1263259  | 40.0000            | 40.8              |
| 12 Benzyl alcohol               | 108       | 4.894  | 4.894  | (1.023) | 351387   | 40.0000            | 40.2              |
| 15 o-Cresol                     | 107       | 4.976  | 4.976  | (1.041) | 438993   | 40.0000            | 40.8              |
| 18 m,p-Cresols                  | 107       | 5.129  | 5.129  | (1.072) | 578688   | 40.0000            | 41.3              |

| Compounds                     | QUANT SIG |        |        | REL RT  | RESPONSE | AMOUNTS            |                   |
|-------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                               | MASS      | RT     | EXP RT |         |          | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| =====                         | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| 17 N-Nitrosodipropylamine     | 70        | 5.155  | 5.155  | (1.078) | 430182   | 40.0000            | 40.5              |
| 19 Hexachloroethane           | 117       | 5.281  | 5.281  | (1.104) | 243530   | 40.0000            | 38.7              |
| 21 Nitrobenzene               | 77        | 5.343  | 5.343  | (0.881) | 633918   | 40.0000            | 42.9              |
| 22 Isophorone                 | 82        | 5.578  | 5.578  | (0.920) | 1095915  | 40.0000            | 41.9              |
| 23 2-Nitrophenol              | 139       | 5.660  | 5.660  | (0.933) | 272103   | 40.0000            | 40.2              |
| 24 2,4-Dimethylphenol         | 122       | 5.669  | 5.669  | (0.935) | 490044   | 40.0000            | 41.8              |
| 25 bis(2-Chloroethoxy)methane | 93        | 5.777  | 5.777  | (0.953) | 626612   | 40.0000            | 41.2              |
| 26 2,4-Dichlorophenol         | 162       | 5.898  | 5.898  | (0.972) | 409207   | 40.0000            | 41.5              |
| 27 Benzoic acid               | 105       | 5.771  | 5.771  | (0.952) | 359896   | 40.0000            | 43.7 (H)          |
| 28 1,2,4-Trichlorobenzene     | 180       | 5.995  | 5.995  | (0.988) | 451131   | 40.0000            | 41.2              |
| 30 Naphthalene                | 128       | 6.089  | 6.089  | (1.004) | 1572162  | 40.0000            | 39.3              |
| 204 alpha-Terpineol           | 59        | 6.074  | 6.074  | (1.001) | 525364   | 40.0000            | 39.9              |
| 31 4-Chloroaniline            | 127       | 6.127  | 6.127  | (1.010) | 545416   | 40.0000            | 45.1              |
| 32 Hexachlorobutadiene        | 225       | 6.195  | 6.195  | (1.021) | 259095   | 40.0000            | 41.5              |
| 33 4-Chloro-3-methylphenol    | 107       | 6.608  | 6.608  | (1.090) | 466334   | 40.0000            | 41.8              |
| 34 2-Methylnaphthalene        | 142       | 6.814  | 6.814  | (1.123) | 1075137  | 40.0000            | 44.7              |
| 35 1-Methylnaphthalene        | 142       | 6.920  | 6.920  | (1.141) | 1012751  | 40.0000            | 41.5              |
| 36 Hexachlorocyclopentadiene  | 237       | 6.967  | 6.967  | (0.877) | 189378   | 40.0000            | 35.0              |
| 205 2,3-Dichloroaniline       | 161       | 7.111  | 7.111  | (0.895) | 490842   | 40.0000            | 40.6              |
| 37 2,4,6-Trichlorophenol      | 196       | 7.102  | 7.102  | (0.894) | 262115   | 40.0000            | 38.5              |
| 38 2,4,5-Trichlorophenol      | 196       | 7.137  | 7.137  | (0.899) | 313762   | 40.0000            | 42.7              |
| 40 2-Chloronaphthalene        | 162       | 7.337  | 7.337  | (0.924) | 893462   | 40.0000            | 39.8              |
| 42 o-Nitroaniline             | 65        | 7.437  | 7.437  | (0.936) | 357794   | 40.0000            | 40.6              |
| 41 m-Nitroaniline             | 138       | 7.883  | 7.883  | (0.993) | 234062   | 40.0000            | 44.1              |
| 43 Dimethylphthalate          | 163       | 7.628  | 7.628  | (0.960) | 1101902  | 40.0000            | 42.8              |
| 44 2,6-Dinitrotoluene         | 165       | 7.698  | 7.698  | (0.969) | 257764   | 40.0000            | 42.1              |
| 50 2,4-Dinitrotoluene         | 165       | 8.130  | 8.130  | (1.024) | 335252   | 40.0000            | 44.1              |
| 45 Acenaphthylene             | 152       | 7.792  | 7.792  | (0.981) | 1591910  | 40.0000            | 45.1              |
| 47 Acenaphthene               | 154       | 7.977  | 7.977  | (1.004) | 953057   | 40.0000            | 42.4              |
| 48 2,4-Dinitrophenol          | 184       | 7.992  | 7.992  | (1.006) | 96267    | 40.0000            | 35.3              |
| 49 Dibenzofuran               | 168       | 8.159  | 8.159  | (1.027) | 1211202  | 40.0000            | 42.0              |
| 51 Diethylphthalate           | 149       | 8.380  | 8.380  | (1.055) | 1118181  | 40.0000            | 43.7              |
| 52 4-Nitrophenol              | 139       | 8.033  | 8.033  | (1.011) | 181882   | 40.0000            | 41.9              |
| 53 Fluorene                   | 166       | 8.533  | 8.533  | (1.074) | 1061338  | 40.0000            | 43.6              |
| 54 4-Chlorophenylphenylether  | 204       | 8.518  | 8.518  | (1.073) | 474613   | 40.0000            | 41.5              |
| 55 2-Methyl-4,6-dinitrophenol | 198       | 8.574  | 8.574  | (0.897) | 192668   | 40.0000            | 50.6              |
| 56 p-Nitroaniline             | 138       | 8.547  | 8.547  | (1.076) | 206560   | 40.0000            | 40.5              |
| 133 Diphenylamine             | 169       | 8.647  | 8.647  | (0.905) | 797043   | 40.0000            | 40.7              |
| 58 1,2-Diphenylhydrazine      | 77        | 8.694  | 8.694  | (0.910) | 1188292  | 40.0000            | 41.2              |
| 61 4-Bromophenylphenylether   | 248       | 9.053  | 9.053  | (0.947) | 250520   | 40.0000            | 39.8              |
| 63 Hexachlorobenzene          | 284       | 9.123  | 9.123  | (0.955) | 254740   | 40.0000            | 39.0              |
| 65 Pentachlorophenol          | 266       | 9.329  | 9.329  | (0.976) | 151784   | 40.0000            | 41.0              |
| 206 n-Octadecane              | 57        | 9.382  | 9.382  | (0.982) | 968723   | 40.0000            | 40.3              |
| 68 Phenanthrene               | 178       | 9.585  | 9.585  | (1.003) | 1396181  | 40.0000            | 43.0              |
| 69 Anthracene                 | 178       | 9.641  | 9.641  | (1.009) | 1447417  | 40.0000            | 44.7              |
| 72 Di-n-butylphthalate        | 149       | 10.146 | 10.146 | (1.062) | 1711919  | 40.0000            | 43.7              |
| 76 Fluoranthene               | 202       | 10.876 | 10.876 | (1.138) | 1349711  | 40.0000            | 45.7              |

| Compounds                         | QUANT SIG |        |        |         |          | AMOUNTS            |                   |
|-----------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                   | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| 79 Pyrene                         | 202       | 11.126 | 11.126 | (0.885) | 1384548  | 40.0000            | 42.7              |
| 85 Butylbenzylphthalate           | 149       | 11.801 | 11.801 | (0.938) | 699620   | 40.0000            | 43.1              |
| 89 Benzo(a)anthracene             | 228       | 12.557 | 12.557 | (0.998) | 1136459  | 40.0000            | 43.9              |
| 92 Chrysene                       | 228       | 12.613 | 12.613 | (1.003) | 1072849  | 40.0000            | 44.0              |
| 93 bis(2-Ethylhexyl)phthalate     | 149       | 12.521 | 12.521 | (0.996) | 964461   | 40.0000            | 43.2              |
| 94 Di-n-octylphthalate            | 149       | 13.508 | 13.508 | (0.907) | 1424930  | 40.0000            | 42.2              |
| 95 Benzo(b)fluoranthene           | 252       | 14.221 | 14.221 | (0.955) | 911254   | 40.0000            | 46.6              |
| 96 Benzo(k)fluoranthene           | 252       | 14.271 | 14.271 | (0.958) | 922585   | 40.0000            | 45.4              |
| 97 Benzo(a)pyrene                 | 252       | 14.796 | 14.796 | (0.993) | 804729   | 40.0000            | 47.2              |
| 99 Indeno(1,2,3-cd)pyrene         | 276       | 16.877 | 16.877 | (1.133) | 673143   | 40.0000            | 48.4              |
| 100 Dibenzo(a,h)anthracene        | 278       | 16.909 | 16.909 | (1.135) | 554860   | 40.0000            | 48.9              |
| 101 Benzo(ghi)perylene            | 276       | 17.388 | 17.388 | (1.167) | 547305   | 40.0000            | 47.9(Q)           |
| 126 m-Dinitrobenzene              | 168       | 7.669  | 7.669  | (0.966) | 184765   | 40.0000            | 42.1              |
| 130 2,3,4,6-Tetrachlorophenol     | 232       | 8.280  | 8.280  | (1.043) | 229581   | 40.0000            | 39.8              |
| 143 Dinoseb                       | 211       | 9.517  | 9.517  | (0.996) | 216974   | 40.0000            | 41.4              |
| 173 Carbazole                     | 167       | 9.802  | 9.802  | (1.026) | 1069713  | 40.0000            | 40.7              |
| 184 p-Benzoquinone                | 54        | 4.034  | 4.034  | (0.844) | 85145    | 40.0000            | 77.0              |
| 192 Methoxychlor                  | 227       | 12.427 | 12.427 | (0.988) | 645202   | 40.0000            | 44.2              |
| 211 p-Toluidine                   | 106       | 5.202  | 5.202  | (1.088) | 476859   | 40.0000            | 43.7              |
| 210 m-Toluidine                   | 106       | 5.234  | 5.234  | (1.095) | 557632   | 40.0000            | 35.8              |
| 26 Phthalic anhydride             | 104       | 6.870  | 6.870  | (1.133) | 263941   | 40.0000            | 53.0              |
| 179 Dibenzo(a,e)pyrene            | 302       | 21.055 | 21.055 | (1.413) | 163472   | 40.0000            | 32.7              |
| 214 1,4-Dinitrobenzene            | 75        | 7.590  | 7.590  | (0.956) | 212371   | 40.0000            | 41.7              |
| 215 2-Ethoxyethanol               | 59        | 2.387  | 2.387  | (0.499) | 425233   | 40.0000            | 41.8              |
| 216 Methylenebis(2-chloroaniline) | 231       | 12.504 | 12.504 | (0.994) | 153759   | 40.0000            | 50.5(Q)           |
| M 225 Trichlorophenols            | 196       |        |        |         | 575877   | 80.0000            | 81.4              |
| M 226 Tetrachlorophenols          | 232       |        |        |         | 229581   | 40.0000            | 39.8              |
| M 227 Benzo(b,k)fluoranthene      | 252       |        |        |         | 1833839  | 80.0000            | 92.0              |

#### QC Flag Legend

Q - Qualifier signal failed the ratio test.  
 H - Operator selected an alternate compound hit.

Data File: /chem/MSD3.i/s012010a.k/33a2030.d

Date: 21-JAN-2010 00:59

Client ID: HEGAICV

Sample Info: IWBND00106-09.3140PH11SYH11HEGAICV

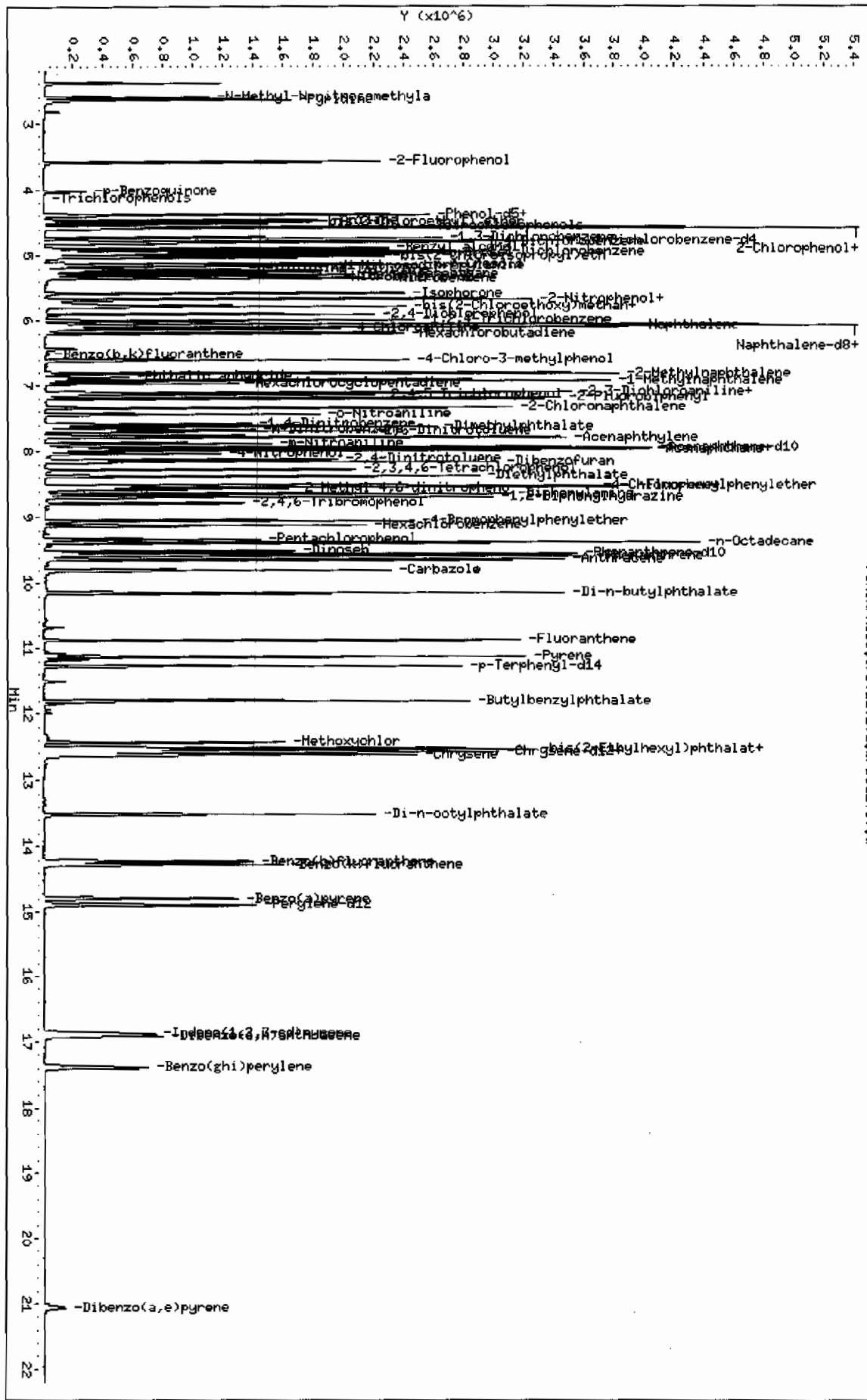
Column phase: 3M DB-SHS

Instrument: MSD3.i

Operator: JLDI

Column diameter: 0.20

/chem/MSD3.i/s012010a.k/33a2030.d



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 21-JAN-2010 01:29  
Lab File ID: s3a2031.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010  
Analysis Type: Init. Cal. Times: 17:59 00:33  
Lab Sample ID: WBN100103-08.1 Quant Type: ISTD  
Method: /chem/MSD3.i/s012010a.b/MSD3-8270R-AQA-012010.m

| COMPOUND                       | RRF / AMOUNT | RF40     | CCAL<br>RRF40 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE |
|--------------------------------|--------------|----------|---------------|------------|-------------|--------------------|------------|
| 209 Benzaldehyde               | 1.00310      | 0.87886  | 0.87886       | 0.000      | -12.38528   | 60.00000           | Averaged   |
| 16 Acetophenone                | 1.32216      | 1.42921  | 1.42921       | 0.000      | 8.09690     | 60.00000           | Averaged   |
| 189 Caprolactam                | 0.08576      | 0.10573  | 0.10573       | 0.000      | 23.29058    | 60.00000           | Averaged   |
| 208 1,1'-Biphenyl              | 1.21038      | 1.35841  | 1.35841       | 0.000      | 12.23019    | 60.00000           | Averaged   |
| 207 Atrazine                   | 0.04628      | 0.05463  | 0.05463       | 0.000      | 18.04776    | 60.00000           | Averaged   |
| 77 Benidine                    | 42.00694     | 40.00000 | 0.37178       | 0.000      | 5.01735     | 60.00000           | Linear     |
| 90 3,3'-Dichlorobenzidine      | 43.71602     | 40.00000 | 0.30161       | 0.000      | 9.29005     | 60.00000           | Linear     |
| 102 1,4-Dioxane                | 0.37050      | 0.48478  | 0.48478       | 0.000      | 30.84714    | 60.00000           | Averaged   |
| 103 Methyl methacrylate        | 0.21351      | 0.27929  | 0.27929       | 0.000      | 30.81270    | 60.00000           | Averaged   |
| 104 Ethyl methacrylate         | 0.89246      | 1.16472  | 1.16472       | 0.000      | 30.50708    | 60.00000           | Averaged   |
| 105 2-Picoline                 | 1.30074      | 1.34281  | 1.34281       | 0.000      | 3.23452     | 60.00000           | Averaged   |
| 106 N-Nitrosomethylethylamine  | 0.57807      | 0.62738  | 0.62738       | 0.000      | 8.53033     | 60.00000           | Averaged   |
| 107 Methyl methanesulfonate    | 0.60378      | 0.70581  | 0.70581       | 0.000      | 16.89775    | 60.00000           | Averaged   |
| 108 N-Nitrosodiethylamine      | 0.58167      | 0.62350  | 0.62350       | 0.000      | 7.19031     | 60.00000           | Averaged   |
| 109 Ethyl Methanesulfonate     | 0.74637      | 0.99843  | 0.99843       | 0.000      | 33.77148    | 60.00000           | Averaged   |
| 110 Pentachloroethane          | 0.32905      | 0.48815  | 0.48815       | 0.000      | 48.35264    | 60.00000           | Averaged   |
| 111 N-Nitrosopyrrolidine       | 0.60059      | 0.65198  | 0.65198       | 0.000      | 8.55722     | 60.00000           | Averaged   |
| 113 N-Nitrosomorpholine        | 0.98604      | 1.06719  | 1.06719       | 0.000      | 8.22947     | 60.00000           | Averaged   |
| 114 o-Toluidine                | 1.80736      | 1.88793  | 1.88793       | 0.000      | 4.45782     | 60.00000           | Averaged   |
| 115 N-Nitrosopiperidine        | 0.15108      | 0.16164  | 0.16164       | 0.000      | 6.98512     | 60.00000           | Averaged   |
| 116 a,a-Dimethylphenethylamine | 1.11880      | 1.16043  | 1.16043       | 0.000      | 3.72071     | 60.00000           | Averaged   |
| 118 2,6-Dichlorophenol         | 0.21531      | 0.25050  | 0.25050       | 0.000      | 16.34370    | 60.00000           | Averaged   |
| 119 Hexachloropropene          | 0.11708      | 0.19865  | 0.19865       | 0.000      | 69.66795    | 60.00000           | Averaged   |
| 120 p-Phenylenediamine         | 0.24808      | 0.28612  | 0.28612       | 0.000      | 15.33691    | 60.00000           | Averaged   |
| 121 N-Nitrosodi-n-butylamine   | 0.23566      | 0.24977  | 0.24977       | 0.000      | 5.98473     | 60.00000           | Averaged   |
| 122 Safrole                    | 0.19323      | 0.24544  | 0.24544       | 0.000      | 27.02225    | 60.00000           | Averaged   |
| 123 1,2,4,5-Tetrachlorobenzene | 0.42534      | 0.50468  | 0.50468       | 0.000      | 18.65216    | 60.00000           | Averaged   |
| 124 Isosafrole                 | 0.35652      | 0.51744  | 0.51744       | 0.000      | 45.13574    | 60.00000           | Averaged   |
| 125 1,4-Naphthoquinone         | 0.33545      | 0.36014  | 0.36014       | 0.000      | 7.36120     | 60.00000           | Averaged   |
| 127 Pentachlorobenzene         | 0.37060      | 0.42276  | 0.42276       | 0.000      | 14.07224    | 60.00000           | Averaged   |
| 128 1-Naphthylamine            | 0.91242      | 1.03143  | 1.03143       | 0.000      | 13.04392    | 60.00000           | Averaged   |
| 129 2-Naphthylamine            | 1.00263      | 1.12891  | 1.12891       | 0.000      | 12.59532    | 60.00000           | Averaged   |
| 131 5-Nitro-o-toluidine        | 0.29533      | 0.33028  | 0.33028       | 0.000      | 11.83547    | 60.00000           | Averaged   |
| 136 1,3,5-Trinitrobenzene      | 0.14894      | 0.22680  | 0.22680       | 0.000      | 52.28395    | 60.00000           | Averaged   |
| 137 Phenacetin                 | 0.33125      | 0.38915  | 0.38915       | 0.000      | 17.47830    | 60.00000           | Averaged   |
| 138 Diallate                   | 0.31820      | 0.32997  | 0.32997       | 0.000      | 3.69872     | 60.00000           | Averaged   |

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 21-JAN-2010 01:29  
 Lab File ID: s3a2031.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010  
 Analysis Type: Init. Cal. Times: 17:59 00:33  
 Lab Sample ID: WBN100103-08.1 Quant Type: ISTD  
 Method: /chem/MSD3.i/s012010a.b/MSD3-8270R-AQA-012010.m

| COMPOUND                          | RRF / AMOUNT | RF40     | CCAL<br>RRF40 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE |
|-----------------------------------|--------------|----------|---------------|------------|-------------|--------------------|------------|
| 140 4-Aminobiphenyl               | 0.63580      | 0.70273  | 0.70273       | 0.000      | 10.52630    | 60.00000           | Averaged   |
| 141 Pentachloronitrobenzene       | 0.07853      | 0.09143  | 0.09143       | 0.000      | 16.43821    | 60.00000           | Averaged   |
| 142 Pronamide                     | 0.29619      | 0.34625  | 0.34625       | 0.000      | 16.89924    | 60.00000           | Averaged   |
| 146 4-Nitroquinoline-1-oxide      | 0.03387      | 0.03596  | 0.03596       | 0.000      | 6.17128     | 60.00000           | Averaged   |
| 147 Methapyrilene                 | 0.52598      | 0.61294  | 0.61294       | 0.000      | 16.53393    | 60.00000           | Averaged   |
| 148 Isodrin                       | 0.11094      | 0.11480  | 0.11480       | 0.000      | 3.48482     | 60.00000           | Averaged   |
| 149 Aramite                       | 0.04585      | 0.04869  | 0.04869       | 0.000      | 6.19320     | 60.00000           | Averaged   |
| 150 Kepone                        | 0.06767      | 0.07404  | 0.07404       | 0.000      | 9.41477     | 60.00000           | Averaged   |
| 151 p-(Dimethylamino)azobenzene   | 0.39647      | 0.41235  | 0.41235       | 0.000      | 4.00381     | 60.00000           | Averaged   |
| 152 Chlorobenzilate               | 0.32229      | 0.35506  | 0.35506       | 0.000      | 10.16696    | 60.00000           | Averaged   |
| 153 3,3'-Dimethylbenzidine        | 0.51678      | 0.53770  | 0.53770       | 0.000      | 4.04793     | 60.00000           | Averaged   |
| 155 2-Acetylaminofluorene         | 43.29018     | 40.00000 | 0.34384       | 0.000      | 8.22545     | 60.00000           | Linear     |
| 157 7,12Dimethylbenz(a)anthracene | 0.53008      | 0.55722  | 0.55722       | 0.000      | 5.11999     | 60.00000           | Averaged   |
| 158 3-Methylcholanthrene          | 0.38427      | 0.46495  | 0.46495       | 0.000      | 20.99848    | 60.00000           | Averaged   |
| 212 Cis Diallate                  | 0.33782      | 0.46727  | 0.46727       | 0.000      | 38.32025    | 60.00000           | Averaged   |
| 213 Trans Diallate                | 0.37435      | 0.38819  | 0.38819       | 0.000      | 3.69872     | 60.00000           | Averaged   |



GEL Laboratories LLC

Data file : /chem/MSD3.i/s012010a.b/s3a2031.d  
Lab Smp Id: WBN100103-08.1 Client Smp ID: APICV  
Inj Date : 21-JAN-2010 01:29  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |WBN100103-08.1|40PPM|1|SVMF|1|APICV  
Misc Info : |MSD8270|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012010a.b/MSD3-8270R-AQA-012010.m  
Meth Date : 21-Jan-2010 09:24 jen00986 Quant Type: ISTD  
Cal Date : 20-JAN-2010 21:56 Cal File: s3a2023.d  
Als bottle: 32 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: AP12.sub  
Target Version: 3.50  
Processing Host: hpc1p1

| Compounds                     | QUANT SIG |        |        |         |          | AMOUNTS            |                   |
|-------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                               | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| * 10 1,4-Dichlorobenzene-d4   | 152       | 4.782  | 4.782  | (1.000) | 601996   | 40.0000            |                   |
| * 29 Naphthalene-d8           | 136       | 6.064  | 6.064  | (1.000) | 2246525  | 40.0000            |                   |
| * 46 Acenaphthene-d10         | 164       | 7.939  | 7.939  | (1.000) | 1188314  | 40.0000            |                   |
| * 67 Phenanthrene-d10         | 188       | 9.561  | 9.561  | (1.000) | 1851984  | 40.0000            |                   |
| * 91 Chrysene-d12             | 240       | 12.572 | 12.572 | (1.000) | 1380458  | 40.0000            |                   |
| * 98 Perylene-d12             | 264       | 14.895 | 14.895 | (1.000) | 919801   | 40.0000            |                   |
| 209 Benzaldehyde              | 77        | 4.377  | 4.377  | (0.915) | 529070   | 40.0000            | 35.0              |
| 16 Acetophenone               | 105       | 5.163  | 5.163  | (1.080) | 860378   | 40.0000            | 43.2              |
| 189 Caprolactam               | 113       | 6.504  | 6.504  | (1.073) | 237531   | 40.0000            | 49.3              |
| 208 1,1'-Biphenyl             | 154       | 7.311  | 7.311  | (0.921) | 1614222  | 40.0000            | 44.9              |
| 207 Atrazine                  | 173       | 9.217  | 9.217  | (0.964) | 101175   | 40.0000            | 47.2              |
| 77 Benzidine                  | 184       | 11.005 | 11.005 | (0.875) | 513228   | 40.0000            | 42.0              |
| 90 3,3'-Dichlorobenzidine     | 252       | 12.501 | 12.501 | (0.994) | 416362   | 40.0000            | 43.7              |
| 102 1,4-Dioxane               | 88        | 2.396  | 2.396  | (0.501) | 291838   | 40.0000            | 52.3              |
| 103 Methyl methacrylate       | 100       | 2.393  | 2.393  | (0.500) | 168133   | 40.0000            | 52.3              |
| 104 Ethyl methacrylate        | 69        | 2.912  | 2.912  | (0.609) | 701155   | 40.0000            | 52.2              |
| 105 2-Picoline                | 93        | 3.169  | 3.169  | (0.663) | 808367   | 40.0000            | 41.3              |
| 106 N-Nitrosomethylethylamine | 88        | 3.243  | 3.243  | (0.678) | 377681   | 40.0000            | 43.4              |
| 107 Methyl methanesulfonate   | 80        | 3.474  | 3.474  | (0.727) | 424893   | 40.0000            | 46.8              |
| 108 N-Nitrosodiethylamine     | 102       | 3.809  | 3.809  | (0.796) | 375342   | 40.0000            | 42.9              |
| 109 Ethyl Methanesulfonate    | 79        | 4.052  | 4.052  | (0.847) | 601051   | 40.0000            | 53.5              |
| 110 Pentachloroethane         | 167       | 4.521  | 4.521  | (0.945) | 293863   | 40.0000            | 59.3              |
| 111 N-Nitrosopyrrolidine      | 100       | 5.154  | 5.154  | (1.078) | 392491   | 40.0000            | 43.4 (Q)          |
| 113 N-Nitrosomorpholine       | 56        | 5.187  | 5.187  | (1.085) | 642444   | 40.0000            | 43.3              |
| 114 o-Toluidine               | 106       | 5.201  | 5.201  | (1.088) | 1136525  | 40.0000            | 41.8              |
| 115 N-Nitrosopiperidine       | 114       | 5.498  | 5.498  | (0.907) | 363120   | 40.0000            | 42.8              |

| Compounds                         | QUANT SIG |        |        |         |          | AMOUNTS            |                   |
|-----------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                   | MASS      | RT     | EXP RT | REJ. RT | RESPONSE | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| 116 a,a-Dimethylphenethylamine    | 58        | 5.896  | 5.896  | (0.972) | 2606938  | 40.0000            | 41.5              |
| 118 2,6-Dichlorophenol            | 162       | 6.137  | 6.137  | (1.012) | 562759   | 40.0000            | 46.5              |
| 119 Hexachloropropene             | 213       | 6.169  | 6.169  | (1.017) | 446272   | 40.0000            | 67.9              |
| 120 p-Phenylenediamine            | 108       | 6.507  | 6.507  | (1.073) | 642785   | 40.0000            | 46.1              |
| 121 N-Nitrosodi-n-butylamine      | 84        | 6.469  | 6.469  | (1.067) | 561110   | 40.0000            | 42.4(Q)           |
| 122 Safrole                       | 162       | 6.704  | 6.704  | (1.106) | 551387   | 40.0000            | 50.8              |
| 123 1,2,4,5-Tetrachlorobenzene    | 216       | 6.985  | 6.985  | (0.880) | 599717   | 40.0000            | 47.5              |
| 124 Isosafrole                    | 162       | 7.261  | 7.261  | (0.915) | 614885   | 40.0000            | 58.0              |
| 125 1,4-Naphthoquinone            | 158       | 7.525  | 7.525  | (0.948) | 427957   | 40.0000            | 42.9              |
| 127 Pentachlorobenzene            | 250       | 8.109  | 8.109  | (1.021) | 502367   | 40.0000            | 45.6              |
| 128 1-Naphthylamine               | 143       | 8.244  | 8.244  | (1.038) | 1225664  | 40.0000            | 45.2              |
| 129 2-Naphthylamine               | 143       | 8.330  | 8.330  | (1.049) | 1341500  | 40.0000            | 45.0              |
| 131 5-Nitro-o-toluidine           | 152       | 8.538  | 8.538  | (1.075) | 392478   | 40.0000            | 44.7              |
| 136 1,3,5-Trinitrobenzene         | 75        | 8.917  | 8.917  | (0.933) | 420039   | 40.0000            | 60.9              |
| 137 Phenacetin                    | 108       | 8.978  | 8.978  | (0.939) | 720701   | 40.0000            | 47.0(Q)           |
| 138 Diallate                      | 86        | 8.946  | 8.946  | (0.936) | 611091   | 40.0000            | 41.5              |
| 140 4-Aminobiphenyl               | 169       | 9.340  | 9.340  | (0.977) | 1301442  | 40.0000            | 44.2              |
| 141 Pentachloronitrobenzene       | 237       | 9.346  | 9.346  | (0.978) | 169333   | 40.0000            | 46.6(Q)           |
| 142 Pronamide                     | 173       | 9.381  | 9.381  | (0.981) | 641242   | 40.0000            | 46.8              |
| 146 4-Nitroquinoline-1-oxide      | 101       | 10.417 | 10.417 | (1.090) | 66605    | 40.0000            | 42.5              |
| 147 Methapyrilene                 | 58        | 10.476 | 10.476 | (1.096) | 1135156  | 40.0000            | 46.6              |
| 148 Isodrin                       | 193       | 10.711 | 10.711 | (1.120) | 212615   | 40.0000            | 41.4              |
| 149 Aramite                       | 185       | 11.228 | 11.228 | (1.174) | 90172    | 40.0000            | 42.5              |
| 150 Kepone                        | 272       | 11.890 | 11.890 | (1.244) | 137118   | 40.0000            | 43.8              |
| 151 p-(Dimethylamino)azobenzene   | 120       | 11.422 | 11.422 | (0.909) | 569227   | 40.0000            | 41.6              |
| 152 Chlorobenzilate               | 251       | 11.464 | 11.464 | (0.912) | 490148   | 40.0000            | 44.1              |
| 153 3,3'-Dimethylbenzidine        | 212       | 11.807 | 11.807 | (0.939) | 742275   | 40.0000            | 41.6              |
| 155 2-Acetylaminofluorene         | 181       | 12.119 | 12.119 | (0.964) | 474661   | 40.0000            | 43.3              |
| 157 7,12Dimethylbenz(a)anthracene | 256       | 14.200 | 14.200 | (0.953) | 512532   | 40.0000            | 42.0              |
| 158 3-Methylcholanthrene          | 268       | 15.418 | 15.418 | (1.035) | 427666   | 40.0000            | 48.4(Q)           |
| 212 Cis Diallate                  | 86        | 9.046  | 9.046  | (0.946) | 129807   | 6.00000            | 8.3               |
| 213 Trans Diallate                | 86        | 8.946  | 8.946  | (0.936) | 611091   | 34.0000            | 35.2              |

#### QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/HSD3.i/s012010a,b/s3a2031.d

Date: 21-JAN-2010 04:29

Client ID: APICV

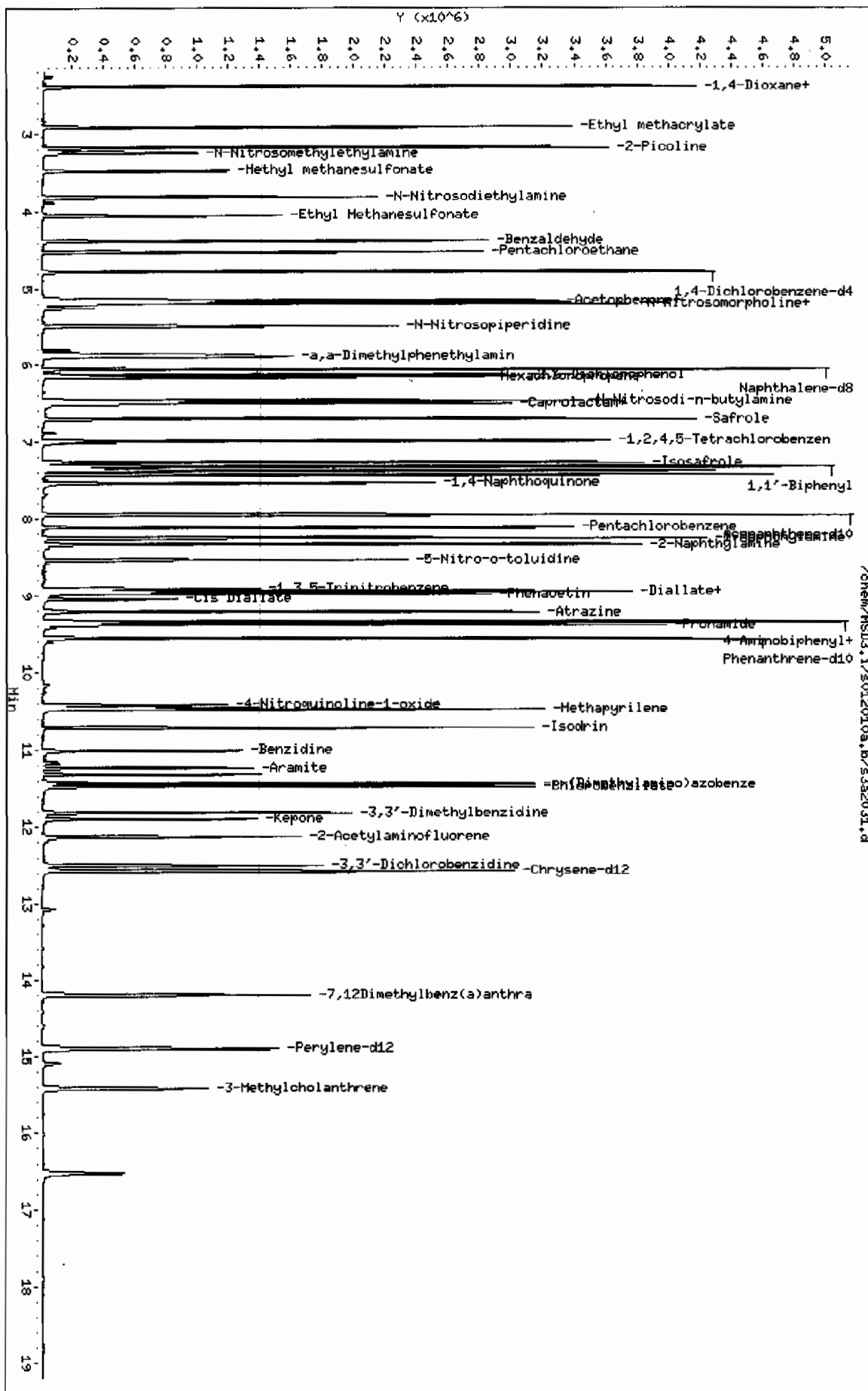
Sample Info: IWBNI00103-08.1140PH11(SWF11)APICV

Column phase: JSM DB-SHS

Instrument: HSD3.i

Operator: JLM

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 26-JAN-2010 11:48  
Lab File ID: s3a2607.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010  
Analysis Type: Init. Cal. Times: 17:59 23:34  
Lab Sample ID: WBN100121-17.2 Quant Type: ISTD  
Method: /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m

| COMPOUND                       | RRF / AMOUNT | RF40     | CCAL<br>RRF40 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE |
|--------------------------------|--------------|----------|---------------|------------|-------------|--------------------|------------|
| \$ 3 2-Fluorophenol            | 1.04085      | 1.02812  | 1.02812 0.000 | -1.22268   | 60.00000    | Averaged           |            |
| \$ 5 Phenol-d5                 | 1.30813      | 1.25058  | 1.25058 0.000 | -4.39899   | 60.00000    | Averaged           |            |
| \$ 20 Nitrobenzene-d5          | 0.29548      | 0.30023  | 0.30023 0.000 | 1.60929    | 60.00000    | Averaged           |            |
| \$ 39 2-Fluorobiphenyl         | 1.03392      | 1.13455  | 1.13455 0.000 | 9.73318    | 60.00000    | Averaged           |            |
| \$ 60 2,4,6-Tribromophenol     | 0.11467      | 0.11969  | 0.11969 0.000 | 4.37779    | 60.00000    | Averaged           |            |
| \$ 81 p-Terphenyl-d14          | 0.68752      | 0.86716  | 0.86716 0.000 | 26.12814   | 60.00000    | Averaged           |            |
| 1 N-Methyl-N-nitrosomethylami  | 0.72841      | 0.61631  | 0.61631 0.000 | -15.38947  | 60.00000    | Averaged           |            |
| 2 Pyridine                     | 0.81403      | 0.68929  | 0.68929 0.000 | -15.32314  | 60.00000    | Averaged           |            |
| 4 Aniline                      | 0.60975      | 0.57236  | 0.57236 0.000 | -6.13305   | 60.00000    | Averaged           |            |
| 6 Phenol                       | 1.38337      | 1.35051  | 1.35051 0.001 | -2.37579   | 20.00000    | Averaged ccc       |            |
| 7 bis(2-Chloroethyl) ether     | 1.09435      | 0.89686  | 0.89686 0.000 | -18.04642  | 60.00000    | Averaged           |            |
| 8 2-Chlorophenol               | 1.05048      | 1.11171  | 1.11171 0.000 | 5.82908    | 60.00000    | Averaged           |            |
| 203 n-Decane                   | 1.59470      | 1.34615  | 1.34615 0.000 | -15.58577  | 60.00000    | Averaged           |            |
| 9 1,3-Dichlorobenzene          | 1.20957      | 1.31686  | 1.31686 0.000 | 8.87000    | 60.00000    | Averaged           |            |
| 11 1,4-Dichlorobenzene         | 1.22630      | 1.31497  | 1.31497 0.001 | 7.23114    | 20.00000    | Averaged ccc       |            |
| 13 1,2-Dichlorobenzene         | 1.15004      | 1.23013  | 1.23013 0.000 | 6.96402    | 60.00000    | Averaged           |            |
| 14 bis(2-Chloroisopropyl)ether | 2.59104      | 2.12413  | 2.12413 0.000 | -18.01993  | 60.00000    | Averaged           |            |
| 12 Benzyl alcohol              | 0.73117      | 0.72793  | 0.72793 0.000 | -0.44429   | 60.00000    | Averaged           |            |
| 15 o-Cresol                    | 0.89964      | 0.91059  | 0.91059 0.000 | 1.21701    | 60.00000    | Averaged           |            |
| 18 m,p-Cresols                 | 1.17039      | 1.20499  | 1.20499 0.000 | 2.95651    | 60.00000    | Averaged           |            |
| 17 N-Nitrosodipropylamine      | 0.88907      | 0.84535  | 0.84535 0.050 | -4.91760   | 60.00000    | Averaged spcc      |            |
| 19 Hexachloroethane            | 0.52660      | 0.53102  | 0.53102 0.000 | 0.83975    | 60.00000    | Averaged           |            |
| 21 Nitrobenzene                | 0.31068      | 0.30659  | 0.30659 0.000 | -1.31854   | 60.00000    | Averaged           |            |
| 22 Isophorone                  | 0.55065      | 0.53738  | 0.53738 0.000 | -2.40958   | 60.00000    | Averaged           |            |
| 23 2-Nitrophenol               | 0.14255      | 0.15329  | 0.15329 0.001 | 7.53202    | 20.00000    | Averaged ccc       |            |
| 24 2,4-Dimethylphenol          | 0.24644      | 0.26260  | 0.26260 0.000 | 6.55627    | 60.00000    | Averaged           |            |
| 25 bis(2-Chloroethoxy)methane  | 0.31970      | 0.30314  | 0.30314 0.000 | -5.17965   | 60.00000    | Averaged           |            |
| 26 2,4-Dichlorophenol          | 0.20739      | 0.23359  | 0.23359 0.001 | 12.63392   | 20.00000    | Averaged ccc       |            |
| 27 Benzoic acid                | 0.17347      | 0.16685  | 0.16685 0.000 | -3.81471   | 60.00000    | Averaged           |            |
| 28 1,2,4-Trichlorobenzene      | 0.23033      | 0.25672  | 0.25672 0.000 | 11.45615   | 60.00000    | Averaged           |            |
| 30 Naphthalene                 | 0.84122      | 0.77665  | 0.77665 0.000 | -7.67633   | 60.00000    | Averaged           |            |
| 204 alpha-Terpineol            | 0.27709      | 0.24384  | 0.24384 0.000 | -12.00104  | 60.00000    | Averaged           |            |
| 31 4-Chloroaniline             | 45.69292     | 40.00000 | 0.29098 0.000 | 14.23231   | 60.00000    | Linear             |            |
| 32 Hexachlorobutadiene         | 0.13146      | 0.15054  | 0.15054 0.001 | 14.51136   | 20.00000    | Averaged ccc       |            |
| 33 4-Chloro-3-methylphenol     | 0.23504      | 0.25897  | 0.25897 0.001 | 10.18247   | 20.00000    | Averaged ccc       |            |
| 34 2-Methylnaphthalene         | 0.50578      | 0.54519  | 0.54519 0.000 | 7.79112    | 60.00000    | Averaged           |            |

## GEL Laboratories LLC

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 26-JAN-2010 11:48  
Lab File ID: s3a2607.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010  
Analysis Type: Init. Cal. Times: 17:59 23:34  
Lab Sample ID: WBN100121-17.2 Quant Type: ISTD  
Method: /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m

| COMPOUND                      | RRF / AMOUNT | RF40     | CCAL<br>RRF40 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE    |
|-------------------------------|--------------|----------|---------------|------------|-------------|--------------------|---------------|
| 35 1-Methylnaphthalene        | 0.51307      | 0.51607  | 0.51607       | 0.000      | 0.58458     | 60.00000           | Averaged      |
| 36 Hexachlorocyclopentadiene  | 0.22766      | 0.24157  | 0.24157       | 0.050      | 6.11431     | 60.00000           | Averaged spcc |
| 205 2,3-Dichloroaniline       | 0.50997      | 0.53189  | 0.53189       | 0.000      | 4.29800     | 60.00000           | Averaged      |
| 37 2,4,6-Trichlorophenol      | 0.28670      | 0.31909  | 0.31909       | 0.001      | 11.29693    | 20.00000           | Averaged ccc  |
| 38 2,4,5-Trichlorophenol      | 0.30976      | 0.35399  | 0.35399       | 0.000      | 14.27986    | 60.00000           | Averaged      |
| 40 2-Chloronaphthalene        | 0.94508      | 0.99814  | 0.99814       | 0.000      | 5.61499     | 60.00000           | Averaged      |
| 42 o-Nitroaniline             | 0.37117      | 0.32865  | 0.32865       | 0.000      | -11.45454   | 60.00000           | Averaged      |
| 41 m-Nitroaniline             | 43.55258     | 40.00000 | 0.24293       | 0.000      | 8.88146     | 60.00000           | Linear        |
| 43 Dimethylphthalate          | 1.08482      | 1.16420  | 1.16420       | 0.000      | 7.31701     | 60.00000           | Averaged      |
| 44 2,6-Dinitrotoluene         | 0.25779      | 0.27693  | 0.27693       | 0.000      | 7.42429     | 60.00000           | Averaged      |
| 50 2,4-Dinitrotoluene         | 0.32038      | 0.35425  | 0.35425       | 0.000      | 10.57194    | 60.00000           | Averaged      |
| 45 Acenaphthylene             | 1.48695      | 1.56796  | 1.56796       | 0.000      | 5.44849     | 60.00000           | Averaged      |
| 47 Acenaphthene               | 0.94692      | 0.96126  | 0.96126       | 0.001      | 1.51492     | 20.00000           | Averaged ccc  |
| 48 2,4-Dinitrophenol          | 0.11484      | 0.13507  | 0.13507       | 0.050      | 17.61344    | 60.00000           | Averaged spcc |
| 49 Dibenzofuran               | 1.21446      | 1.34468  | 1.34468       | 0.000      | 10.72270    | 60.00000           | Averaged      |
| 51 Diethylphthalate           | 1.07824      | 1.17692  | 1.17692       | 0.000      | 9.15236     | 60.00000           | Averaged      |
| 52 4-Nitrophenol              | 0.18279      | 0.20745  | 0.20745       | 0.050      | 13.48776    | 60.00000           | Averaged spcc |
| 53 Fluorene                   | 1.02579      | 1.08731  | 1.08731       | 0.000      | 5.99734     | 60.00000           | Averaged      |
| 54 4-Chlorophenylphenylether  | 0.48232      | 0.55027  | 0.55027       | 0.000      | 14.08677    | 60.00000           | Averaged      |
| 55 2-Methyl-4,6-dinitrophenol | 0.10303      | 0.15077  | 0.15077       | 0.000      | 46.33459    | 60.00000           | Averaged      |
| 56 p-Nitroaniline             | 43.91785     | 40.00000 | 0.23856       | 0.000      | 9.79463     | 60.00000           | Linear        |
| 133 Diphenylamine             | 0.53006      | 0.53928  | 0.53928       | 0.001      | 1.73894     | 20.00000           | Averaged ccc  |
| 58 1,2-Diphenylhydrazine      | 0.78142      | 0.69149  | 0.69149       | 0.000      | -11.50860   | 60.00000           | Averaged      |
| 61 4-Bromophenylphenylether   | 0.17043      | 0.16538  | 0.16538       | 0.000      | -2.96071    | 60.00000           | Averaged      |
| 63 Hexachlorobenzene          | 0.17700      | 0.17336  | 0.17336       | 0.000      | -2.05925    | 60.00000           | Averaged      |
| 65 Pentachlorophenol          | 0.10027      | 0.11476  | 0.11476       | 0.001      | 14.45004    | 20.00000           | Averaged ccc  |
| 206 n-Octadecane              | 0.65176      | 0.54096  | 0.54096       | 0.000      | -17.00010   | 60.00000           | Averaged      |
| 68 Phenanthrene               | 0.87923      | 0.88623  | 0.88623       | 0.000      | 0.79634     | 60.00000           | Averaged      |
| 69 Anthracene                 | 0.87768      | 0.91140  | 0.91140       | 0.000      | 3.84260     | 60.00000           | Averaged      |
| 72 Di-n-butylphthalate        | 1.06159      | 1.13894  | 1.13894       | 0.000      | 7.28607     | 60.00000           | Averaged      |
| 76 Fluoranthene               | 0.80003      | 0.88744  | 0.88744       | 0.001      | 10.92631    | 20.00000           | Averaged ccc  |
| 79 Pyrene                     | 1.14589      | 1.24742  | 1.24742       | 0.000      | 8.85959     | 60.00000           | Averaged      |
| 85 Butylbenzylphthalate       | 0.57344      | 0.61574  | 0.61574       | 0.000      | 7.37643     | 60.00000           | Averaged      |
| 89 Benzo(a)anthracene         | 0.91588      | 0.91279  | 0.91279       | 0.000      | -0.33767    | 60.00000           | Averaged      |
| 92 Chrysene                   | 0.86151      | 0.88413  | 0.88413       | 0.000      | 2.62549     | 60.00000           | Averaged      |
| 93 bis(2-Ethylhexyl)phthalate | 0.78921      | 0.84510  | 0.84510       | 0.000      | 7.08147     | 60.00000           | Averaged      |

## GEL Laboratories LLC

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 26-JAN-2010 11:48  
Lab File ID: s3a2607.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010  
Analysis Type: Init. Cal. Times: 17:59 23:34  
Lab Sample ID: WBN100121-17.2 Quant Type: ISTD  
Method: /chem/MSD3.1/s012610a.b/MSD3-8270R-AQA-012110.m

| COMPOUND                        | RRF / AMOUNT | RF40    | CCAL<br>RRF40 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE   |
|---------------------------------|--------------|---------|---------------|------------|-------------|--------------------|--------------|
| 94 Di-n-octylphthalate          | 1.61982      | 1.74352 | 1.74352       | 0.001      | 7.63656     | 20.00000           | Averaged ccc |
| 95 Benzo(b)fluoranthene         | 0.93870      | 0.98881 | 0.98881       | 0.000      | 5.33750     | 60.00000           | Averaged     |
| 96 Benzo(k)fluoranthene         | 0.97450      | 1.02248 | 1.02248       | 0.000      | 4.92391     | 60.00000           | Averaged     |
| 97 Benzo(a)pyrene               | 0.81798      | 0.89407 | 0.89407       | 0.001      | 9.30276     | 20.00000           | Averaged ccc |
| 99 Indeno(1,2,3-cd)pyrene       | 0.66728      | 0.77088 | 0.77088       | 0.000      | 15.52556    | 60.00000           | Averaged     |
| 100 Dibenzo(a,h)anthracene      | 0.54458      | 0.63585 | 0.63585       | 0.000      | 16.75973    | 60.00000           | Averaged     |
| 101 Benzo(ghi)perylene          | 0.54772      | 0.62788 | 0.62788       | 0.000      | 14.63534    | 60.00000           | Averaged     |
| 126 m-Dinitrobenzene            | 0.18506      | 0.19853 | 0.19853       | 0.000      | 7.27815     | 60.00000           | Averaged     |
| 130 2,3,4,6-Tetrachlorophenol   | 0.24334      | 0.27200 | 0.27200       | 0.000      | 11.77790    | 60.00000           | Averaged     |
| 143 Dinoseb                     | 0.14194      | 0.17109 | 0.17109       | 0.000      | 20.53255    | 60.00000           | Averaged     |
| 173 Carbazole                   | 0.71254      | 0.78570 | 0.78570       | 0.000      | 10.26827    | 60.00000           | Averaged     |
| 184 p-Benzoquinone              | 0.09247      | 0.08593 | 0.08593       | 0.000      | -7.07318    | 60.00000           | Averaged     |
| 192 Methoxychlor                | 0.51665      | 0.61075 | 0.61075       | 0.000      | 18.21388    | 60.00000           | Averaged     |
| 211 p-Toluidine                 | 0.91289      | 1.03895 | 1.03895       | 0.000      | 13.80889    | 60.00000           | Averaged     |
| 210 m-Toluidine                 | 1.30281      | 1.47440 | 1.47440       | 0.000      | 13.17062    | 60.00000           | Averaged     |
| 26 Phthalic anhydride           | 0.10481      | 0.14873 | 0.14873       | 0.000      | 41.90391    | 60.00000           | Averaged     |
| 179 Dibenzo(a,e)pyrene          | 0.23979      | 0.20264 | 0.20264       | 0.000      | -15.49159   | 60.00000           | Averaged     |
| 214 1,4-Dinitrobenzene          | 0.21468      | 0.19914 | 0.19914       | 0.000      | -7.23667    | 60.00000           | Averaged     |
| 215 2-Ethoxyethanol             | 0.84974      | 0.70998 | 0.70998       | 0.000      | -16.44699   | 60.00000           | Averaged     |
| 216 Methylenebis(2-chloroanilin | 0.10764      | 0.14824 | 0.14824       | 0.000      | 37.71077    | 60.00000           | Averaged     |
| M 225 Trichlorophenols          | 0.29823      | 0.33654 | 0.33654       | 0.000      | 12.84605    | 60.00000           | Averaged     |
| M 226 Tetrachlorophenols        | 0.24334      | 0.27200 | 0.27200       | 0.000      | 11.77790    | 60.00000           | Averaged     |
| M 227 Benzo(b,k)fluoranthene    | 0.95660      | 1.00564 | 1.00564       | 0.000      | 5.12684     | 60.00000           | Averaged     |

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012610a.b/s3a2607.d  
Lab Smp Id: WBN100121-17.2 Client Smp ID: MEGACVS  
Inj Date : 26-JAN-2010 11:48  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |WBN100121-17.2|40 PPM|1|SVMF|1|MEGACVS  
Misc Info : |MSD8270|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
Meth Date : 26-Jan-2010 16:29 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 2 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: MEGAILI.sub  
Target Version: 3.50  
Processing Host: hpc1pl

| Compounds                       | QUANT SIG<br>MASS | RT     | EXP RT | REL RT  | RESPONSE | AMOUNTS            |                   |
|---------------------------------|-------------------|--------|--------|---------|----------|--------------------|-------------------|
|                                 |                   |        |        |         |          | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| * 10 1,4-Dichlorobenzene-d4     | 152               | 4.832  | 4.832  | (1.000) | 319045   | 40.0000            |                   |
| * 29 Naphthalene-d8             | 136               | 6.114  | 6.114  | (1.000) | 1275014  | 40.0000            |                   |
| * 46 Acenaphthene-d10           | 164               | 7.990  | 7.990  | (1.000) | 676019   | 40.0000            |                   |
| * 67 Phenanthrene-d10           | 188               | 9.605  | 9.605  | (1.000) | 1138387  | 40.0000            |                   |
| * 91 Chrysene-d12               | 240               | 12.634 | 12.634 | (1.000) | 825135   | 40.0000            |                   |
| * 98 Perylene-d12               | 264               | 14.975 | 14.975 | (1.000) | 556699   | 40.0000            |                   |
| \$ 3 2-Fluorophenol             | 112               | 3.644  | 3.644  | (0.754) | 328018   | 40.0000            | 39.5              |
| \$ 5 Phenol-d5                  | 99                | 4.430  | 4.430  | (0.917) | 398992   | 40.0000            | 38.2              |
| \$ 20 Nitrobenzene-d5           | 82                | 5.372  | 5.372  | (0.879) | 382798   | 40.0000            | 40.6              |
| \$ 39 2-Fluorobiphenyl          | 172               | 7.244  | 7.244  | (0.907) | 766977   | 40.0000            | 43.9              |
| \$ 60 2,4,6-Tribromophenol      | 329               | 8.842  | 8.842  | (1.107) | 80912    | 40.0000            | 41.8              |
| \$ 81 p-Terphenyl-d14           | 244               | 11.316 | 11.316 | (0.896) | 715526   | 40.0000            | 50.4              |
| 1 N-Methyl-N-nitrosomethylamine | 74                | 2.651  | 2.651  | (0.549) | 196630   | 40.0000            | 33.8              |
| 2 Pyridine                      | 79                | 2.695  | 2.695  | (0.558) | 219916   | 40.0000            | 33.9              |
| 4 Aniline                       | 66                | 4.518  | 4.518  | (0.935) | 182608   | 40.0000            | 37.5              |
| 6 Phenol                        | 94                | 4.444  | 4.444  | (0.920) | 430872   | 40.0000            | 39.0              |
| 7 bis(2-Chloroethyl) ether      | 63                | 4.556  | 4.556  | (0.943) | 286139   | 40.0000            | 32.8              |
| 8 2-Chlorophenol                | 128               | 4.629  | 4.629  | (0.958) | 354686   | 40.0000            | 42.3              |
| 203 n-Decane                    | 43                | 4.629  | 4.629  | (0.958) | 429484   | 40.0000            | 33.8              |
| 9 1,3-Dichlorobenzene           | 146               | 4.779  | 4.779  | (0.989) | 420138   | 40.0000            | 43.5              |
| 11 1,4-Dichlorobenzene          | 146               | 4.846  | 4.846  | (1.003) | 419536   | 40.0000            | 42.9              |
| 13 1,2-Dichlorobenzene          | 146               | 4.996  | 4.996  | (1.034) | 392466   | 40.0000            | 42.8              |
| 14 bis(2-Chloroisopropyl)ether  | 45                | 5.063  | 5.063  | (1.048) | 677694   | 40.0000            | 32.8              |
| 12 Benzyl alcohol               | 108               | 4.943  | 4.943  | (1.023) | 232241   | 40.0000            | 39.8              |
| 15 o-Cresol                     | 107               | 5.025  | 5.025  | (1.040) | 290518   | 40.0000            | 40.5              |
| 18 m,p-Cresols                  | 107               | 5.181  | 5.181  | (1.072) | 384447   | 40.0000            | 41.2              |

| Compounds                     | QUANT SIG |        |        |         |          | AMOUNTS            |                   |
|-------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                               | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| =====                         | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| 17 N-Nitrosodipropylamine     | 70        | 5.204  | 5.204  | (1.077) | 269705   | 40.0000            | 38.0              |
| 19 Hexachloroethane           | 117       | 5.331  | 5.331  | (1.103) | 169419   | 40.0000            | 40.3              |
| 21 Nitrobenzene               | 77        | 5.392  | 5.392  | (0.882) | 390903   | 40.0000            | 39.5              |
| 22 Isophorone                 | 82        | 5.627  | 5.627  | (0.920) | 685168   | 40.0000            | 39.0              |
| 23 2-Nitrophenol              | 139       | 5.709  | 5.709  | (0.934) | 195444   | 40.0000            | 43.0              |
| 24 2,4-Dimethylphenol         | 122       | 5.718  | 5.718  | (0.935) | 334815   | 40.0000            | 42.6              |
| 25 bis(2-Chloroethoxy)methane | 93        | 5.826  | 5.826  | (0.953) | 386504   | 40.0000            | 37.9              |
| 26 2,4-Dichlorophenol         | 162       | 5.950  | 5.950  | (0.973) | 297829   | 40.0000            | 45.0              |
| 27 Benzoic acid               | 105       | 5.818  | 5.818  | (0.952) | 212738   | 40.0000            | 38.5              |
| 28 1,2,4-Trichlorobenzene     | 180       | 6.044  | 6.044  | (0.988) | 327318   | 40.0000            | 44.6              |
| 30 Naphthalene                | 128       | 6.138  | 6.138  | (1.004) | 990239   | 40.0000            | 36.9              |
| 204 alpha-Terpineol           | 59        | 6.120  | 6.120  | (1.001) | 310898   | 40.0000            | 35.2              |
| 31 4-Chloroaniline            | 127       | 6.176  | 6.176  | (1.010) | 371004   | 40.0000            | 45.7              |
| 32 Hexachlorobutadiene        | 225       | 6.243  | 6.243  | (1.021) | 191939   | 40.0000            | 45.8              |
| 33 4-Chloro-3-methylphenol    | 107       | 6.660  | 6.660  | (1.089) | 330189   | 40.0000            | 44.1              |
| 34 2-Methylnaphthalene        | 142       | 6.862  | 6.862  | (1.122) | 695119   | 40.0000            | 43.1              |
| 35 1-Methylnaphthalene        | 142       | 6.971  | 6.971  | (1.140) | 657999   | 40.0000            | 40.2              |
| 36 Hexachlorocyclopentadiene  | 237       | 7.015  | 7.015  | (0.878) | 163309   | 40.0000            | 42.4              |
| 205 2,3-Dichloroaniline       | 161       | 7.159  | 7.159  | (0.896) | 359567   | 40.0000            | 41.7              |
| 37 2,4,6-Trichlorophenol      | 196       | 7.150  | 7.150  | (0.895) | 215710   | 40.0000            | 44.5              |
| 38 2,4,5-Trichlorophenol      | 196       | 7.189  | 7.189  | (0.900) | 239303   | 40.0000            | 45.7              |
| 40 2-Chloronaphthalene        | 162       | 7.388  | 7.388  | (0.925) | 674764   | 40.0000            | 42.2              |
| 42 o-Nitroaniline             | 65        | 7.488  | 7.488  | (0.937) | 222176   | 40.0000            | 35.4              |
| 41 m-Nitroaniline             | 138       | 7.934  | 7.934  | (0.993) | 164227   | 40.0000            | 43.6              |
| 43 Dimethylphthalate          | 163       | 7.676  | 7.676  | (0.961) | 787020   | 40.0000            | 42.9              |
| 44 2,6-Dinitrotoluene         | 165       | 7.746  | 7.746  | (0.970) | 187212   | 40.0000            | 43.0              |
| 50 2,4-Dinitrotoluene         | 165       | 8.181  | 8.181  | (1.024) | 239480   | 40.0000            | 44.2              |
| 45 Acenaphthylene             | 152       | 7.840  | 7.840  | (0.981) | 1059972  | 40.0000            | 42.2              |
| 47 Acenaphthene               | 154       | 8.025  | 8.025  | (1.004) | 649831   | 40.0000            | 40.6              |
| 48 2,4-Dinitrophenol          | 184       | 8.043  | 8.043  | (1.007) | 91311    | 40.0000            | 47.0              |
| 49 Dibenzofuran               | 168       | 8.210  | 8.210  | (1.028) | 909029   | 40.0000            | 44.3              |
| 51 Diethylphthalate           | 149       | 8.428  | 8.428  | (1.055) | 795622   | 40.0000            | 43.7              |
| 52 4-Nitrophenol              | 139       | 8.087  | 8.087  | (1.012) | 140237   | 40.0000            | 45.4              |
| 53 Fluorene                   | 166       | 8.583  | 8.583  | (1.074) | 735044   | 40.0000            | 42.4              |
| 54 4-Chlorophenylphenylether  | 204       | 8.566  | 8.566  | (1.072) | 371992   | 40.0000            | 45.6              |
| 55 2-Methyl-4,6-dinitrophenol | 198       | 8.624  | 8.624  | (0.898) | 171633   | 40.0000            | 58.5              |
| 56 p-Nitroaniline             | 138       | 8.598  | 8.598  | (1.076) | 161272   | 40.0000            | 43.9              |
| 133 Diphenylamine             | 169       | 8.695  | 8.695  | (0.905) | 613912   | 40.0000            | 40.7              |
| 58 1,2-Diphenylhydrazine      | 77        | 8.742  | 8.742  | (0.910) | 787186   | 40.0000            | 35.4              |
| 61 4-Bromophenylphenylether   | 248       | 9.100  | 9.100  | (0.947) | 188272   | 40.0000            | 38.8              |
| 63 Hexachlorobenzene          | 284       | 9.174  | 9.174  | (0.955) | 197347   | 40.0000            | 39.2              |
| 65 Pentachlorophenol          | 266       | 9.382  | 9.382  | (0.977) | 130636   | 40.0000            | 45.8              |
| 206 n-Octadecane              | 57        | 9.423  | 9.423  | (0.981) | 615820   | 40.0000            | 33.2              |
| 68 Phenanthrene               | 178       | 9.632  | 9.632  | (1.003) | 1008870  | 40.0000            | 40.3              |
| 69 Anthracene                 | 178       | 9.688  | 9.688  | (1.009) | 1037527  | 40.0000            | 41.5              |
| 72 Di-n-butylphthalate        | 149       | 10.189 | 10.189 | (1.061) | 1296556  | 40.0000            | 42.9              |
| 76 Fluoranthene               | 202       | 10.922 | 10.922 | (1.137) | 1010250  | 40.0000            | 44.4              |



| Compounds                         | QUANT SIG |        |        | REL RT  | RESPONSE | AMOUNTS            |                   |
|-----------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                   | MASS      | RT     | EXP RT |         |          | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| =====                             | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| 79 Pyrene                         | 202       | 11.175 | 11.175 | (0.884) | 1029286  | 40.0000            | 43.5              |
| 85 Butylbenzylphthalate           | 149       | 11.847 | 11.847 | (0.938) | 508065   | 40.0000            | 43.0              |
| 89 Benzo(a)anthracene             | 228       | 12.613 | 12.613 | (0.998) | 753171   | 40.0000            | 39.9              |
| 92 Chrysene                       | 228       | 12.669 | 12.669 | (1.003) | 729524   | 40.0000            | 41.0              |
| 93 bis(2-Ethylhexyl)phthalate     | 149       | 12.572 | 12.572 | (0.995) | 697322   | 40.0000            | 42.8              |
| 94 Di-n-octylphthalate            | 149       | 13.564 | 13.564 | (0.906) | 970614   | 40.0000            | 43.0              |
| 95 Benzo(b)fluoranthene           | 252       | 14.294 | 14.294 | (0.955) | 550468   | 40.0000            | 42.1              |
| 96 Benzo(k)fluoranthene           | 252       | 14.344 | 14.344 | (0.958) | 569213   | 40.0000            | 42.0              |
| 97 Benzo(a)pyrene                 | 252       | 14.875 | 14.875 | (0.993) | 497729   | 40.0000            | 43.7              |
| 99 Indeno(1,2,3-cd)pyrene         | 276       | 16.968 | 16.968 | (1.133) | 429150   | 40.0000            | 46.2              |
| 100 Dibenzo(a,h)anthracene        | 278       | 17.000 | 17.000 | (1.135) | 353979   | 40.0000            | 46.7              |
| 101 Benzo(ghi)perylene            | 276       | 17.485 | 17.485 | (1.168) | 349538   | 40.0000            | 45.8              |
| 126 m-Dinitrobenzene              | 168       | 7.720  | 7.720  | (0.966) | 134211   | 40.0000            | 42.9              |
| 130 2,3,4,6-Tetrachlorophenol     | 232       | 8.328  | 8.328  | (1.042) | 183874   | 40.0000            | 44.7              |
| 143 Dinoseb                       | 211       | 9.564  | 9.564  | (0.996) | 194761   | 40.0000            | 48.2              |
| 173 Carbazole                     | 167       | 9.852  | 9.852  | (1.026) | 894434   | 40.0000            | 44.1              |
| 184 p-Benzoquinone                | 54        | 4.087  | 4.087  | (0.846) | 27414    | 40.0000            | 37.2              |
| 192 Methoxychlor                  | 227       | 12.481 | 12.481 | (0.988) | 503955   | 40.0000            | 47.3              |
| 211 p-Toluidine                   | 106       | 5.251  | 5.251  | (1.087) | 331471   | 40.0000            | 45.5              |
| 210 m-Toluidine                   | 106       | 5.287  | 5.287  | (1.094) | 470399   | 40.0000            | 45.3              |
| 26 Phthalic anhydride             | 104       | 6.924  | 6.924  | (1.132) | 189630   | 40.0000            | 56.8              |
| 179 Dibenzo(a,e)pyrene            | 302       | 21.218 | 21.218 | (1.417) | 112810   | 40.0000            | 33.8              |
| 214 1,4-Dinitrobenzene            | 75        | 7.638  | 7.638  | (0.956) | 134625   | 40.0000            | 37.1              |
| 215 2-Ethoxyethanol               | 59        | 2.437  | 2.437  | (0.504) | 226517   | 40.0000            | 33.4              |
| 216 Methylenebis(2-chloroaniline) | 231       | 12.557 | 12.557 | (0.994) | 122316   | 40.0000            | 55.1              |
| M 225 Trichlorophenols            | 196       |        |        |         | 455013   | 80.0000            | 90.3              |
| M 226 Tetrachlorophenols          | 232       |        |        |         | 183874   | 40.0000            | 44.7              |
| M 227 Benzo(b,k)fluoranthene      | 252       |        |        |         | 1119681  | 80.0000            | 84.1              |

Data File: /chem/MSD3.1/s012610a,b/s3a2607.d

Date: 26-JAN-2010 11:48

Client ID: HECACVS

Sample Info: IUBM00121-17.2140 PHH11 SWF11 HECACVS

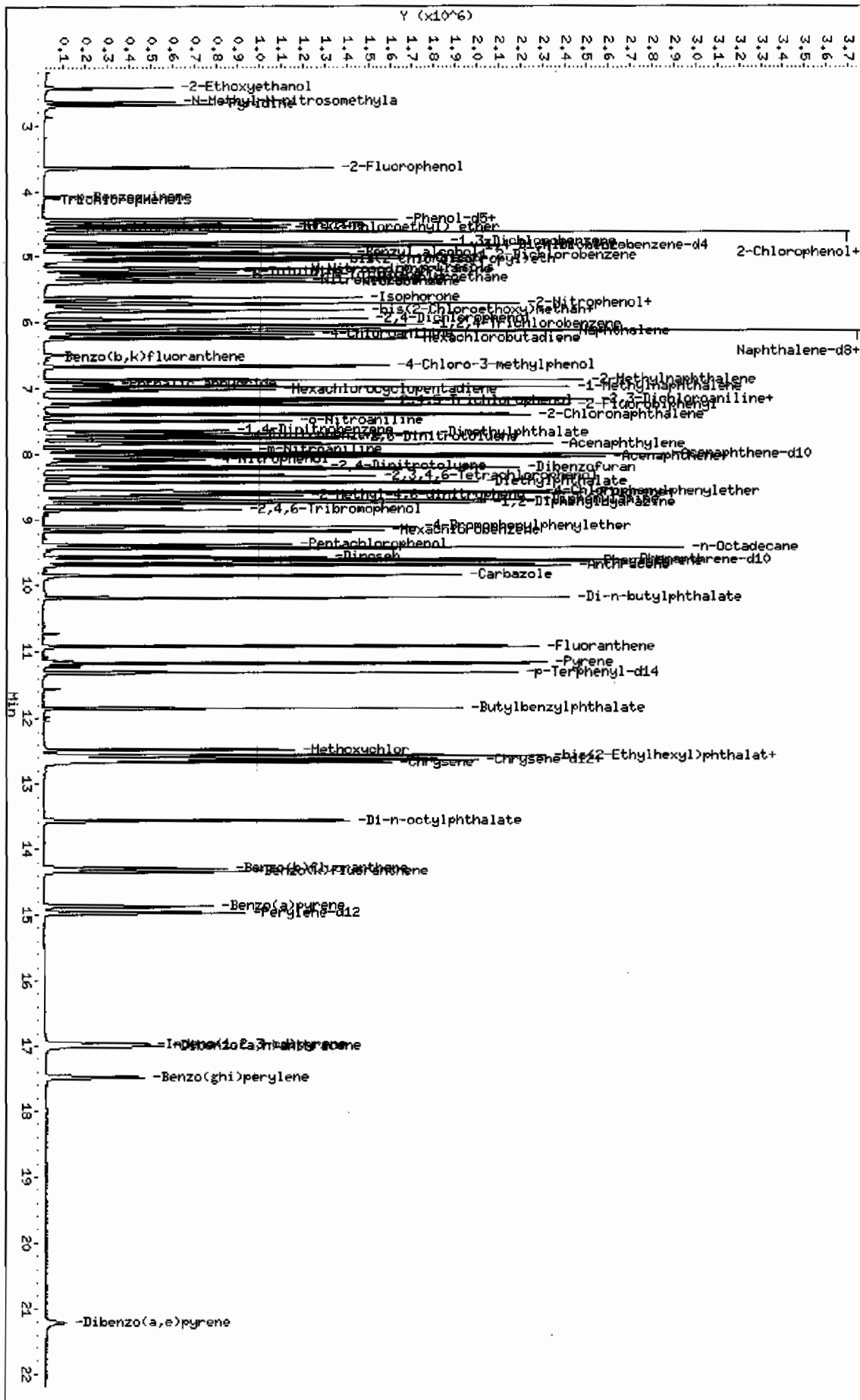
Column phase: J&W DB-5MS

Instrument: MSD3.1

Operator: JLD

Column diameter: 0.20

/chem/MSD3.1/s012610a,b/s3a2607.d



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 26-JAN-2010 12:19  
Lab File ID: s3a2608.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010  
Analysis Type: Init. Cal. Times: 17:59 23:34  
Lab Sample ID: WBN100120-08.3 Quant Type: ISTD  
Method: /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m

| COMPOUND                       | RRF / AMOUNT | RF40     | CCAL<br>RRF40 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE |
|--------------------------------|--------------|----------|---------------|------------|-------------|--------------------|------------|
| 209 Benzaldehyde               | 1.00310      | 0.69434  | 0.69434       | 0.000      | -30.78050   | 60.00000           | Averaged   |
| 16 Acetophenone                | 1.32216      | 1.17080  | 1.17080       | 0.000      | -11.44742   | 60.00000           | Averaged   |
| 189 Caprolactam                | 0.08576      | 0.08580  | 0.08580       | 0.000      | 0.04414     | 60.00000           | Averaged   |
| 208 1,1'-Biphenyl              | 1.21038      | 1.14215  | 1.14215       | 0.000      | -5.63689    | 60.00000           | Averaged   |
| 207 Atrazine                   | 0.04628      | 0.04614  | 0.04614       | 0.000      | -0.29576    | 60.00000           | Averaged   |
| 77 Benzidine                   | 41.31554     | 40.00000 | 0.36433       | 0.000      | 3.28886     | 60.00000           | Linear     |
| 90 3,3'-Dichlorobenzidine      | 39.82390     | 40.00000 | 0.27247       | 0.000      | -0.44025    | 60.00000           | Linear     |
| 102 1,4-Dioxane                | 0.37050      | 0.36822  | 0.36822       | 0.000      | -0.61505    | 60.00000           | Averaged   |
| 103 Methyl methacrylate        | 0.21351      | 0.22119  | 0.22119       | 0.000      | 3.60074     | 60.00000           | Averaged   |
| 104 Ethyl methacrylate         | 0.89246      | 0.84951  | 0.84951       | 0.000      | -4.81180    | 60.00000           | Averaged   |
| 105 2-Picoline                 | 1.30074      | 1.04631  | 1.04631       | 0.000      | -19.56051   | 60.00000           | Averaged   |
| 106 N-Nitrosomethylethylamine  | 0.57807      | 0.45793  | 0.45793       | 0.000      | -20.78294   | 60.00000           | Averaged   |
| 107 Methyl methanesulfonate    | 0.60378      | 0.53649  | 0.53649       | 0.000      | -11.14431   | 60.00000           | Averaged   |
| 108 N-Nitrosodiethylamine      | 0.58167      | 0.50358  | 0.50358       | 0.000      | -13.42595   | 60.00000           | Averaged   |
| 109 Ethyl Methanesulfonate     | 0.74637      | 0.74032  | 0.74032       | 0.000      | -0.81010    | 60.00000           | Averaged   |
| 110 Pentachloroethane          | 0.32905      | 0.42826  | 0.42826       | 0.000      | 30.15248    | 60.00000           | Averaged   |
| 111 N-Nitrosopyrrolidine       | 0.60059      | 0.52867  | 0.52867       | 0.000      | -11.97538   | 60.00000           | Averaged   |
| 113 N-Nitrosomorpholine        | 0.98604      | 0.84613  | 0.84613       | 0.000      | -14.18973   | 60.00000           | Averaged   |
| 114 o-Toluidine                | 1.80736      | 1.65570  | 1.65570       | 0.000      | -8.39133    | 60.00000           | Averaged   |
| 115 N-Nitrosopiperidine        | 0.15108      | 0.13237  | 0.13237       | 0.000      | -12.38549   | 60.00000           | Averaged   |
| 116 a,a-Dimethylphenethylamine | 1.11880      | 0.83449  | 0.83449       | 0.000      | -25.41241   | 60.00000           | Averaged   |
| 118 2,6-Dichlorophenol         | 0.21531      | 0.21187  | 0.21187       | 0.000      | -1.59730    | 60.00000           | Averaged   |
| 119 Hexachloropropene          | 0.11708      | 0.17194  | 0.17194       | 0.000      | 46.85844    | 60.00000           | Averaged   |
| 120 p-Phenylenediamine         | 0.24808      | 0.22584  | 0.22584       | 0.000      | -8.96344    | 60.00000           | Averaged   |
| 121 N-Nitrosodi-n-butylamine   | 0.23566      | 0.20525  | 0.20525       | 0.000      | -12.90725   | 60.00000           | Averaged   |
| 122 Safrole                    | 0.19323      | 0.22126  | 0.22126       | 0.000      | 14.51003    | 60.00000           | Averaged   |
| 123 1,2,4,5-Tetrachlorobenzene | 0.42534      | 0.43775  | 0.43775       | 0.000      | 2.91671     | 60.00000           | Averaged   |
| 124 Isosafrole                 | 0.35652      | 0.42076  | 0.42076       | 0.000      | 18.01800    | 60.00000           | Averaged   |
| 125 1,4-Naphthoquinone         | 0.33545      | 0.29664  | 0.29664       | 0.000      | -11.56678   | 60.00000           | Averaged   |
| 127 Pentachlorobenzene         | 0.37060      | 0.35813  | 0.35813       | 0.000      | -3.36666    | 60.00000           | Averaged   |
| 128 1-Naphthylamine            | 0.91242      | 0.89364  | 0.89364       | 0.000      | -2.05764    | 60.00000           | Averaged   |
| 129 2-Naphthylamine            | 1.00263      | 0.99186  | 0.99186       | 0.000      | -1.07340    | 60.00000           | Averaged   |
| 131 5-Nitro-o-toluidine        | 0.29533      | 0.29061  | 0.29061       | 0.000      | -1.59655    | 60.00000           | Averaged   |
| 136 1,3,5-Trinitrobenzene      | 0.14894      | 0.17935  | 0.17935       | 0.000      | 20.42196    | 60.00000           | Averaged   |
| 137 Phenacetin                 | 0.33125      | 0.29647  | 0.29647       | 0.000      | -10.50051   | 60.00000           | Averaged   |
| 138 Diallate                   | 0.31820      | 0.24844  | 0.24844       | 0.000      | -21.92389   | 60.00000           | Averaged   |

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 26-JAN-2010 12:19  
 Lab File ID: s3a2608.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010  
 Analysis Type: Init. Cal. Times: 17:59 23:34  
 Lab Sample ID: WBN100120-08.3 Quant Type: ISTD  
 Method: /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m

| COMPOUND                        | RRF / AMOUNT | RF40     | CCAL<br>RRF40 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE |
|---------------------------------|--------------|----------|---------------|------------|-------------|--------------------|------------|
| 140 4-Aminobiphenyl             | 0.63580      | 0.61485  | 0.61485       | 0.000      | -3.29556    | 60.00000           | Averaged   |
| 141 Pentachloronitrobenzene     | 0.07853      | 0.07411  | 0.07411       | 0.000      | -5.62731    | 60.00000           | Averaged   |
| 142 Pronamide                   | 0.29619      | 0.29468  | 0.29468       | 0.000      | -0.50973    | 60.00000           | Averaged   |
| 146 4-Nitroquinoline-1-oxide    | 0.03387      | 0.02455  | 0.02455       | 0.000      | -27.51255   | 60.00000           | Averaged   |
| 147 Methapyrilene               | 0.52598      | 0.46427  | 0.46427       | 0.000      | -11.73090   | 60.00000           | Averaged   |
| 148 Isodrin                     | 0.11094      | 0.10119  | 0.10119       | 0.000      | -8.78488    | 60.00000           | Averaged   |
| 149 Aramite                     | 0.04585      | 0.04690  | 0.04690       | 0.000      | 2.29004     | 60.00000           | Averaged   |
| 150 Kepone                      | 0.06767      | 0.07115  | 0.07115       | 0.000      | 5.14083     | 60.00000           | Averaged   |
| 151 p-(Dimethylamino)azobenzene | 0.39647      | 0.32638  | 0.32638       | 0.000      | -17.67858   | 60.00000           | Averaged   |
| 152 Chlorobenzilate             | 0.32229      | 0.28636  | 0.28636       | 0.000      | -11.14801   | 60.00000           | Averaged   |
| 153 3,3'-Dimethylbenzidine      | 0.51678      | 0.53370  | 0.53370       | 0.000      | 3.27268     | 60.00000           | Averaged   |
| 155 2-Acetylaminofluorene       | 39.39914     | 40.00000 | 0.30882       | 0.000      | -1.50214    | 60.00000           | Linear     |
| 157 7,12Dimethylbenz(a)anthrace | 0.53008      | 0.48992  | 0.48992       | 0.000      | -7.57697    | 60.00000           | Averaged   |
| 158 3-Methylcholanthrene        | 0.38427      | 0.41862  | 0.41862       | 0.000      | 8.94069     | 60.00000           | Averaged   |
| 212 Cis Diallate                | 0.33782      | 0.33849  | 0.33849       | 0.000      | 0.19971     | 60.00000           | Averaged   |
| 213 Trans Diallate              | 0.37435      | 0.29228  | 0.29228       | 0.000      | -21.92389   | 60.00000           | Averaged   |

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012610a.b/s3a2608.d  
Lab Smp Id: WBN100120-08.3 Client Smp ID: APCVS  
Inj Date : 26-JAN-2010 12:19  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |WBN100120-08.3|40 PPM|1|SVMF|1|APCVS  
Misc Info : |MSD8270|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
Meth Date : 26-Jan-2010 13:48 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 3 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: AP12.sub  
Target Version: 3.50  
Processing Host: hpc1p1

| Compounds                     | QUANT SIG<br>MASS | RT     | EXP RT | REL RT  | RESPONSE | AMOUNTS            |                   |
|-------------------------------|-------------------|--------|--------|---------|----------|--------------------|-------------------|
|                               |                   |        |        |         |          | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| * 10 1,4-Dichlorobenzene-d4   | 152               | 4.828  | 4.828  | (1.000) | 292156   | 40.0000            |                   |
| * 29 Naphthalene-d8           | 136               | 6.112  | 6.112  | (1.000) | 1126383  | 40.0000            |                   |
| * 46 Acenaphthene-d10         | 164               | 7.986  | 7.986  | (1.000) | 655494   | 40.0000            |                   |
| * 67 Phenanthrene-d10         | 188               | 9.606  | 9.606  | (1.000) | 1160495  | 40.0000            |                   |
| * 91 Chrysene-d12             | 240               | 12.629 | 12.629 | (1.000) | 1012624  | 40.0000            |                   |
| * 98 Perylene-d12             | 264               | 14.976 | 14.976 | (1.000) | 651950   | 40.0000            |                   |
| 209 Benzaldehyde              | 77                | 4.426  | 4.426  | (0.917) | 202855   | 40.0000            | 27.7              |
| 16 Acetophenone               | 105               | 5.209  | 5.209  | (1.079) | 342057   | 40.0000            | 35.4              |
| 189 Caprolactam               | 113               | 6.543  | 6.543  | (1.071) | 96640    | 40.0000            | 40.0              |
| 208 1,1'-Biphenyl             | 154               | 7.355  | 7.355  | (0.921) | 748675   | 40.0000            | 37.7              |
| 207 Atrazine                  | 173               | 9.259  | 9.259  | (0.964) | 53547    | 40.0000            | 39.9              |
| 77 Benzidine                  | 184               | 11.052 | 11.052 | (0.875) | 368930   | 40.0000            | 41.3              |
| 90 3,3'-Dichlorobenzidine     | 252               | 12.556 | 12.556 | (0.994) | 275912   | 40.0000            | 39.8              |
| 102 1,4-Dioxane               | 88                | 2.439  | 2.439  | (0.505) | 107577   | 40.0000            | 39.8              |
| 103 Methyl methacrylate       | 100               | 2.434  | 2.434  | (0.504) | 64623    | 40.0000            | 41.4              |
| 104 Ethyl methacrylate        | 69                | 2.955  | 2.955  | (0.612) | 248190   | 40.0000            | 38.1              |
| 105 2-Picoline                | 93                | 3.219  | 3.219  | (0.667) | 305685   | 40.0000            | 32.2              |
| 106 N-Nitrosomethylethylamine | 88                | 3.289  | 3.289  | (0.681) | 133787   | 40.0000            | 31.7              |
| 107 Methyl methanesulfonate   | 80                | 3.521  | 3.521  | (0.729) | 156740   | 40.0000            | 35.5              |
| 108 N-Nitrosodiethylamine     | 102               | 3.852  | 3.852  | (0.798) | 147123   | 40.0000            | 34.6              |
| 109 Ethyl Methanesulfonate    | 79                | 4.095  | 4.095  | (0.848) | 216290   | 40.0000            | 39.7              |
| 110 Pentachloroethane         | 167               | 4.567  | 4.567  | (0.946) | 125119   | 40.0000            | 52.1              |
| 111 N-Nitrosopyrrolidine      | 100               | 5.194  | 5.194  | (1.076) | 154453   | 40.0000            | 35.2 (Q)          |
| 113 N-Nitrosomorpholine       | 56                | 5.230  | 5.230  | (1.083) | 247201   | 40.0000            | 34.3              |
| 114 o-Toluidine               | 106               | 5.247  | 5.247  | (1.087) | 483722   | 40.0000            | 36.6              |
| 115 N-Nitrosopiperidine       | 114               | 5.543  | 5.543  | (0.907) | 149100   | 40.0000            | 35.0              |

| Compounds                         | QUANT SIG |        |        |         |          | AMOUNTS            |                   |
|-----------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                   | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| =====                             | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| 116 a,a-Dimethylphenethylamine    | 58        | 5.913  | 5.913  | (0.967) | 939954   | 40.0000            | 29.8              |
| 118 2,6-Dichlorophenol            | 162       | 6.185  | 6.185  | (1.012) | 238650   | 40.0000            | 39.4              |
| 119 Hexachloropropene             | 213       | 6.218  | 6.218  | (1.017) | 193675   | 40.0000            | 58.7              |
| 120 p-Phenylenediamine            | 108       | 6.549  | 6.549  | (1.071) | 254383   | 40.0000            | 36.4              |
| 121 N-Nitrosodi-n-butylamine      | 84        | 6.514  | 6.514  | (1.066) | 231186   | 40.0000            | 34.8(Q)           |
| 122 Safrole                       | 162       | 6.751  | 6.751  | (1.105) | 249227   | 40.0000            | 45.8              |
| 123 1,2,4,5-Tetrachlorobenzene    | 216       | 7.036  | 7.036  | (0.881) | 286942   | 40.0000            | 41.2              |
| 124 Isosafrole                    | 162       | 7.308  | 7.308  | (0.915) | 275807   | 40.0000            | 47.2              |
| 125 1,4-Naphthoquinone            | 158       | 7.576  | 7.576  | (0.949) | 194449   | 40.0000            | 35.4              |
| 127 Pentachlorobenzene            | 250       | 8.156  | 8.156  | (1.021) | 234750   | 40.0000            | 38.6              |
| 128 1-Naphthylamine               | 143       | 8.294  | 8.294  | (1.039) | 585777   | 40.0000            | 39.2              |
| 129 2-Naphthylamine               | 143       | 8.379  | 8.379  | (1.049) | 650161   | 40.0000            | 39.6              |
| 131 5-Nitro-o-toluidine           | 152       | 8.584  | 8.584  | (1.075) | 190495   | 40.0000            | 39.4              |
| 136 1,3,5-Trinitrobenzene         | 75        | 8.966  | 8.966  | (0.933) | 208136   | 40.0000            | 48.2              |
| 137 Phenacetin                    | 108       | 9.021  | 9.021  | (0.939) | 344052   | 40.0000            | 35.8(Q)           |
| 138 Diallylate                    | 86        | 8.989  | 8.989  | (0.936) | 288308   | 40.0000            | 31.2              |
| 140 4-Aminobiphenyl               | 169       | 9.386  | 9.386  | (0.977) | 713529   | 40.0000            | 38.7              |
| 141 Pentachloronitrobenzene       | 237       | 9.394  | 9.394  | (0.978) | 86000    | 40.0000            | 37.7(Q)           |
| 142 Pronamide                     | 173       | 9.424  | 9.424  | (0.981) | 341977   | 40.0000            | 39.8              |
| 146 4-Nitroquinoline-1-oxide      | 101       | 10.465 | 10.465 | (1.089) | 28495    | 40.0000            | 29.0              |
| 147 Methapyrilene                 | 58        | 10.518 | 10.518 | (1.095) | 538788   | 40.0000            | 35.3              |
| 148 Isodrin                       | 193       | 10.756 | 10.756 | (1.120) | 117433   | 40.0000            | 36.5              |
| 149 Aramite                       | 185       | 11.269 | 11.269 | (1.173) | 54427    | 40.0000            | 40.9              |
| 150 Kepone                        | 272       | 11.939 | 11.939 | (1.243) | 82565    | 40.0000            | 42.0              |
| 151 p-(Dimethylamino)azobenzene   | 120       | 11.463 | 11.463 | (0.908) | 330502   | 40.0000            | 32.9              |
| 152 Chlorobenzilate               | 251       | 11.504 | 11.504 | (0.911) | 289980   | 40.0000            | 35.5              |
| 153 3,3'-Dimethylbenzidine        | 212       | 11.854 | 11.854 | (0.939) | 540433   | 40.0000            | 41.3              |
| 155 2-Acetylaminofluorene         | 181       | 12.171 | 12.171 | (0.964) | 312718   | 40.0000            | 39.4              |
| 157 7,12Dimethylbenz(a)anthracene | 256       | 14.271 | 14.271 | (0.953) | 319401   | 40.0000            | 37.0              |
| 158 3-Methylcholanthrene          | 268       | 15.498 | 15.498 | (1.035) | 272920   | 40.0000            | 43.6(Q)           |
| 212 Cis Diallylate                | 86        | 9.092  | 9.092  | (0.946) | 58923    | 6.00000            | 6.0               |
| 213 Trans Diallylate              | 86        | 8.989  | 8.989  | (0.936) | 288308   | 34.0000            | 26.5              |

# QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/HSD3.i/s012610a.b/s3a2608.d

Date: 26-JAN-2010 12:19

Client ID: APCVS

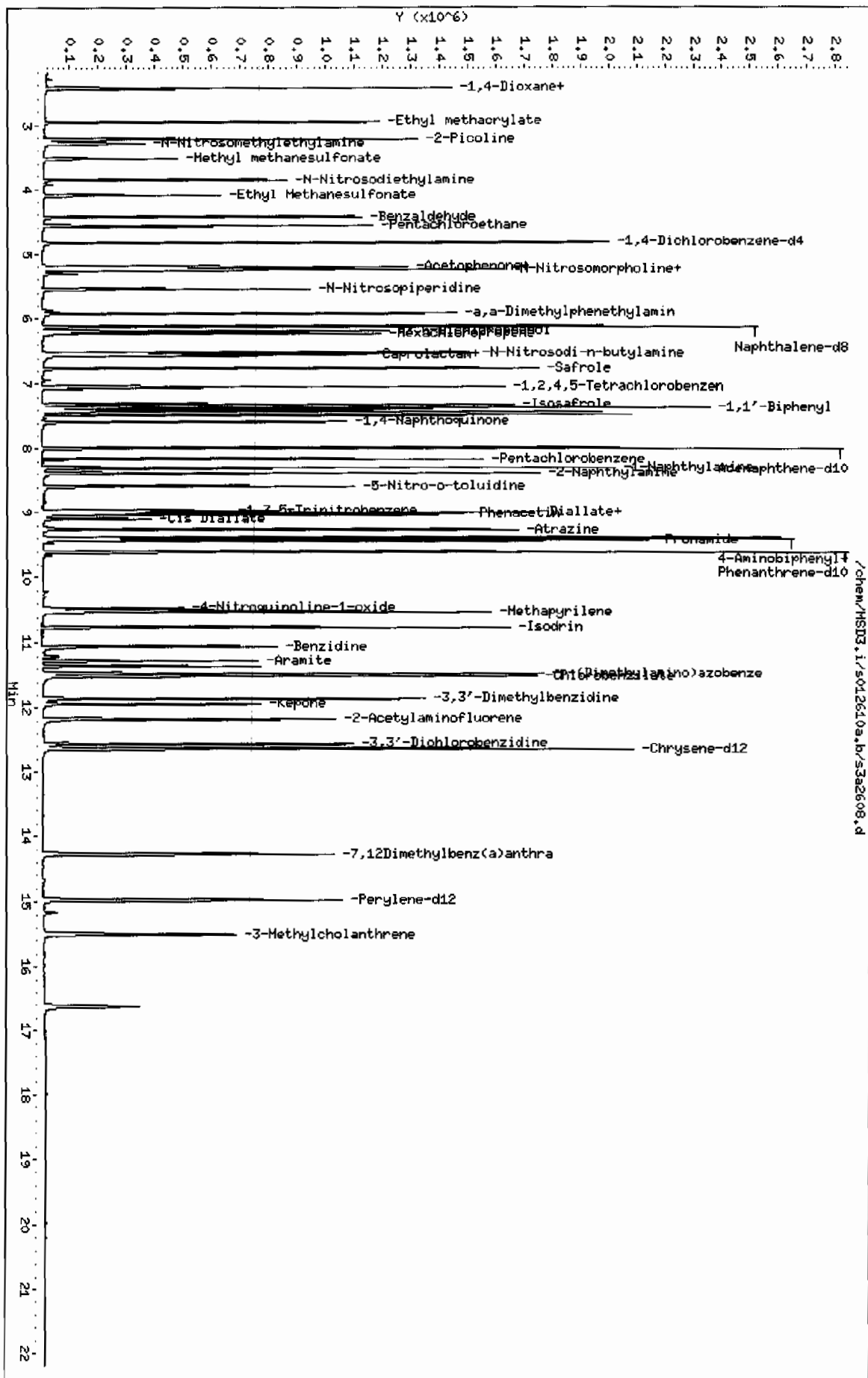
Sample Info: IBERD00120-08.3140 PPH115WFI11APCVS

Instrument: HSD3.i

Page 1

Column Phase: J&W DB-5MS

Operator: JLD  
Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 27-JAN-2010 09:09  
Lab File ID: s3a2702.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010  
Analysis Type: Init. Cal. Times: 17:59 23:34  
Lab Sample ID: WBN100121-17.2 Quant Type: ISTD  
Method: /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m

| COMPOUND                       | RRF / AMOUNT | RF40     | CCAL<br>RRF40 | MTN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE    |
|--------------------------------|--------------|----------|---------------|------------|-------------|--------------------|---------------|
| 3 2-Fluorophenol               | 1.04085      | 0.90591  | 0.90591       | 0.000      | -12.96417   | 60.00000           | Averaged      |
| 5 Phenol-d5                    | 1.30813      | 1.19728  | 1.19728       | 0.000      | -8.47331    | 60.00000           | Averaged      |
| 20 Nitrobenzene-d5             | 0.29548      | 0.29587  | 0.29587       | 0.000      | 0.13247     | 60.00000           | Averaged      |
| 39 2-Fluorobiphenyl            | 1.03392      | 1.11826  | 1.11826       | 0.000      | 8.15810     | 60.00000           | Averaged      |
| 60 2,4,6-Tribromophenol        | 0.11467      | 0.12408  | 0.12408       | 0.000      | 8.20586     | 60.00000           | Averaged      |
| 81 p-Terphenyl-d14             | 0.68752      | 0.77786  | 0.77786       | 0.000      | 13.13942    | 60.00000           | Averaged      |
| 1 N-Methyl-N-nitrosomethylami  | 0.72841      | 0.51560  | 0.51560       | 0.000      | -29.21500   | 60.00000           | Averaged      |
| 2 Pyridine                     | 0.81403      | 0.58289  | 0.58289       | 0.000      | -28.39413   | 60.00000           | Averaged      |
| 4 Aniline                      | 0.60975      | 0.53792  | 0.53792       | 0.000      | -11.78108   | 60.00000           | Averaged      |
| 6 Phenol                       | 1.38337      | 1.30033  | 1.30033       | 0.001      | -6.00284    | 20.00000           | Averaged ccc  |
| 7 bis(2-Chloroethyl) ether     | 1.09435      | 0.85072  | 0.85072       | 0.000      | -22.26249   | 60.00000           | Averaged      |
| 8 2-Chlorophenol               | 1.05048      | 1.09089  | 1.09089       | 0.000      | 3.84724     | 60.00000           | Averaged      |
| 203 n-Decane                   | 1.59470      | 1.27038  | 1.27038       | 0.000      | -20.33761   | 60.00000           | Averaged      |
| 9 1,3-Dichlorobenzene          | 1.20957      | 1.29878  | 1.29878       | 0.000      | 7.37481     | 60.00000           | Averaged      |
| 11 1,4-Dichlorobenzene         | 1.22630      | 1.29521  | 1.29521       | 0.001      | 5.61929     | 20.00000           | Averaged ccc  |
| 13 1,2-Dichlorobenzene         | 1.15004      | 1.21756  | 1.21756       | 0.000      | 5.87143     | 60.00000           | Averaged      |
| 14 bis(2-Chloroisopropyl)ether | 2.59104      | 1.96635  | 1.96635       | 0.000      | -24.10939   | 60.00000           | Averaged      |
| 12 Benzyl alcohol              | 0.73117      | 0.71097  | 0.71097       | 0.000      | -2.76366    | 60.00000           | Averaged      |
| 15 o-Cresol                    | 0.89964      | 0.86657  | 0.86657       | 0.000      | -3.67535    | 60.00000           | Averaged      |
| 18 m,p-Cresols                 | 1.17039      | 1.15231  | 1.15231       | 0.000      | -1.54440    | 60.00000           | Averaged      |
| 17 N-Nitrosodipropylamine      | 0.88907      | 0.82943  | 0.82943       | 0.050      | -6.70847    | 60.00000           | Averaged spcc |
| 19 Hexachloroethane            | 0.52660      | 0.53239  | 0.53239       | 0.000      | 1.10012     | 60.00000           | Averaged      |
| 21 Nitrobenzene                | 0.31068      | 0.29993  | 0.29993       | 0.000      | -3.46013    | 60.00000           | Averaged      |
| 22 Isophorone                  | 0.55065      | 0.54434  | 0.54434       | 0.000      | -1.14521    | 60.00000           | Averaged      |
| 23 2-Nitrophenol               | 0.14255      | 0.15223  | 0.15223       | 0.001      | 6.78932     | 20.00000           | Averaged ccc  |
| 24 2,4-Dimethylphenol          | 0.24644      | 0.26144  | 0.26144       | 0.000      | 6.08531     | 60.00000           | Averaged      |
| 25 bis(2-Chloroethoxy)methane  | 0.31970      | 0.29979  | 0.29979       | 0.000      | -6.22527    | 60.00000           | Averaged      |
| 26 2,4-Dichlorophenol          | 0.20739      | 0.23272  | 0.23272       | 0.001      | 12.21569    | 20.00000           | Averaged ccc  |
| 27 Benzoic acid                | 0.17347      | 0.18034  | 0.18034       | 0.000      | 3.95923     | 60.00000           | Averaged      |
| 28 1,2,4-Trichlorobenzene      | 0.23033      | 0.26120  | 0.26120       | 0.000      | 13.40393    | 60.00000           | Averaged      |
| 30 Naphthalene                 | 0.84122      | 0.77641  | 0.77641       | 0.000      | -7.70441    | 60.00000           | Averaged      |
| 204 alpha-Terpineol            | 0.27709      | 0.23471  | 0.23471       | 0.000      | -15.29473   | 60.00000           | Averaged      |
| 31 4-Chloroaniline             | 41.46192     | 40.00000 | 0.26378       | 0.000      | 3.65481     | 60.00000           | Linear        |
| 32 Hexachlorobutadiene         | 0.13146      | 0.15493  | 0.15493       | 0.001      | 17.85024    | 20.00000           | Averaged ccc  |
| 33 4-Chloro-3-methylphenol     | 0.23504      | 0.25474  | 0.25474       | 0.001      | 8.38390     | 20.00000           | Averaged ccc  |
| 34 2-Methylnaphthalene         | 0.50578      | 0.53512  | 0.53512       | 0.000      | 5.80018     | 60.00000           | Averaged      |



## GEL Laboratories LLC

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 27-JAN-2010 09:09  
Lab File ID: s3a2702.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010  
Analysis Type: Init. Cal. Times: 17:59 23:34  
Lab Sample ID: WBN100121-17.2 Quant Type: ISTD  
Method: /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m

| COMPOUND                      | RRF / AMOUNT | RF40     | CCAL<br>RRF40 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE    |
|-------------------------------|--------------|----------|---------------|------------|-------------|--------------------|---------------|
| 35 1-Methylnaphthalene        | 0.51307      | 0.51236  | 0.51236       | 0.000      | -0.13943    | 60.00000           | Averaged      |
| 36 Hexachlorocyclopentadiene  | 0.22766      | 0.21464  | 0.21464       | 0.050      | -5.71837    | 60.00000           | Averaged spcc |
| 205 2,3-Dichloroaniline       | 0.50997      | 0.52002  | 0.52002       | 0.000      | 1.97092     | 60.00000           | Averaged      |
| 37 2,4,6-Trichlorophenol      | 0.28670      | 0.32082  | 0.32082       | 0.001      | 11.90223    | 20.00000           | Averaged ccc  |
| 38 2,4,5-Trichlorophenol      | 0.30976      | 0.34924  | 0.34924       | 0.000      | 12.74701    | 60.00000           | Averaged      |
| 40 2-Chloronaphthalene        | 0.94508      | 0.97164  | 0.97164       | 0.000      | 2.81095     | 60.00000           | Averaged      |
| 42 o-Nitroaniline             | 0.37117      | 0.31589  | 0.31589       | 0.000      | -14.89411   | 60.00000           | Averaged      |
| 41 m-Nitroaniline             | 38.80115     | 40.00000 | 0.21352       | 0.000      | -2.99713    | 60.00000           | Linear        |
| 43 Dimethylphthalate          | 1.08482      | 1.16032  | 1.16032       | 0.000      | 6.95976     | 60.00000           | Averaged      |
| 44 2,6-Dinitrotoluene         | 0.25779      | 0.27419  | 0.27419       | 0.000      | 6.36093     | 60.00000           | Averaged      |
| 50 2,4-Dinitrotoluene         | 0.32038      | 0.34731  | 0.34731       | 0.000      | 8.40492     | 60.00000           | Averaged      |
| 45 Acenaphthylene             | 1.48695      | 1.54934  | 1.54934       | 0.000      | 4.19598     | 60.00000           | Averaged      |
| 47 Acenaphthene               | 0.94692      | 0.95605  | 0.95605       | 0.001      | 0.96487     | 20.00000           | Averaged ccc  |
| 48 2,4-Dinitrophenol          | 0.11484      | 0.13221  | 0.13221       | 0.050      | 15.11975    | 60.00000           | Averaged spcc |
| 49 Dibenzofuran               | 1.21446      | 1.32220  | 1.32220       | 0.000      | 8.87147     | 60.00000           | Averaged      |
| 51 Diethylphthalate           | 1.07824      | 1.18578  | 1.18578       | 0.000      | 9.97353     | 60.00000           | Averaged      |
| 52 4-Nitrophenol              | 0.18279      | 0.20202  | 0.20202       | 0.050      | 10.52130    | 60.00000           | Averaged spcc |
| 53 Fluorene                   | 1.02579      | 1.07659  | 1.07659       | 0.000      | 4.95207     | 60.00000           | Averaged      |
| 54 4-Chlorophenylphenylether  | 0.48232      | 0.54239  | 0.54239       | 0.000      | 12.45342    | 60.00000           | Averaged      |
| 55 2-Methyl-4,6-dinitrophenol | 0.10303      | 0.15089  | 0.15089       | 0.000      | 46.45686    | 60.00000           | Averaged      |
| 56 p-Nitroaniline             | 33.66597     | 40.00000 | 0.17537       | 0.000      | -15.83509   | 60.00000           | Linear        |
| 133 Diphenylamine             | 0.53006      | 0.50850  | 0.50850       | 0.001      | -4.06831    | 20.00000           | Averaged ccc  |
| 58 1,2-Diphenylhydrazine      | 0.78142      | 0.67735  | 0.67735       | 0.000      | -13.31866   | 60.00000           | Averaged      |
| 61 4-Bromophenylphenylether   | 0.17043      | 0.16912  | 0.16912       | 0.000      | -0.77077    | 60.00000           | Averaged      |
| 63 Hexachlorobenzene          | 0.17700      | 0.17714  | 0.17714       | 0.000      | 0.07565     | 60.00000           | Averaged      |
| 65 Pentachlorophenol          | 0.10027      | 0.11506  | 0.11506       | 0.001      | 14.75009    | 20.00000           | Averaged ccc  |
| 206 n-Octadecane              | 0.65176      | 0.53001  | 0.53001       | 0.000      | -18.67961   | 60.00000           | Averaged      |
| 68 Phenanthrene               | 0.87923      | 0.87965  | 0.87965       | 0.000      | 0.04834     | 60.00000           | Averaged      |
| 69 Anthracene                 | 0.87768      | 0.89540  | 0.89540       | 0.000      | 2.01931     | 60.00000           | Averaged      |
| 72 Di-n-butylphthalate        | 1.06159      | 1.14276  | 1.14276       | 0.000      | 7.64590     | 60.00000           | Averaged      |
| 76 Fluoranthene               | 0.80003      | 0.88153  | 0.88153       | 0.001      | 10.18748    | 20.00000           | Averaged ccc  |
| 79 Pyrene                     | 1.14589      | 1.10199  | 1.10199       | 0.000      | -3.83144    | 60.00000           | Averaged      |
| 85 Butylbenzylphthalate       | 0.57344      | 0.58350  | 0.58350       | 0.000      | 1.75469     | 60.00000           | Averaged      |
| 89 Benzo(a)anthracene         | 0.91588      | 0.90755  | 0.90755       | 0.000      | -0.90883    | 60.00000           | Averaged      |
| 92 Chrysene                   | 0.86151      | 0.88377  | 0.88377       | 0.000      | 2.58355     | 60.00000           | Averaged      |
| 93 bis(2-Ethylhexyl)phthalate | 0.78921      | 0.80453  | 0.80453       | 0.000      | 1.94049     | 60.00000           | Averaged      |

## GEL Laboratories LLC

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 27-JAN-2010 09:09  
Lab File ID: s3a2702.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010  
Analysis Type: Init. Cal. Times: 17:59 23:34  
Lab Sample ID: WBN100121-17.2 Quant Type: ISTD  
Method: /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m

| COMPOUND                        | RRF / AMOUNT | RF40    | CCAL RRF40 | MIN RRF | %D / %DRIFT | MAX %D / %DRIFT | CURVE TYPE   |
|---------------------------------|--------------|---------|------------|---------|-------------|-----------------|--------------|
| 94 Di-n-octylphthalate          | 1.61982      | 1.72946 | 1.72946    | 0.001   | 6.76848     | 20.00000        | Averaged ccc |
| 95 Benzo(b)fluoranthene         | 0.93870      | 0.99131 | 0.99131    | 0.000   | 5.60427     | 60.00000        | Averaged     |
| 96 Benzo(k)fluoranthene         | 0.97450      | 1.01295 | 1.01295    | 0.000   | 3.94564     | 60.00000        | Averaged     |
| 97 Benzo(a)pyrene               | 0.81798      | 0.89059 | 0.89059    | 0.001   | 8.87716     | 20.00000        | Averaged ccc |
| 99 Indeno(1,2,3-cd)pyrene       | 0.66728      | 0.73658 | 0.73658    | 0.000   | 10.38520    | 60.00000        | Averaged     |
| 100 Dibenzo(a,h)anthracene      | 0.54458      | 0.60797 | 0.60797    | 0.000   | 11.64019    | 60.00000        | Averaged     |
| 101 Benzo(ghi)perylene          | 0.54772      | 0.58120 | 0.58120    | 0.000   | 6.11368     | 60.00000        | Averaged     |
| 126 m-Dinitrobenzene            | 0.18506      | 0.19340 | 0.19340    | 0.000   | 4.50486     | 60.00000        | Averaged     |
| 130 2,3,4,6-Tetrachlorophenol   | 0.24334      | 0.27541 | 0.27541    | 0.000   | 13.18147    | 60.00000        | Averaged     |
| 143 Dinoseb                     | 0.14194      | 0.16915 | 0.16915    | 0.000   | 19.17146    | 60.00000        | Averaged     |
| 173 Carbazole                   | 0.71254      | 0.61695 | 0.61695    | 0.000   | -13.41533   | 60.00000        | Averaged     |
| 184 p-Benzoquinone              | 0.09247      | 0.04411 | 0.04411    | 0.000   | -52.29876   | 60.00000        | Averaged     |
| 192 Methoxychlor                | 0.51665      | 0.63910 | 0.63910    | 0.000   | 23.69958    | 60.00000        | Averaged     |
| 211 p-Toluidine                 | 0.91289      | 0.91280 | 0.91280    | 0.000   | -0.00983    | 60.00000        | Averaged     |
| 210 m-Toluidine                 | 1.30281      | 1.20361 | 1.20361    | 0.000   | -7.61429    | 60.00000        | Averaged     |
| 26 Phthalic anhydride           | 0.10481      | 0.16491 | 0.16491    | 0.000   | 57.34233    | 60.00000        | Averaged     |
| 179 Dibenzo(a,e)pyrene          | 0.23979      | 0.18658 | 0.18658    | 0.000   | -22.19083   | 60.00000        | Averaged     |
| 214 1,4-Dinitrobenzene          | 0.21468      | 0.19150 | 0.19150    | 0.000   | -10.79659   | 60.00000        | Averaged     |
| 215 2-Ethoxyethanol             | 0.84974      | 0.51871 | 0.51871    | 0.000   | -38.95626   | 60.00000        | Averaged     |
| 216 Methylenebis(2-chloroanilin | 0.10764      | 0.12443 | 0.12443    | 0.000   | 15.59241    | 60.00000        | Averaged     |
| M 225 Trichlorophenols          | 0.29823      | 0.33503 | 0.33503    | 0.000   | 12.34094    | 60.00000        | Averaged     |
| M 226 Tetrachlorophenols        | 0.24334      | 0.27541 | 0.27541    | 0.000   | 13.18147    | 60.00000        | Averaged     |
| M 227 Benzo(b,k)fluoranthene    | 0.95660      | 1.00213 | 1.00213    | 0.000   | 4.75944     | 60.00000        | Averaged     |

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2702.d  
Lab Smp Id: WBN100121-17.2 Client Smp ID: MEGACVS  
Inj Date : 27-JAN-2010 09:09  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |WBN100121-17.2|40 PPM|1|SVMF|1|MEGACVS  
Misc Info : |MSD8270|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m  
Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 2 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: MEGAILI.sub  
Target Version: 3.50  
Processing Host: hpc1p1

|                                 |      |        |        |         |          | AMOUNTS |         |
|---------------------------------|------|--------|--------|---------|----------|---------|---------|
| QUANT SIG                       |      |        |        |         |          | CAL-AMT | ON-COL  |
| Compounds                       | MASS | RT     | EXP RT | REL RT  | RESPONSE | (ng/ul) | (ng/ul) |
| =====                           | ---- | --     | -----  | -----   | -----    | -----   | -----   |
| * 10 1,4-Dichlorobenzene-d4     | 152  | 4.817  | 4.817  | (1.000) | 267689   | 40.0000 |         |
| * 29 Naphthalene-d8             | 136  | 6.100  | 6.100  | (1.000) | 1068883  | 40.0000 |         |
| * 46 Acenaphthene-d10           | 164  | 7.973  | 7.973  | (1.000) | 570163   | 40.0000 |         |
| * 67 Phenanthrene-d10           | 188  | 9.588  | 9.588  | (1.000) | 947337   | 40.0000 |         |
| * 91 Chrysene-d12               | 240  | 12.610 | 12.610 | (1.000) | 775080   | 40.0000 |         |
| * 98 Perylene-d12               | 264  | 14.945 | 14.945 | (1.000) | 562347   | 40.0000 |         |
| \$ 3 2-Fluorophenol             | 112  | 3.633  | 3.633  | (0.754) | 242503   | 40.0000 | 34.8    |
| \$ 5 Phenol-d5                  | 99   | 4.418  | 4.418  | (0.917) | 320500   | 40.0000 | 36.6    |
| \$ 20 Nitrobenzene-d5           | 82   | 5.357  | 5.357  | (0.878) | 316247   | 40.0000 | 40.0    |
| \$ 39 2-Fluorobiphenyl          | 172  | 7.227  | 7.227  | (0.906) | 637593   | 40.0000 | 43.3    |
| \$ 60 2,4,6-Tribromophenol      | 329  | 8.825  | 8.825  | (1.107) | 70745    | 40.0000 | 43.3    |
| \$ 81 p-Terphenyl-d14           | 244  | 11.297 | 11.297 | (0.896) | 602905   | 40.0000 | 45.2    |
| 1 N-Methyl-N-nitrosomethylamine | 74   | 2.639  | 2.639  | (0.548) | 138021   | 40.0000 | 28.3    |
| 2 Pyridine                      | 79   | 2.680  | 2.680  | (0.556) | 156034   | 40.0000 | 28.6    |
| 4 Aniline                       | 66   | 4.503  | 4.503  | (0.935) | 143995   | 40.0000 | 35.3    |
| 6 Phenol                        | 94   | 4.430  | 4.430  | (0.920) | 348084   | 40.0000 | 37.6    |
| 7 bis(2-Chloroethyl) ether      | 63   | 4.541  | 4.541  | (0.943) | 227729   | 40.0000 | 31.1    |
| 8 2-Chlorophenol                | 128  | 4.615  | 4.615  | (0.958) | 292020   | 40.0000 | 41.5    |
| 203 n-Decane                    | 43   | 4.615  | 4.615  | (0.958) | 340066   | 40.0000 | 31.9    |
| 9 1,3-Dichlorobenzene           | 146  | 4.764  | 4.764  | (0.989) | 347668   | 40.0000 | 42.9    |
| 11 1,4-Dichlorobenzene          | 146  | 4.832  | 4.832  | (1.003) | 346713   | 40.0000 | 42.2    |
| 13 1,2-Dichlorobenzene          | 146  | 4.982  | 4.982  | (1.034) | 325928   | 40.0000 | 42.3    |
| 14 bis(2-Chloroisopropyl)ether  | 45   | 5.049  | 5.049  | (1.048) | 526371   | 40.0000 | 30.4    |
| 12 Benzyl alcohol               | 108  | 4.926  | 4.926  | (1.023) | 190318   | 40.0000 | 38.9    |
| 15 o-Cresol                     | 107  | 5.011  | 5.011  | (1.040) | 231972   | 40.0000 | 38.5    |
| 18 m,p-Cresols                  | 107  | 5.164  | 5.164  | (1.072) | 308462   | 40.0000 | 39.4    |

| Compounds                      | QUANT SIG |        |        |         |          | AMOUNTS            |                   |
|--------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| =====                          | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| 17 N-Nitrosodipropylamine      | 70        | 5.187  | 5.187  | (1.077) | 222029   | 40.0000            | 37.3              |
| 19 Hexachloroethane            | 117       | 5.316  | 5.316  | (1.104) | 142515   | 40.0000            | 40.4              |
| 21 Nitrobenzene                | 77        | 5.378  | 5.378  | (0.882) | 320594   | 40.0000            | 38.6              |
| 22 Isophorone                  | 82        | 5.610  | 5.610  | (0.920) | 581839   | 40.0000            | 39.5              |
| 23 2-Nitrophenol               | 139       | 5.695  | 5.695  | (0.934) | 162715   | 40.0000            | 42.7              |
| 24 2,4-Dimethylphenol          | 122       | 5.704  | 5.704  | (0.935) | 279445   | 40.0000            | 42.4              |
| 25 bis (2-Chloroethoxy)methane | 93        | 5.809  | 5.809  | (0.952) | 320445   | 40.0000            | 37.5              |
| 26 2,4-Dichlorophenol          | 162       | 5.933  | 5.933  | (0.973) | 248752   | 40.0000            | 44.9              |
| 27 Benzoic acid                | 105       | 5.800  | 5.800  | (0.951) | 192759   | 40.0000            | 41.6              |
| 28 1,2,4-Trichlorobenzene      | 180       | 6.029  | 6.029  | (0.988) | 279196   | 40.0000            | 45.4              |
| 30 Naphthalene                 | 128       | 6.120  | 6.120  | (1.003) | 829895   | 40.0000            | 36.9              |
| 204 alpha-Terpineol            | 59        | 6.106  | 6.106  | (1.001) | 250880   | 40.0000            | 33.9              |
| 31 4-Chloroaniline             | 127       | 6.162  | 6.162  | (1.010) | 281947   | 40.0000            | 41.5              |
| 32 Hexachlorobutadiene         | 225       | 6.226  | 6.226  | (1.021) | 165600   | 40.0000            | 47.1              |
| 33 4-Chloro-3-methylphenol     | 107       | 6.643  | 6.643  | (1.089) | 272289   | 40.0000            | 43.4              |
| 34 2-Methylnaphthalene         | 142       | 6.845  | 6.845  | (1.122) | 571976   | 40.0000            | 42.3              |
| 35 1-Methylnaphthalene         | 142       | 6.954  | 6.954  | (1.140) | 547650   | 40.0000            | 39.9              |
| 36 Hexachlorocyclopentadiene   | 237       | 6.998  | 6.998  | (0.878) | 122378   | 40.0000            | 37.7              |
| 205 2,3-Dichloroaniline        | 161       | 7.145  | 7.145  | (0.896) | 296497   | 40.0000            | 40.8 (H)          |
| 37 2,4,6-Trichlorophenol       | 196       | 7.136  | 7.136  | (0.895) | 182922   | 40.0000            | 44.8              |
| 38 2,4,5-Trichlorophenol       | 196       | 7.171  | 7.171  | (0.899) | 199124   | 40.0000            | 45.1              |
| 40 2-Chloronaphthalene         | 162       | 7.371  | 7.371  | (0.925) | 553995   | 40.0000            | 41.1              |
| 42 o-Nitroaniline              | 65        | 7.474  | 7.474  | (0.937) | 180107   | 40.0000            | 34.0              |
| 41 m-Nitroaniline              | 138       | 7.917  | 7.917  | (0.993) | 121741   | 40.0000            | 38.8              |
| 43 Dimethylphthalate           | 163       | 7.656  | 7.656  | (0.960) | 661573   | 40.0000            | 42.8              |
| 44 2,6-Dinitrotoluene          | 165       | 7.729  | 7.729  | (0.969) | 156334   | 40.0000            | 42.5              |
| 50 2,4-Dinitrotoluene          | 165       | 8.164  | 8.164  | (1.024) | 198022   | 40.0000            | 43.4              |
| 45 Acenaphthylene              | 152       | 7.823  | 7.823  | (0.981) | 883375   | 40.0000            | 41.7              |
| 47 Acenaphthene                | 154       | 8.008  | 8.008  | (1.004) | 545106   | 40.0000            | 40.4              |
| 48 2,4-Dinitrophenol           | 184       | 8.026  | 8.026  | (1.007) | 75380    | 40.0000            | 46.0              |
| 49 Dibenzofuran                | 168       | 8.193  | 8.193  | (1.028) | 753868   | 40.0000            | 43.5              |
| 51 Diethylphthalate            | 149       | 8.411  | 8.411  | (1.055) | 676086   | 40.0000            | 44.0              |
| 52 4-Nitrophenol               | 139       | 8.070  | 8.070  | (1.012) | 115186   | 40.0000            | 44.2              |
| 53 Fluorene                    | 166       | 8.563  | 8.563  | (1.074) | 613832   | 40.0000            | 42.0              |
| 54 4-Chlorophenylphenylether   | 204       | 8.549  | 8.549  | (1.072) | 309251   | 40.0000            | 45.0              |
| 55 2-Methyl-4,6-dinitrophenol  | 198       | 8.605  | 8.605  | (0.897) | 142948   | 40.0000            | 58.6              |
| 56 p-Nitroaniline              | 138       | 8.578  | 8.578  | (1.076) | 99987    | 40.0000            | 33.7              |
| 133 Diphenylamine              | 169       | 8.678  | 8.678  | (0.905) | 481721   | 40.0000            | 38.4              |
| 58 1,2-Diphenylhydrazine       | 77        | 8.725  | 8.725  | (0.910) | 641677   | 40.0000            | 34.7              |
| 61 4-Bromophenylphenylether    | 248       | 9.083  | 9.083  | (0.947) | 160211   | 40.0000            | 39.7              |
| 63 Hexachlorobenzene           | 284       | 9.157  | 9.157  | (0.955) | 167807   | 40.0000            | 40.0              |
| 65 Pentachlorophenol           | 266       | 9.365  | 9.365  | (0.977) | 108997   | 40.0000            | 45.9              |
| 206 n-Octadecane               | 57        | 9.406  | 9.406  | (0.981) | 502100   | 40.0000            | 32.5              |
| 68 Phenanthrene                | 178       | 9.615  | 9.615  | (1.003) | 833326   | 40.0000            | 40.0              |
| 69 Anthracene                  | 178       | 9.671  | 9.671  | (1.009) | 848244   | 40.0000            | 40.8              |
| 72 Di-n-butylphthalate         | 149       | 10.173 | 10.173 | (1.061) | 1082580  | 40.0000            | 43.0              |
| 76 Fluoranthene                | 202       | 10.906 | 10.906 | (1.137) | 835105   | 40.0000            | 44.1              |

| Compounds                         | QUANT STG |        |                | RESPONSE | AMOUNTS            |                   |
|-----------------------------------|-----------|--------|----------------|----------|--------------------|-------------------|
|                                   | MASS      | RT     | EXP RT REL RT  |          | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| =====                             | =====     | ==     | =====          | =====    | =====              | =====             |
| 79 Pyrene                         | 202       | 11.156 | 11.156 (0.885) | 854130   | 40.0000            | 38.5              |
| 85 Butylbenzylphthalate           | 149       | 11.828 | 11.828 (0.938) | 452258   | 40.0000            | 40.7              |
| 89 Benzo(a)anthracene             | 228       | 12.592 | 12.592 (0.999) | 703427   | 40.0000            | 39.6              |
| 92 Chrysene                       | 228       | 12.646 | 12.646 (1.003) | 684989   | 40.0000            | 41.0              |
| 93 bis(2-Ethylhexyl)phthalate     | 149       | 12.548 | 12.548 (0.995) | 623573   | 40.0000            | 40.8 (H)          |
| 94 Di-n-octylphthalate            | 149       | 13.538 | 13.538 (0.906) | 972554   | 40.0000            | 42.7              |
| 95 Benzo(b)fluoranthene           | 252       | 14.266 | 14.266 (0.955) | 557461   | 40.0000            | 42.2 (H)          |
| 96 Benzo(k)fluoranthene           | 252       | 14.316 | 14.316 (0.958) | 569627   | 40.0000            | 41.6              |
| 97 Benzo(a)pyrene                 | 252       | 14.845 | 14.845 (0.993) | 500821   | 40.0000            | 43.6              |
| 99 Indeno(1,2,3-cd)pyrene         | 276       | 16.934 | 16.934 (1.133) | 414215   | 40.0000            | 44.2              |
| 100 Dibenzo(a,h)anthracene        | 278       | 16.966 | 16.966 (1.135) | 341892   | 40.0000            | 44.6              |
| 101 Benzo(ghi)perylene            | 276       | 17.446 | 17.446 (1.167) | 326837   | 40.0000            | 42.4              |
| 126 m-Dinitrobenzene              | 168       | 7.703  | 7.703 (0.966)  | 110269   | 40.0000            | 41.8              |
| 130 2,3,4,6-Tetrachlorophenol     | 232       | 8.314  | 8.314 (1.043)  | 157029   | 40.0000            | 45.3              |
| 143 Dinoseb                       | 211       | 9.547  | 9.547 (0.996)  | 160245   | 40.0000            | 47.7              |
| 173 Carbazole                     | 167       | 9.835  | 9.835 (1.026)  | 584458   | 40.0000            | 34.6              |
| 184 p-Benzoquinone                | 54        | 4.075  | 4.075 (0.846)  | 11807    | 40.0000            | 19.1              |
| 192 Methoxychlor                  | 227       | 12.457 | 12.457 (0.988) | 495351   | 40.0000            | 49.5              |
| 211 p-Toluidine                   | 106       | 5.237  | 5.237 (1.087)  | 244346   | 40.0000            | 40.0              |
| 210 m-Toluidine                   | 106       | 5.269  | 5.269 (1.094)  | 322193   | 40.0000            | 37.0              |
| 26 Phthalic anhydride             | 104       | 6.907  | 6.907 (1.132)  | 176268   | 40.0000            | 62.9              |
| 179 Dibenzo(a,e)pyrene            | 302       | 21.154 | 21.154 (1.415) | 104921   | 40.0000            | 31.1              |
| 214 1,4-Dinitrobenzene            | 75        | 7.624  | 7.624 (0.956)  | 109187   | 40.0000            | 35.7              |
| 215 2-Ethoxyethanol               | 59        | 2.422  | 2.422 (0.503)  | 138854   | 40.0000            | 24.4              |
| 216 Methylenebis(2-chloroaniline) | 231       | 12.536 | 12.536 (0.994) | 96442    | 40.0000            | 46.2              |
| M 225 Trichlorophenols            | 196       |        |                | 382046   | 80.0000            | 89.9              |
| M 226 Tetrachlorophenols          | 232       |        |                | 157029   | 40.0000            | 45.3              |
| M 227 Benzo(b,k)fluoranthene      | 252       |        |                | 1127088  | 80.0000            | 83.8              |

#### QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/HSD3.i/s012710.b/s3a2702.d

Date: 27-JAN-2010 09:09

Client ID: HECACVS

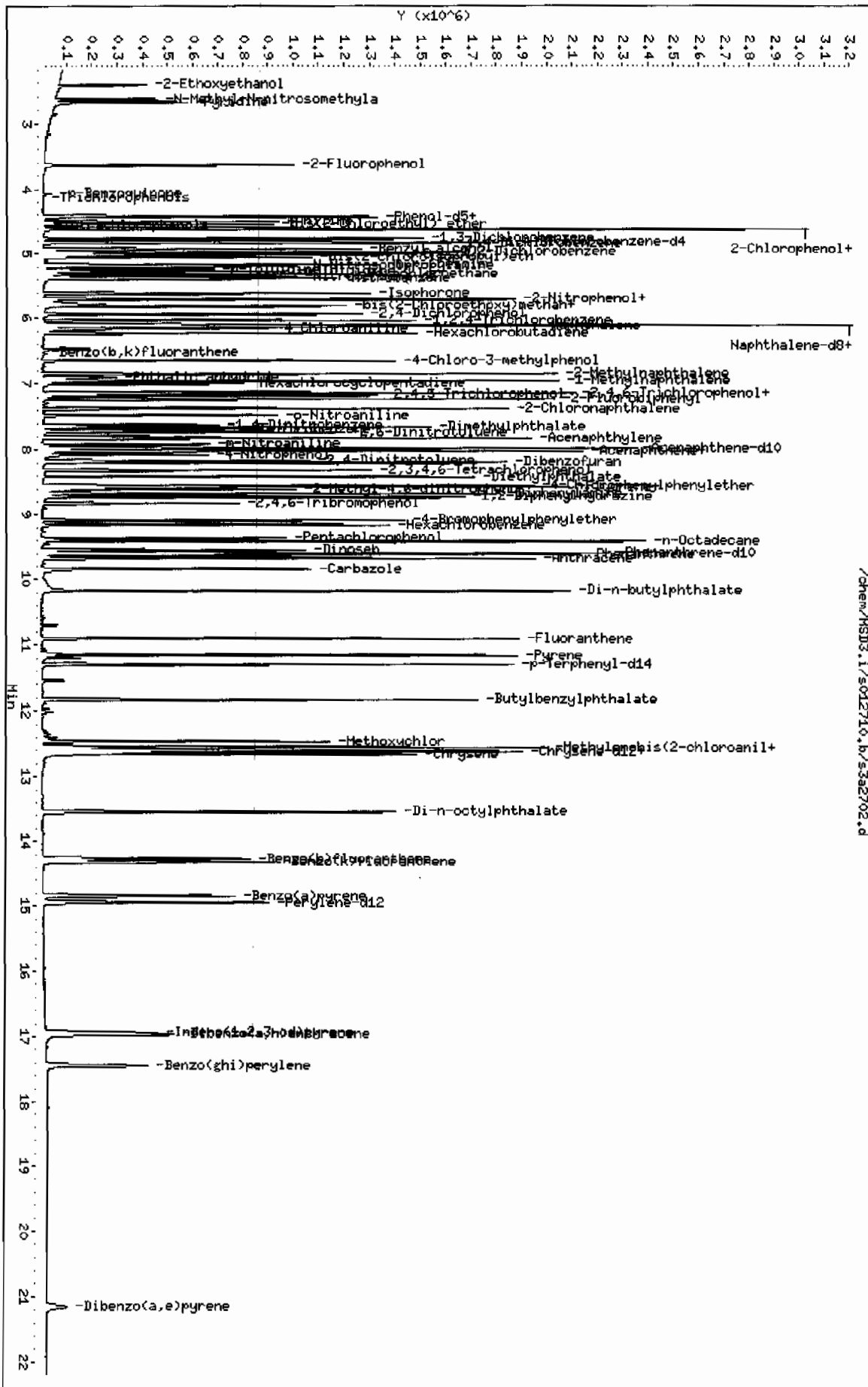
Sample Info: IBERD00121-17.2140 PPH111SVH111HEGACVS

Column phase: J&W DB-5MS

Instrument: HSD3.i

Operator: JLD

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 27-JAN-2010 10:11  
Lab File ID: s3a2704.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010  
Analysis Type: Init. Cal. Times: 17:59 23:34  
Lab Sample ID: WBN100120-08.4 Quant Type: ISTD  
Method: /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m

| COMPOUND                       | RRF / AMOUNT | RF40     | CCAL<br>RRF40 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE |
|--------------------------------|--------------|----------|---------------|------------|-------------|--------------------|------------|
| 209 Benzaldehyde               | 1.00310      | 0.69755  | 0.69755       | 0.000      | -30.46057   | 60.00000           | Averaged   |
| 16 Acetophenone                | 1.32216      | 1.14533  | 1.14533       | 0.000      | -13.37434   | 60.00000           | Averaged   |
| 189 Caprolactam                | 0.08576      | 0.08451  | 0.08451       | 0.000      | -1.45316    | 60.00000           | Averaged   |
| 208 1,1'-Biphenyl              | 1.21038      | 1.17905  | 1.17905       | 0.000      | -2.58856    | 60.00000           | Averaged   |
| 207 Atrazine                   | 0.04628      | 0.04843  | 0.04843       | 0.000      | 4.65576     | 60.00000           | Averaged   |
| 77 Benzidine                   | 24.89647     | 40.00000 | 0.18740       | 0.000      | -37.75882   | 60.00000           | Linear     |
| 90 3,3'-Dichlorobenzidine      | 35.07004     | 40.00000 | 0.23688       | 0.000      | -12.32491   | 60.00000           | Linear     |
| 102 1,4-Dioxane                | 0.37050      | 0.37143  | 0.37143       | 0.000      | 0.25291     | 60.00000           | Averaged   |
| 103 Methyl methacrylate        | 0.21351      | 0.22531  | 0.22531       | 0.000      | 5.53095     | 60.00000           | Averaged   |
| 104 Ethyl methacrylate         | 0.89246      | 0.85284  | 0.85284       | 0.000      | -4.43918    | 60.00000           | Averaged   |
| 105 2-Picoline                 | 1.30074      | 1.04330  | 1.04330       | 0.000      | -19.79167   | 60.00000           | Averaged   |
| 106 N-Nitrosomethylethylamine  | 0.57807      | 0.45950  | 0.45950       | 0.000      | -20.51215   | 60.00000           | Averaged   |
| 107 Methyl methanesulfonate    | 0.60378      | 0.55389  | 0.55389       | 0.000      | -8.26297    | 60.00000           | Averaged   |
| 108 N-Nitrosodiethylamine      | 0.58167      | 0.50389  | 0.50389       | 0.000      | -13.37265   | 60.00000           | Averaged   |
| 109 Ethyl Methanesulfonate     | 0.74637      | 0.74248  | 0.74248       | 0.000      | -0.52086    | 60.00000           | Averaged   |
| 110 Pentachloroethane          | 0.32905      | 0.43278  | 0.43278       | 0.000      | 31.52699    | 60.00000           | Averaged   |
| 111 N-Nitrosopyrrolidine       | 0.60059      | 0.51940  | 0.51940       | 0.000      | -13.51777   | 60.00000           | Averaged   |
| 113 N-Nitrosomorpholine        | 0.98604      | 0.82768  | 0.82768       | 0.000      | -16.06094   | 60.00000           | Averaged   |
| 114 o-Toluidine                | 1.80736      | 1.61096  | 1.61096       | 0.000      | -10.86667   | 60.00000           | Averaged   |
| 115 N-Nitrosopiperidine        | 0.15108      | 0.13342  | 0.13342       | 0.000      | -11.68999   | 60.00000           | Averaged   |
| 116 a,a-Dimethylphenethylamine | 1.11880      | 0.79170  | 0.79170       | 0.000      | -29.23733   | 60.00000           | Averaged   |
| 118 2,6-Dichlorophenol         | 0.21531      | 0.21236  | 0.21236       | 0.000      | -1.36955    | 60.00000           | Averaged   |
| 119 Hexachloropropene          | 0.11708      | 0.15535  | 0.15535       | 0.000      | 32.68879    | 60.00000           | Averaged   |
| 120 p-Phenylenediamine         | 0.24808      | 0.18786  | 0.18786       | 0.000      | -24.27440   | 60.00000           | Averaged   |
| 121 N-Nitrosodi-n-butylamine   | 0.23566      | 0.20459  | 0.20459       | 0.000      | -13.18411   | 60.00000           | Averaged   |
| 122 Safrole                    | 0.19323      | 0.21744  | 0.21744       | 0.000      | 12.53318    | 60.00000           | Averaged   |
| 123 1,2,4,5-Tetrachlorobenzene | 0.42534      | 0.46495  | 0.46495       | 0.000      | 9.31270     | 60.00000           | Averaged   |
| 124 Isosafrole                 | 0.35652      | 0.43179  | 0.43179       | 0.000      | 21.11174    | 60.00000           | Averaged   |
| 125 1,4-Naphthoquinone         | 0.33545      | 0.30298  | 0.30298       | 0.000      | -9.67783    | 60.00000           | Averaged   |
| 127 Pentachlorobenzene         | 0.37060      | 0.35865  | 0.35865       | 0.000      | -3.22615    | 60.00000           | Averaged   |
| 128 1-Naphthylamine            | 0.91242      | 0.83838  | 0.83838       | 0.000      | -8.11473    | 60.00000           | Averaged   |
| 129 2-Naphthylamine            | 1.00263      | 0.86475  | 0.86475       | 0.000      | -13.75164   | 60.00000           | Averaged   |
| 131 5-Nitro-o-toluidine        | 0.29533      | 0.24171  | 0.24171       | 0.000      | -18.15384   | 60.00000           | Averaged   |
| 136 1,3,5-Trinitrobenzene      | 0.14894      | 0.15140  | 0.15140       | 0.000      | 1.65682     | 60.00000           | Averaged   |
| 137 Phenacetin                 | 0.33125      | 0.26694  | 0.26694       | 0.000      | -19.41452   | 60.00000           | Averaged   |
| 138 Diallate                   | 0.31820      | 0.25215  | 0.25215       | 0.000      | -20.75697   | 60.00000           | Averaged   |

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 27-JAN-2010 10:11  
 Lab File ID: s3a2704.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010  
 Analysis Type: Init. Cal. Times: 17:59 23:34  
 Lab Sample ID: WBN100120-08.4 Quant Type: ISTD  
 Method: /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m

| COMPOUND                          | RRF / AMOUNT | RF40     | CCAL<br>RRF40 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE |
|-----------------------------------|--------------|----------|---------------|------------|-------------|--------------------|------------|
| 140 4-Aminobiphenyl               | 0.63580      | 0.51143  | 0.51143       | 0.000      | -19.56210   | 60.00000           | Averaged   |
| 141 Pentachloronitrobenzene       | 0.07853      | 0.07686  | 0.07686       | 0.000      | -2.12320    | 60.00000           | Averaged   |
| 142 Pronamide                     | 0.29619      | 0.29945  | 0.29945       | 0.000      | 1.09961     | 60.00000           | Averaged   |
| 146 4-Nitroquinoline-1-oxide      | 0.03387      | 0.01701  | 0.01701       | 0.000      | -49.78709   | 60.00000           | Averaged   |
| 147 Methapyrilene                 | 0.52598      | 0.40240  | 0.40240       | 0.000      | -23.49373   | 60.00000           | Averaged   |
| 148 Isodrin                       | 0.11094      | 0.09826  | 0.09826       | 0.000      | -11.43181   | 60.00000           | Averaged   |
| 149 Aramite                       | 0.04585      | 0.04083  | 0.04083       | 0.000      | -10.95651   | 60.00000           | Averaged   |
| 150 Kepone                        | 0.06767      | 0.05999  | 0.05999       | 0.000      | -11.34340   | 60.00000           | Averaged   |
| 151 p-(Dimethylamino)azobenzene   | 0.39647      | 0.40498  | 0.40498       | 0.000      | 2.14596     | 60.00000           | Averaged   |
| 152 Chlorobenzilate               | 0.32229      | 0.39650  | 0.39650       | 0.000      | 23.02305    | 60.00000           | Averaged   |
| 153 3,3'-Dimethylbenzidine        | 0.51678      | 0.43855  | 0.43855       | 0.000      | -15.13914   | 60.00000           | Averaged   |
| 155 2-Acetylaminofluorene         | 35.54353     | 40.00000 | 0.27411       | 0.000      | -11.14119   | 60.00000           | Linear     |
| 157 7,12Dimethylbenz(a)anthracene | 0.53008      | 0.55161  | 0.55161       | 0.000      | 4.06115     | 60.00000           | Averaged   |
| 158 3-Methylcholanthrene          | 0.38427      | 0.42176  | 0.42176       | 0.000      | 9.75629     | 60.00000           | Averaged   |
| 212 Cis Diallate                  | 0.33782      | 0.33747  | 0.33747       | 0.000      | -0.10307    | 60.00000           | Averaged   |
| 213 Trans Diallate                | 0.37435      | 0.29665  | 0.29665       | 0.000      | -20.75697   | 60.00000           | Averaged   |



GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2704.d  
Lab Smp Id: WBN100120-08.4 Client Smp ID: APCVS  
Inj Date : 27-JAN-2010 10:11  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |WBN100120-08.4|40 PPM|1|SVMF|1|APCVS  
Misc Info : |MSD8270|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m  
Meth Date : 27-Jan-2010 11:46 jen00986 Quant Type: ISTD  
Cal Date : 21-Jan-2010 21:36 Cal File: s3a2130.d  
Als bottle: 4 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: AP12.sub  
Target Version: 3.50  
Processing Host: hpclp1

| Compounds                     | QUANT SIG<br>MASS | RT     | EXP RT | REL RT  | RESPONSE | AMOUNTS            |                   |
|-------------------------------|-------------------|--------|--------|---------|----------|--------------------|-------------------|
|                               |                   |        |        |         |          | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| * 10 1,4-Dichlorobenzene-d4   | 152               | 4.814  | 4.814  | (1.000) | 299772   | 40.0000            |                   |
| * 29 Naphthalene-d8           | 136               | 6.098  | 6.098  | (1.000) | 1120405  | 40.0000            |                   |
| * 46 Acenaphthene-d10         | 164               | 7.969  | 7.969  | (1.000) | 612234   | 40.0000            |                   |
| * 67 Phenanthrene-d10         | 188               | 9.589  | 9.589  | (1.000) | 988246   | 40.0000            |                   |
| * 91 Chrysene-d12             | 240               | 12.600 | 12.600 | (1.000) | 531784   | 40.0000            |                   |
| * 98 Perylene-d12             | 264               | 14.935 | 14.935 | (1.000) | 275778   | 40.0000            |                   |
| 209 Benzaldehyde              | 77                | 4.412  | 4.412  | (0.917) | 209105   | 40.0000            | 27.8              |
| 16 Acetophenone               | 105               | 5.195  | 5.195  | (1.079) | 343336   | 40.0000            | 34.6              |
| 189 Caprolactam               | 113               | 6.529  | 6.529  | (1.071) | 94688    | 40.0000            | 39.4              |
| 208 1,1'-Biphenyl             | 154               | 7.342  | 7.342  | (0.921) | 721855   | 40.0000            | 39.0              |
| 207 Atrazine                  | 173               | 9.242  | 9.242  | (0.964) | 47863    | 40.0000            | 41.9              |
| 77 Benzidine                  | 184               | 11.035 | 11.035 | (0.876) | 99658    | 40.0000            | 24.9              |
| 90 3,3'-Dichlorobenzidine     | 252               | 12.530 | 12.530 | (0.994) | 125970   | 40.0000            | 35.1              |
| 102 1,4-Dioxane               | 88                | 2.431  | 2.431  | (0.505) | 111345   | 40.0000            | 40.1              |
| 103 Methyl methacrylate       | 100               | 2.425  | 2.425  | (0.504) | 67543    | 40.0000            | 42.2              |
| 104 Ethyl methacrylate        | 69                | 2.947  | 2.947  | (0.612) | 255656   | 40.0000            | 38.2              |
| 105 2-Picoline                | 93                | 3.211  | 3.211  | (0.667) | 312752   | 40.0000            | 32.1              |
| 106 N-Nitrosomethylethylamine | 88                | 3.278  | 3.278  | (0.681) | 137743   | 40.0000            | 31.8              |
| 107 Methyl methanesulfonate   | 80                | 3.510  | 3.510  | (0.729) | 166041   | 40.0000            | 36.7              |
| 108 N-Nitrosodiethylamine     | 102               | 3.841  | 3.841  | (0.798) | 151051   | 40.0000            | 34.6              |
| 109 Ethyl Methanesulfonate    | 79                | 4.081  | 4.081  | (0.848) | 222575   | 40.0000            | 39.8              |
| 110 Pentachloroethane         | 167               | 4.553  | 4.553  | (0.946) | 129736   | 40.0000            | 52.6              |
| 111 N-Nitrosopyrrolidine      | 100               | 5.183  | 5.183  | (1.077) | 155702   | 40.0000            | 34.6(Q)           |
| 113 N-Nitrosomorpholine       | 56                | 5.215  | 5.215  | (1.083) | 248114   | 40.0000            | 33.6              |
| 114 o-Toluidine               | 106               | 5.233  | 5.233  | (1.087) | 482920   | 40.0000            | 35.6              |
| 115 N-Nitrosopiperidine       | 114               | 5.529  | 5.529  | (0.907) | 149486   | 40.0000            | 35.3              |

| Compounds                         | QUANT SIG |        |        |         |          | AMOUNTS            |                   |
|-----------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                   | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| =====                             | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| 116 a,a-Dimethylphenethylamine    | 58        | 5.919  | 5.919  | (0.971) | 887020   | 40.0000            | 28.3              |
| 118 2,6-Dichlorophenol            | 162       | 6.168  | 6.168  | (1.012) | 237933   | 40.0000            | 39.4              |
| 119 Hexachloropropene             | 213       | 6.201  | 6.201  | (1.017) | 174059   | 40.0000            | 53.1              |
| 120 p-Phenylenediamine            | 108       | 6.535  | 6.535  | (1.072) | 210476   | 40.0000            | 30.3              |
| 121 N-Nitrosodi-n-butylamine      | 84        | 6.497  | 6.497  | (1.065) | 229228   | 40.0000            | 34.7 (Q)          |
| 122 Safrole                       | 162       | 6.734  | 6.734  | (1.104) | 243624   | 40.0000            | 45.0              |
| 123 1,2,4,5-Tetrachlorobenzene    | 216       | 7.019  | 7.019  | (0.881) | 284661   | 40.0000            | 43.7              |
| 124 Isosafrole                    | 162       | 7.292  | 7.292  | (0.915) | 264357   | 40.0000            | 48.4              |
| 125 1,4-Naphthoquinone            | 158       | 7.559  | 7.559  | (0.948) | 185495   | 40.0000            | 36.1              |
| 127 Pentachlorobenzene            | 250       | 8.142  | 8.142  | (1.022) | 219576   | 40.0000            | 38.7              |
| 128 1-Naphthylamine               | 143       | 8.277  | 8.277  | (1.039) | 513282   | 40.0000            | 36.8              |
| 129 2-Naphthylamine               | 143       | 8.359  | 8.359  | (1.049) | 529429   | 40.0000            | 34.5              |
| 131 5-Nitro-o-toluidine           | 152       | 8.567  | 8.567  | (1.075) | 147986   | 40.0000            | 32.7              |
| 136 1,3,5-Trinitrobenzene         | 75        | 8.949  | 8.949  | (0.933) | 149623   | 40.0000            | 40.7              |
| 137 Phenacetin                    | 108       | 9.002  | 9.002  | (0.939) | 263804   | 40.0000            | 32.2 (Q)          |
| 138 Diallate                      | 86        | 8.975  | 8.975  | (0.936) | 249184   | 40.0000            | 31.7              |
| 140 4-Aminobiphenyl               | 169       | 9.369  | 9.369  | (0.977) | 505414   | 40.0000            | 32.2              |
| 141 Pentachloronitrobenzene       | 237       | 9.375  | 9.375  | (0.978) | 75954    | 40.0000            | 39.2 (Q)          |
| 142 Pronamide                     | 173       | 9.407  | 9.407  | (0.981) | 295929   | 40.0000            | 40.4              |
| 146 4-Nitroquinoline-1-oxide      | 101       | 10.445 | 10.445 | (1.089) | 16809    | 40.0000            | 20.1              |
| 147 Methapyrilene                 | 58        | 10.501 | 10.501 | (1.095) | 397675   | 40.0000            | 30.6              |
| 148 Isodrin                       | 193       | 10.736 | 10.736 | (1.120) | 97100    | 40.0000            | 35.4              |
| 149 Aramite                       | 185       | 11.249 | 11.249 | (1.173) | 40346    | 40.0000            | 35.6              |
| 150 Kepone                        | 272       | 11.916 | 11.916 | (1.243) | 59286    | 40.0000            | 35.5              |
| 151 p-(Dimethylamino)azobenzene   | 120       | 11.446 | 11.446 | (0.908) | 215362   | 40.0000            | 40.8              |
| 152 Chlorobenzilate               | 251       | 11.484 | 11.484 | (0.911) | 210850   | 40.0000            | 49.2              |
| 153 3,3'-Dimethylbenzidine        | 212       | 11.831 | 11.831 | (0.939) | 233212   | 40.0000            | 33.9              |
| 155 2-Acetylaminofluorene         | 181       | 12.145 | 12.145 | (0.964) | 145770   | 40.0000            | 35.5              |
| 157 7,12Dimethylbenz(a)anthracene | 256       | 14.234 | 14.234 | (0.953) | 152121   | 40.0000            | 41.6              |
| 158 3-Methylcholanthrene          | 268       | 15.455 | 15.455 | (1.035) | 116311   | 40.0000            | 43.9 (Q)          |
| 212 Cis Diallate                  | 86        | 9.075  | 9.075  | (0.946) | 50025    | 6.00000            | 6.0               |
| 213 Trans Diallate                | 86        | 8.975  | 8.975  | (0.936) | 249184   | 34.0000            | 26.9              |

#### QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/HSD3.i/5012710.b/s3a2704.d

Date: 27-JAN-2010 10:11

Client ID: APCVS

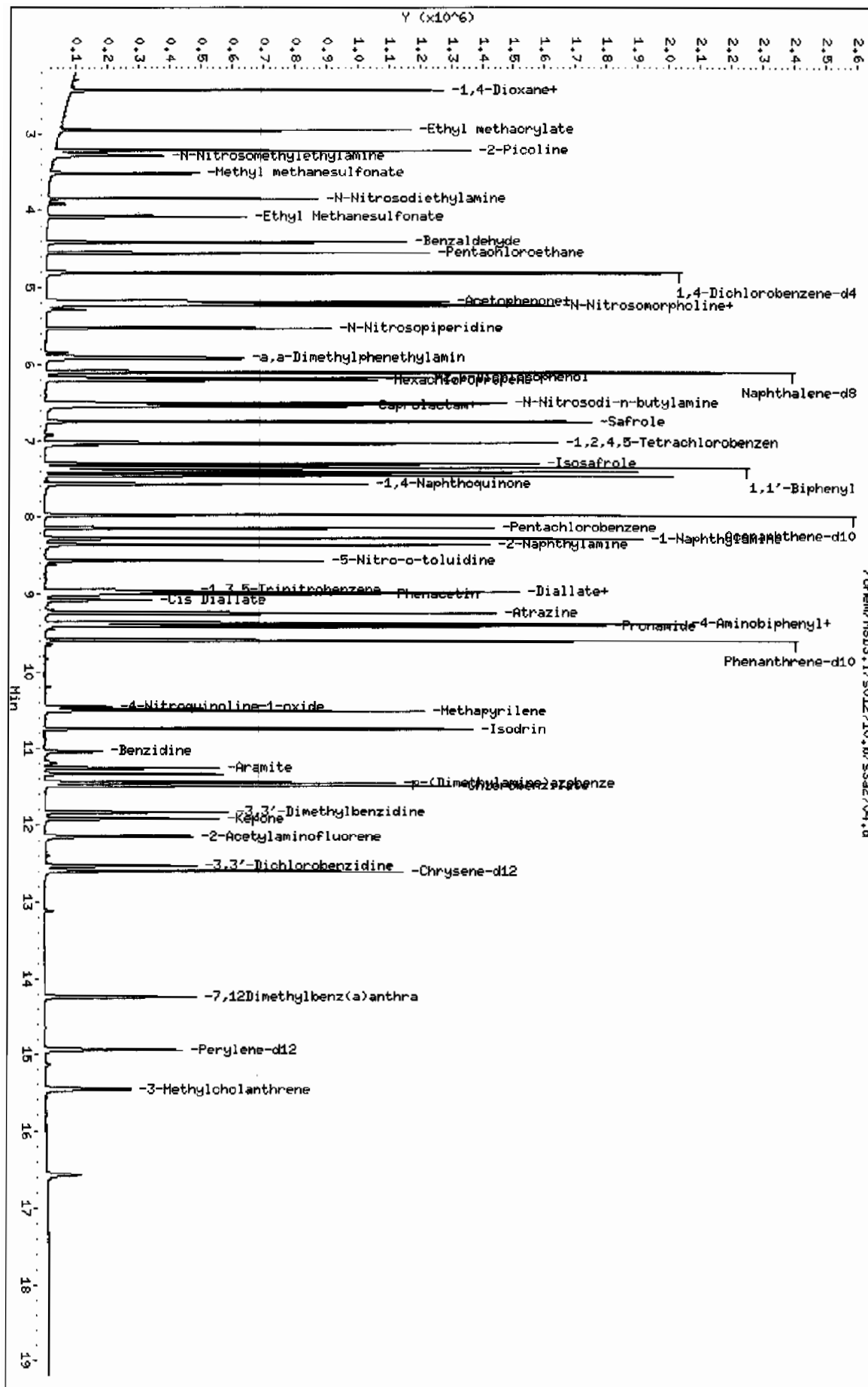
Sample Info: IHRM00120-08.4140 PPH11SWH11APCVS

Column phase: 3M DB-SHS

Instrument: HSD3.i

Operator: JLD

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 28-JAN-2010 19:05  
Lab File ID: s3a2821.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010  
Analysis Type: Init. Cal. Times: 17:59 23:34  
Lab Sample ID: WBN100121-13.5 Quant Type: ISTD  
Method: /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m

| COMPOUND                       | RRF / AMOUNT | RF40     | CCAL<br>RRF40 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE    |
|--------------------------------|--------------|----------|---------------|------------|-------------|--------------------|---------------|
| 3 2-Fluorophenol               | 1.04085      | 1.00536  | 1.00536       | 0.000      | -3.40965    | 60.00000           | Averaged      |
| 5 Phenol-d5                    | 1.30813      | 1.19685  | 1.19685       | 0.000      | -8.50649    | 60.00000           | Averaged      |
| 20 Nitrobenzene-d5             | 0.29548      | 0.28886  | 0.28886       | 0.000      | -2.23885    | 60.00000           | Averaged      |
| 39 2-Fluorobiphenyl            | 1.03392      | 1.13128  | 1.13128       | 0.000      | 9.41706     | 60.00000           | Averaged      |
| 60 2,4,6-Tribromophenol        | 0.11467      | 0.09287  | 0.09287       | 0.000      | -19.01090   | 60.00000           | Averaged      |
| 81 p-Terphenyl-d14             | 0.68752      | 0.89655  | 0.89655       | 0.000      | 30.40315    | 60.00000           | Averaged      |
| 1 N-Methyl-N-nitrosomethylami  | 0.72841      | 0.61732  | 0.61732       | 0.000      | -15.24994   | 60.00000           | Averaged      |
| 2 Pyridine                     | 0.81403      | 0.71516  | 0.71516       | 0.000      | -12.14521   | 60.00000           | Averaged      |
| 4 Aniline                      | 0.60975      | 0.54273  | 0.54273       | 0.000      | -10.99173   | 60.00000           | Averaged      |
| 6 Phenol                       | 1.38337      | 1.29615  | 1.29615       | 0.001      | -6.30477    | 20.00000           | Averaged ccc  |
| 7 bis(2-Chloroethyl) ether     | 1.09435      | 0.86644  | 0.86644       | 0.000      | -20.82667   | 60.00000           | Averaged      |
| 8 2-Chlorophenol               | 1.05048      | 1.11419  | 1.11419       | 0.000      | 6.06482     | 60.00000           | Averaged      |
| 203 n-Decane                   | 1.59470      | 1.31884  | 1.31884       | 0.000      | -17.29852   | 60.00000           | Averaged      |
| 9 1,3-Dichlorobenzene          | 1.20957      | 1.27203  | 1.27203       | 0.000      | 5.16393     | 60.00000           | Averaged      |
| 11 1,4-Dichlorobenzene         | 1.22630      | 1.27710  | 1.27710       | 0.001      | 4.14298     | 20.00000           | Averaged ccc  |
| 13 1,2-Dichlorobenzene         | 1.15004      | 1.19058  | 1.19058       | 0.000      | 3.52537     | 60.00000           | Averaged      |
| 14 bis(2-Chloroisopropyl)ether | 2.59104      | 2.00224  | 2.00224       | 0.000      | -22.72430   | 60.00000           | Averaged      |
| 12 Benzyl alcohol              | 0.73117      | 0.61342  | 0.61342       | 0.000      | -16.10523   | 60.00000           | Averaged      |
| 15 o-Cresol                    | 0.89964      | 0.85501  | 0.85501       | 0.000      | -4.96079    | 60.00000           | Averaged      |
| 18 m,p-Cresols                 | 1.17039      | 1.12646  | 1.12646       | 0.000      | -3.75329    | 60.00000           | Averaged      |
| 17 N-Nitrosodipropylamine      | 0.88907      | 0.81939  | 0.81939       | 0.050      | -7.83747    | 60.00000           | Averaged spcc |
| 19 Hexachloroethane            | 0.52660      | 0.51574  | 0.51574       | 0.000      | -2.06266    | 60.00000           | Averaged      |
| 21 Nitrobenzene                | 0.31068      | 0.29737  | 0.29737       | 0.000      | -4.28614    | 60.00000           | Averaged      |
| 22 Isophorone                  | 0.55065      | 0.51898  | 0.51898       | 0.000      | -5.75135    | 60.00000           | Averaged      |
| 23 2-Nitrophenol               | 0.14255      | 0.14890  | 0.14890       | 0.001      | 4.45363     | 20.00000           | Averaged ccc  |
| 24 2,4-Dimethylphenol          | 0.24644      | 0.24354  | 0.24354       | 0.000      | -1.17582    | 60.00000           | Averaged      |
| 25 bis(2-Chloroethoxy)methane  | 0.31970      | 0.29546  | 0.29546       | 0.000      | -7.58192    | 60.00000           | Averaged      |
| 26 2,4-Dichlorophenol          | 0.20739      | 0.22610  | 0.22610       | 0.001      | 9.02210     | 20.00000           | Averaged ccc  |
| 27 Benzoic acid                | 0.17347      | 0.10747  | 0.10747       | 0.000      | -38.04888   | 60.00000           | Averaged      |
| 28 1,2,4-Trichlorobenzene      | 0.23033      | 0.24949  | 0.24949       | 0.000      | 8.31786     | 60.00000           | Averaged      |
| 30 Naphthalene                 | 0.84122      | 0.74256  | 0.74256       | 0.000      | -11.72847   | 60.00000           | Averaged      |
| 204 alpha-Terpineol            | 0.27709      | 0.24277  | 0.24277       | 0.000      | -12.38735   | 60.00000           | Averaged      |
| 31 4-Chloroaniline             | 42.80258     | 40.00000 | 0.27240       | 0.000      | 7.00646     | 60.00000           | Linear        |
| 32 Hexachlorobutadiene         | 0.13146      | 0.14616  | 0.14616       | 0.001      | 11.17888    | 20.00000           | Averaged ccc  |
| 33 4-Chloro-3-methylphenol     | 0.23504      | 0.24310  | 0.24310       | 0.001      | 3.43006     | 20.00000           | Averaged ccc  |
| 34 2-Methylnaphthalene         | 0.50578      | 0.53186  | 0.53186       | 0.000      | 5.15732     | 60.00000           | Averaged      |

## GEL Laboratories LLC

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 28-JAN-2010 19:05  
Lab File ID: s3a2821.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010  
Analysis Type: Init. Cal. Times: 17:59 23:34  
Lab Sample ID: WBN100121-13.5 Quant Type: ISTD  
Method: /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m

| COMPOUND                      | RRF / AMOUNT | RF40     | CCAL<br>RRF40 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE    |
|-------------------------------|--------------|----------|---------------|------------|-------------|--------------------|---------------|
| 35 1-Methylnaphthalene        | 0.51307      | 0.50556  | 0.50556       | 0.000      | -1.46478    | 60.00000           | Averaged      |
| 36 Hexachlorocyclopentadiene  | 0.22766      | 0.22943  | 0.22943       | 0.050      | 0.78040     | 60.00000           | Averaged spcc |
| 205 2,3-Dichloroaniline       | 0.50997      | 0.52939  | 0.52939       | 0.000      | 3.80736     | 60.00000           | Averaged      |
| 37 2,4,6-Trichlorophenol      | 0.28670      | 0.30603  | 0.30603       | 0.001      | 6.74043     | 20.00000           | Averaged ccc  |
| 38 2,4,5-Trichlorophenol      | 0.30976      | 0.36295  | 0.36295       | 0.000      | 17.17303    | 60.00000           | Averaged      |
| 40 2-Chloronaphthalene        | 0.94508      | 0.98975  | 0.98975       | 0.000      | 4.72727     | 60.00000           | Averaged      |
| 42 o-Nitroaniline             | 0.37117      | 0.33134  | 0.33134       | 0.000      | -10.72959   | 60.00000           | Averaged      |
| 41 m-Nitroaniline             | 43.03955     | 40.00000 | 0.23976       | 0.000      | 7.59886     | 60.00000           | Linear        |
| 43 Dimethylphthalate          | 1.08482      | 1.14790  | 1.14790       | 0.000      | 5.81422     | 60.00000           | Averaged      |
| 44 2,6-Dinitrotoluene         | 0.25779      | 0.27329  | 0.27329       | 0.000      | 6.01246     | 60.00000           | Averaged      |
| 50 2,4-Dinitrotoluene         | 0.32038      | 0.34385  | 0.34385       | 0.000      | 7.32553     | 60.00000           | Averaged      |
| 45 Acenaphthylene             | 1.48695      | 1.52897  | 1.52897       | 0.000      | 2.82628     | 60.00000           | Averaged      |
| 47 Acenaphthene               | 0.94692      | 0.94163  | 0.94163       | 0.001      | -0.55853    | 20.00000           | Averaged ccc  |
| 48 2,4-Dinitrophenol          | 0.11484      | 0.11145  | 0.11145       | 0.050      | -2.95081    | 60.00000           | Averaged spcc |
| 49 Dibenzofuran               | 1.21446      | 1.31840  | 1.31840       | 0.000      | 8.55880     | 60.00000           | Averaged      |
| 51 Diethylphthalate           | 1.07824      | 1.13559  | 1.13559       | 0.000      | 5.31879     | 60.00000           | Averaged      |
| 52 4-Nitrophenol              | 0.18279      | 0.18322  | 0.18322       | 0.050      | 0.23652     | 60.00000           | Averaged spcc |
| 53 Fluorene                   | 1.02579      | 1.04745  | 1.04745       | 0.000      | 2.11120     | 60.00000           | Averaged      |
| 54 4-Chlorophenylphenylether  | 0.48232      | 0.53424  | 0.53424       | 0.000      | 10.76381    | 60.00000           | Averaged      |
| 55 2-Methyl-4,6-dinitrophenol | 0.10303      | 0.14321  | 0.14321       | 0.000      | 39.00090    | 60.00000           | Averaged      |
| 56 p-Nitroaniline             | 40.15598     | 40.00000 | 0.21537       | 0.000      | 0.38995     | 60.00000           | Linear        |
| 133 Diphenylamine             | 0.53006      | 0.55886  | 0.55886       | 0.001      | 5.43328     | 20.00000           | Averaged ccc  |
| 58 1,2-Diphenylhydrazine      | 0.78142      | 0.71998  | 0.71998       | 0.000      | -7.86310    | 60.00000           | Averaged      |
| 61 4-Bromophenylphenylether   | 0.17043      | 0.17490  | 0.17490       | 0.000      | 2.62125     | 60.00000           | Averaged      |
| 63 Hexachlorobenzene          | 0.17700      | 0.16610  | 0.16610       | 0.000      | -6.16107    | 60.00000           | Averaged      |
| 65 Pentachlorophenol          | 0.10027      | 0.08732  | 0.08732       | 0.001      | -12.91404   | 20.00000           | Averaged ccc  |
| 206 n-Octadecane              | 0.65176      | 0.53953  | 0.53953       | 0.000      | -17.21911   | 60.00000           | Averaged      |
| 68 Phenanthrene               | 0.87923      | 0.87512  | 0.87512       | 0.000      | -0.46651    | 60.00000           | Averaged      |
| 69 Anthracene                 | 0.87768      | 0.89385  | 0.89385       | 0.000      | 1.84319     | 60.00000           | Averaged      |
| 72 Di-n-butylphthalate        | 1.06159      | 1.05818  | 1.05818       | 0.000      | -0.32140    | 60.00000           | Averaged      |
| 76 Fluoranthene               | 0.80003      | 0.80024  | 0.80024       | 0.001      | 0.02607     | 20.00000           | Averaged ccc  |
| 79 Pyrene                     | 1.14589      | 1.36294  | 1.36294       | 0.000      | 18.94151    | 60.00000           | Averaged      |
| 85 Butylbenzylphthalate       | 0.57344      | 0.62087  | 0.62087       | 0.000      | 8.27155     | 60.00000           | Averaged      |
| 89 Benzo(a)anthracene         | 0.91588      | 0.93381  | 0.93381       | 0.000      | 1.95750     | 60.00000           | Averaged      |
| 92 Chrysene                   | 0.86151      | 0.90304  | 0.90304       | 0.000      | 4.82048     | 60.00000           | Averaged      |
| 93 bis(2-Ethylhexyl)phthalate | 0.78921      | 0.76252  | 0.76252       | 0.000      | -3.38269    | 60.00000           | Averaged      |

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 28-JAN-2010 19:05  
 Lab File ID: s3a2821.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010  
 Analysis Type: Init. Cal. Times: 17:59 23:34  
 Lab Sample ID: WBN100121-13.5 Quant Type: ISTD  
 Method: /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m

| COMPOUND                        | RRF / AMOUNT | RF40    | CCAL<br>RRF40 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE   |
|---------------------------------|--------------|---------|---------------|------------|-------------|--------------------|--------------|
| 94 Di-n-octylphthalate          | 1.61982      | 1.89362 | 1.89362       | 0.001      | 16.90346    | 20.00000           | Averaged ccc |
| 95 Benzo(b)fluoranthene         | 0.93870      | 1.08809 | 1.08809       | 0.000      | 15.91423    | 60.00000           | Averaged     |
| 96 Benzo(k)fluoranthene         | 0.97450      | 1.11069 | 1.11069       | 0.000      | 13.97589    | 60.00000           | Averaged     |
| 97 Benzo(a)pyrene               | 0.81798      | 0.93318 | 0.93318       | 0.001      | 14.08329    | 20.00000           | Averaged ccc |
| 99 Indeno(1,2,3-cd)pyrene       | 0.66728      | 0.71234 | 0.71234       | 0.000      | 6.75233     | 60.00000           | Averaged     |
| 100 Dibenzo(a,h)anthracene      | 0.54458      | 0.58954 | 0.58954       | 0.000      | 8.25479     | 60.00000           | Averaged     |
| 101 Benzo(ghi)perylene          | 0.54772      | 0.57626 | 0.57626       | 0.000      | 5.21195     | 60.00000           | Averaged     |
| 126 m-Dinitrobenzene            | 0.18506      | 0.19583 | 0.19583       | 0.000      | 5.81595     | 60.00000           | Averaged     |
| 130 2,3,4,6-Tetrachlorophenol   | 0.24334      | 0.24971 | 0.24971       | 0.000      | 2.62157     | 60.00000           | Averaged     |
| 143 Dinoseb                     | 0.14194      | 0.15383 | 0.15383       | 0.000      | 8.37761     | 60.00000           | Averaged     |
| 173 Carbazole                   | 0.71254      | 0.70130 | 0.70130       | 0.000      | -1.57721    | 60.00000           | Averaged     |
| 184 p-Benzoquinone              | 0.09247      | 0.07726 | 0.07726       | 0.000      | -16.44186   | 60.00000           | Averaged     |
| 192 Methoxychlor                | 0.51665      | 0.63522 | 0.63522       | 0.000      | 22.94903    | 60.00000           | Averaged     |
| 211 p-Toluidine                 | 0.91289      | 0.92124 | 0.92124       | 0.000      | 0.91544     | 60.00000           | Averaged     |
| 210 m-Toluidine                 | 1.30281      | 1.27453 | 1.27453       | 0.000      | -2.17063    | 60.00000           | Averaged     |
| 26 Phthalic anhydride           | 0.10481      | 0.12725 | 0.12725       | 0.000      | 21.41178    | 60.00000           | Averaged     |
| 214 1,4-Dinitrobenzene          | 0.21468      | 0.20059 | 0.20059       | 0.000      | -6.56396    | 60.00000           | Averaged     |
| 215 2-Ethoxyethanol             | 0.84974      | 0.71725 | 0.71725       | 0.000      | -15.59147   | 60.00000           | Averaged     |
| 216 Methylenebis(2-chloroanilin | 0.10764      | 0.11623 | 0.11623       | 0.000      | 7.97412     | 60.00000           | Averaged     |
| M 225 Trichlorophenols          | 0.29823      | 0.33449 | 0.33449       | 0.000      | 12.15836    | 60.00000           | Averaged     |
| M 226 Tetrachlorophenols        | 0.24334      | 0.24971 | 0.24971       | 0.000      | 2.62157     | 60.00000           | Averaged     |
| M 227 Benzo(b,k)fluoranthene    | 0.95660      | 1.09939 | 1.09939       | 0.000      | 14.92693    | 60.00000           | Averaged     |

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012810a.b/s3a2821.d  
Lab Smp Id: WBN100121-13.5 Client Smp ID: MEGACVS  
Inj Date : 28-JAN-2010 19:05  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |WBN100121-13.5|40 PPM|1|SVMF|1|MEGACVS  
Misc Info : |MSD8270|WBN100122-01|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m  
Meth Date : 29-Jan-2010 10:49 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 2 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: MEGAILI.sub  
Target Version: 3.50  
Processing Host: hpc1p1

| Compounds                       | QUANT SIG<br>MASS |        |        |         |          | AMOUNTS            |                   |
|---------------------------------|-------------------|--------|--------|---------|----------|--------------------|-------------------|
|                                 |                   | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| * 10 1,4-Dichlorobenzene-d4     | 152               | 4.722  | 4.722  | (1.000) | 564026   | 40.0000            |                   |
| * 29 Naphthalene-d8             | 136               | 6.003  | 6.003  | (1.000) | 2270888  | 40.0000            |                   |
| * 46 Acenaphthene-d10           | 164               | 7.875  | 7.875  | (1.000) | 1166391  | 40.0000            |                   |
| * 67 Phenanthrene-d10           | 188               | 9.486  | 9.486  | (1.000) | 1814958  | 40.0000            |                   |
| * 91 Chrysene-d12               | 240               | 12.478 | 12.478 | (1.000) | 1061579  | 40.0000            |                   |
| * 98 Perylene-d12               | 264               | 14.762 | 14.762 | (1.000) | 561008   | 40.0000            |                   |
| \$ 3 2-Fluorophenol             | 112               | 3.549  | 3.549  | (0.752) | 567050   | 40.0000            | 38.6              |
| \$ 5 Phenol-d5                  | 99                | 4.331  | 4.331  | (0.917) | 675055   | 40.0000            | 36.6              |
| \$ 20 Nitrobenzene-d5           | 82                | 5.262  | 5.262  | (0.877) | 655969   | 40.0000            | 39.1              |
| \$ 39 2-Fluorobiphenyl          | 172               | 7.128  | 7.128  | (0.905) | 1319516  | 40.0000            | 43.8              |
| \$ 60 2,4,6-Tribromophenol      | 329               | 8.724  | 8.724  | (1.108) | 108322   | 40.0000            | 32.4              |
| \$ 81 p-Terphenyl-d14           | 244               | 11.196 | 11.196 | (0.897) | 951763   | 40.0000            | 52.2              |
| 1 N-Methyl-N-nitrosomethylamine | 74                | 2.572  | 2.572  | (0.545) | 348187   | 40.0000            | 33.9              |
| 2 Pyridine                      | 79                | 2.613  | 2.613  | (0.553) | 403371   | 40.0000            | 35.1              |
| 4 Aniline                       | 66                | 4.411  | 4.411  | (0.934) | 306115   | 40.0000            | 35.6              |
| 6 Phenol                        | 94                | 4.343  | 4.343  | (0.920) | 731064   | 40.0000            | 37.5              |
| 7 bis(2-Chloroethyl) ether      | 63                | 4.452  | 4.452  | (0.943) | 488692   | 40.0000            | 31.7              |
| 8 2-Chlorophenol                | 128               | 4.522  | 4.522  | (0.958) | 628431   | 40.0000            | 42.4              |
| 203 n-Decane                    | 43                | 4.525  | 4.525  | (0.958) | 743861   | 40.0000            | 33.1              |
| 9 1,3-Dichlorobenzene           | 146               | 4.669  | 4.669  | (0.989) | 717460   | 40.0000            | 42.1              |
| 11 1,4-Dichlorobenzene          | 146               | 4.739  | 4.739  | (1.004) | 720320   | 40.0000            | 41.6              |
| 13 1,2-Dichlorobenzene          | 146               | 4.886  | 4.886  | (1.035) | 671519   | 40.0000            | 41.4              |
| 14 bis(2-Chloroisopropyl)ether  | 45                | 4.957  | 4.957  | (1.050) | 1129316  | 40.0000            | 30.9              |
| 12 Benzyl alcohol               | 108               | 4.836  | 4.836  | (1.024) | 345983   | 40.0000            | 33.6              |
| 15 o-Cresol                     | 107               | 4.919  | 4.919  | (1.042) | 482247   | 40.0000            | 38.0              |
| 18 m,p-Cresols                  | 107               | 5.077  | 5.077  | (1.075) | 635354   | 40.0000            | 38.5              |

| Compounds                     | QUANT SIG |        |        |         |          | AMOUNTS            |                   |
|-------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                               | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| 17 N-Nitrosodipropylamine     | 70        | 5.098  | 5.098  | (1.080) | 462158   | 40.0000            | 36.9              |
| 19 Hexachloroethane           | 117       | 5.218  | 5.218  | (1.105) | 290888   | 40.0000            | 39.2              |
| 21 Nitrobenzene               | 77        | 5.283  | 5.283  | (0.880) | 675288   | 40.0000            | 38.3              |
| 22 Isophorone                 | 82        | 5.518  | 5.518  | (0.919) | 1178544  | 40.0000            | 37.7              |
| 23 2-Nitrophenol              | 139       | 5.597  | 5.597  | (0.932) | 338134   | 40.0000            | 41.8              |
| 24 2,4-Dimethylphenol         | 122       | 5.612  | 5.612  | (0.935) | 553057   | 40.0000            | 39.5              |
| 25 bis(2-Chloroethoxy)methane | 93        | 5.718  | 5.718  | (0.952) | 670950   | 40.0000            | 37.0              |
| 26 2,4-Dichlorophenol         | 162       | 5.841  | 5.841  | (0.973) | 513444   | 40.0000            | 43.6              |
| 27 Benzoic acid               | 105       | 5.715  | 5.715  | (0.952) | 244043   | 40.0000            | 24.8              |
| 28 1,2,4-Trichlorobenzene     | 180       | 5.932  | 5.932  | (0.988) | 566561   | 40.0000            | 43.3              |
| 30 Naphthalene                | 128       | 6.023  | 6.023  | (1.003) | 1686275  | 40.0000            | 35.3              |
| 204 alpha-Terpineol           | 59        | 6.011  | 6.011  | (1.001) | 551300   | 40.0000            | 35.0              |
| 31 4-Chloroaniline            | 127       | 6.064  | 6.064  | (1.010) | 618583   | 40.0000            | 42.8              |
| 32 Hexachlorobutadiene        | 225       | 6.129  | 6.129  | (1.021) | 331908   | 40.0000            | 44.5              |
| 33 4-Chloro-3-methylphenol    | 107       | 6.552  | 6.552  | (1.091) | 552049   | 40.0000            | 41.4              |
| 34 2-Methylnaphthalene        | 142       | 6.749  | 6.749  | (1.124) | 1207804  | 40.0000            | 42.1              |
| 35 1-Methylnaphthalene        | 142       | 6.854  | 6.854  | (1.142) | 1148064  | 40.0000            | 39.4              |
| 36 Hexachlorocyclopentadiene  | 237       | 6.902  | 6.902  | (0.876) | 267607   | 40.0000            | 40.3              |
| 205 2,3-Dichloroaniline       | 161       | 7.046  | 7.046  | (0.895) | 617472   | 40.0000            | 41.5              |
| 37 2,4,6-Trichlorophenol      | 196       | 7.037  | 7.037  | (0.894) | 356945   | 40.0000            | 42.7              |
| 38 2,4,5-Trichlorophenol      | 196       | 7.075  | 7.075  | (0.898) | 423342   | 40.0000            | 46.9              |
| 40 2-Chloronaphthalene        | 162       | 7.272  | 7.272  | (0.923) | 1154440  | 40.0000            | 41.9              |
| 42 o-Nitroaniline             | 65        | 7.375  | 7.375  | (0.937) | 386477   | 40.0000            | 35.7              |
| 41 m-Nitroaniline             | 138       | 7.822  | 7.822  | (0.993) | 279650   | 40.0000            | 43.0              |
| 43 Dimethylphthalate          | 163       | 7.563  | 7.563  | (0.960) | 1338895  | 40.0000            | 42.3              |
| 44 2,6-Dinitrotoluene         | 165       | 7.634  | 7.634  | (0.969) | 318767   | 40.0000            | 42.4              |
| 50 2,4-Dinitrotoluene         | 165       | 8.069  | 8.069  | (1.025) | 401063   | 40.0000            | 42.9              |
| 45 Acenaphthylene             | 152       | 7.725  | 7.725  | (0.981) | 1783378  | 40.0000            | 41.1              |
| 47 Acenaphthene               | 154       | 7.910  | 7.910  | (1.004) | 1098306  | 40.0000            | 39.8              |
| 48 2,4-Dinitrophenol          | 184       | 7.928  | 7.928  | (1.007) | 130000   | 40.0000            | 38.8              |
| 49 Dibenzofuran               | 168       | 8.095  | 8.095  | (1.028) | 1537770  | 40.0000            | 43.4              |
| 51 Diethylphthalate           | 149       | 8.316  | 8.316  | (1.056) | 1324539  | 40.0000            | 42.1              |
| 52 4-Nitrophenol              | 139       | 7.978  | 7.978  | (1.013) | 213710   | 40.0000            | 40.1              |
| 53 Fluorene                   | 166       | 8.466  | 8.466  | (1.075) | 1221735  | 40.0000            | 40.8              |
| 54 4-Chlorophenylphenylether  | 204       | 8.451  | 8.451  | (1.073) | 623134   | 40.0000            | 44.3              |
| 55 2-Methyl-4,6-dinitrophenol | 198       | 8.510  | 8.510  | (0.897) | 259925   | 40.0000            | 55.6              |
| 56 p-Nitroaniline             | 138       | 8.483  | 8.483  | (1.077) | 251208   | 40.0000            | 40.2              |
| 133 Diphenylamine             | 169       | 8.580  | 8.580  | (0.904) | 1014316  | 40.0000            | 42.2              |
| 58 1,2-Diphenylhydrazine      | 77        | 8.627  | 8.627  | (0.909) | 1306732  | 40.0000            | 36.8              |
| 61 4-Bromophenylphenylether   | 248       | 8.983  | 8.983  | (0.947) | 317433   | 40.0000            | 41.0              |
| 63 Hexachlorobenzene          | 284       | 9.054  | 9.054  | (0.954) | 301458   | 40.0000            | 37.5              |
| 65 Pentachlorophenol          | 266       | 9.262  | 9.262  | (0.976) | 158479   | 40.0000            | 34.8              |
| 206 n-Octadecane              | 57        | 9.315  | 9.315  | (0.982) | 979226   | 40.0000            | 33.1              |
| 68 Phenanthrene               | 178       | 9.513  | 9.513  | (1.003) | 1588314  | 40.0000            | 39.8              |
| 69 Anthracene                 | 178       | 9.569  | 9.569  | (1.009) | 1622305  | 40.0000            | 40.7              |
| 72 Di-n-butylphthalate        | 149       | 10.080 | 10.080 | (1.063) | 1920554  | 40.0000            | 39.9              |
| 76 Fluoranthene               | 202       | 10.803 | 10.803 | (1.139) | 1452393  | 40.0000            | 40.0              |



| Compounds                         | QUANT SIG |        |        | REL RT  | RESPONSE | AMOUNTS            |                   |
|-----------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                   | MASS      | RT     | EXP RT |         |          | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| =====                             | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| 79 Pyrene                         | 202       | 11.052 | 11.052 | (0.886) | 1446872  | 40.0000            | 47.6              |
| 85 Butylbenzylphthalate           | 149       | 11.725 | 11.725 | (0.940) | 659101   | 40.0000            | 43.3              |
| 89 Benzo(a)anthracene             | 228       | 12.461 | 12.461 | (0.999) | 991309   | 40.0000            | 40.8              |
| 92 Chrysene                       | 228       | 12.514 | 12.514 | (1.003) | 958645   | 40.0000            | 41.9              |
| 93 bis(2-Ethylhexyl)phthalate     | 149       | 12.431 | 12.431 | (0.996) | 809471   | 40.0000            | 38.6              |
| 94 Di-n-octylphthalate            | 149       | 13.399 | 13.399 | (0.908) | 1062338  | 40.0000            | 46.8              |
| 95 Benzo(b)fluoranthene           | 252       | 14.098 | 14.098 | (0.955) | 610428   | 40.0000            | 46.4              |
| 96 Benzo(k)fluoranthene           | 252       | 14.145 | 14.145 | (0.958) | 623106   | 40.0000            | 45.6              |
| 97 Benzo(a)pyrene                 | 252       | 14.662 | 14.662 | (0.993) | 523519   | 40.0000            | 45.6              |
| 99 Indeno(1,2,3-cd)pyrene         | 276       | 16.714 | 16.714 | (1.132) | 399629   | 40.0000            | 42.7              |
| 100 Dibenzo(a,h)anthracene        | 278       | 16.749 | 16.749 | (1.135) | 330735   | 40.0000            | 43.3              |
| 101 Benzo(ghi)perylene            | 276       | 17.220 | 17.220 | (1.167) | 323288   | 40.0000            | 42.1              |
| 126 m-Dinitrobenzene              | 168       | 7.607  | 7.607  | (0.966) | 228409   | 40.0000            | 42.3              |
| 130 2,3,4,6-Tetrachlorophenol     | 232       | 8.213  | 8.213  | (1.043) | 291265   | 40.0000            | 41.0              |
| 143 Dinoseb                       | 211       | 9.451  | 9.451  | (0.996) | 279199   | 40.0000            | 43.4              |
| 173 Carbazole                     | 167       | 9.736  | 9.736  | (1.026) | 1272829  | 40.0000            | 39.4              |
| 184 p-Benzoquinone                | 54        | 3.982  | 3.982  | (0.843) | 43578    | 40.0000            | 33.4              |
| 192 Methoxychlor                  | 227       | 12.337 | 12.337 | (0.989) | 674335   | 40.0000            | 49.2              |
| 211 p-Toluidine                   | 106       | 5.142  | 5.142  | (1.089) | 519606   | 40.0000            | 40.4              |
| 210 m-Toluidine                   | 106       | 5.177  | 5.177  | (1.096) | 718868   | 40.0000            | 39.1              |
| 26 Phthalic anhydride             | 104       | 6.810  | 6.810  | (1.135) | 288971   | 40.0000            | 48.6              |
| 214 1,4-Dinitrobenzene            | 75        | 7.528  | 7.528  | (0.956) | 233964   | 40.0000            | 37.4              |
| 215 2-Ethoxyethanol               | 59        | 2.364  | 2.364  | (0.501) | 404550   | 40.0000            | 33.8              |
| 216 Methylenabis(2-chloroaniline) | 231       | 12.414 | 12.414 | (0.995) | 123385   | 40.0000            | 43.2              |
| M 225 Trichlorophenols            | 196       |        |        |         | 780287   | 80.0000            | 89.7              |
| M 226 Tetrachlorophenols          | 232       |        |        |         | 291265   | 40.0000            | 41.0              |
| M 227 Benzo(b,k)fluoranthene      | 252       |        |        |         | 1233534  | 80.0000            | 91.9              |

Data File: /chem/MSD3.i/s012810a,b/s3a2821.d

Date : 28-JAN-2010 19:05

Client ID: HECACVS

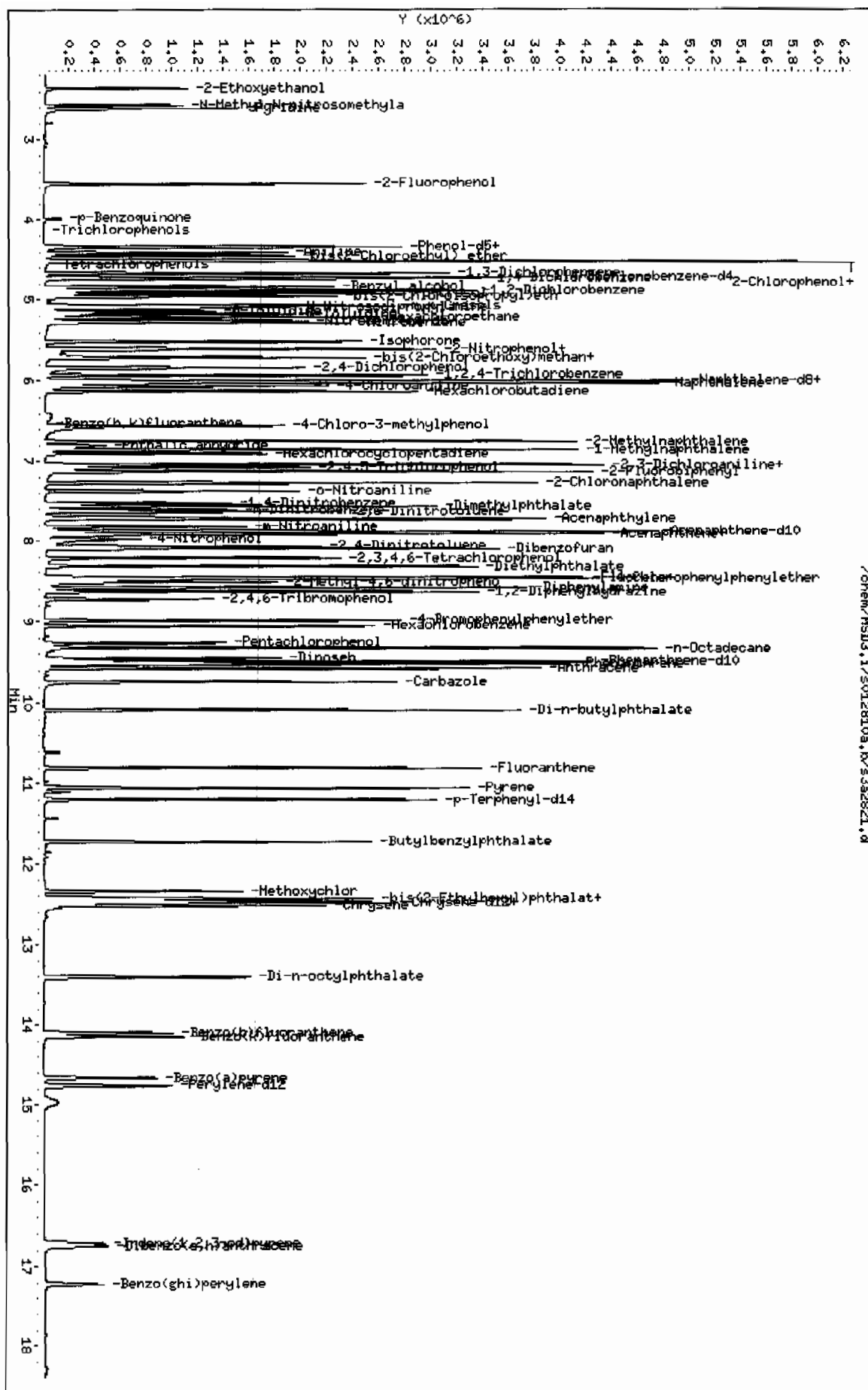
Sample Info: IBERM00121-13.5140 PPM115WME11HECACVS

Column phase: J&W DB-5MS

Instrument: MSD3.i

Operator: JLD

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 28-JAN-2010 20:23  
Lab File ID: s3a2824.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010  
Analysis Type: Init. Cal. Times: 17:59 23:34  
Lab Sample ID: WBN100120-08.4 Quant Type: ISTD  
Method: /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m

| COMPOUND                       | RRF / AMOUNT | RF40     | CCAL<br>RRF40 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE |
|--------------------------------|--------------|----------|---------------|------------|-------------|--------------------|------------|
| 209 Benzaldehyde               | 1.00310      | 0.95220  | 0.95220       | 0.000      | -5.07424    | 60.00000           | Averaged   |
| 16 Acetophenone                | 1.32216      | 1.32894  | 1.32894       | 0.000      | 0.51342     | 60.00000           | Averaged   |
| 189 Caprolactam                | 0.08576      | 0.09259  | 0.09259       | 0.000      | 7.96606     | 60.00000           | Averaged   |
| 208 1,1'-Biphenyl              | 1.21038      | 1.27219  | 1.27219       | 0.000      | 5.10624     | 60.00000           | Averaged   |
| 207 Atrazine                   | 0.04628      | 0.05071  | 0.05071       | 0.000      | 9.58104     | 60.00000           | Averaged   |
| 77 Benzidine                   | 33.80189     | 40.00000 | 0.28337       | 0.000      | -15.49526   | 60.00000           | Linear     |
| 90 3,3'-Dichlorobenzidine      | 42.29542     | 40.00000 | 0.29098       | 0.000      | 5.73854     | 60.00000           | Linear     |
| 102 1,4-Dioxane                | 0.37050      | 0.36921  | 0.36921       | 0.000      | -0.34627    | 60.00000           | Averaged   |
| 103 Methyl methacrylate        | 0.21351      | 0.21885  | 0.21885       | 0.000      | 2.50402     | 60.00000           | Averaged   |
| 104 Ethyl methacrylate         | 0.89246      | 0.83398  | 0.83398       | 0.000      | -6.55263    | 60.00000           | Averaged   |
| 105 2-Picoline                 | 1.30074      | 1.26274  | 1.26274       | 0.000      | -2.92129    | 60.00000           | Averaged   |
| 106 N-Nitrosomethylethylamine  | 0.57807      | 0.53169  | 0.53169       | 0.000      | -8.02382    | 60.00000           | Averaged   |
| 107 Methyl methanesulfonate    | 0.60378      | 0.57920  | 0.57920       | 0.000      | -4.07145    | 60.00000           | Averaged   |
| 108 N-Nitrosodiethylamine      | 0.58167      | 0.57867  | 0.57867       | 0.000      | -0.51562    | 60.00000           | Averaged   |
| 109 Ethyl Methanesulfonate     | 0.74637      | 0.69816  | 0.69816       | 0.000      | -6.45894    | 60.00000           | Averaged   |
| 110 Pentachloroethane          | 0.32905      | 0.35358  | 0.35358       | 0.000      | 7.45681     | 60.00000           | Averaged   |
| 111 N-Nitrosopyrrolidine       | 0.60059      | 0.61488  | 0.61488       | 0.000      | 2.37948     | 60.00000           | Averaged   |
| 113 N-Nitrosomorpholine        | 0.98604      | 0.91739  | 0.91739       | 0.000      | -6.96278    | 60.00000           | Averaged   |
| 114 o-Toluidine                | 1.80736      | 1.84510  | 1.84510       | 0.000      | 2.08801     | 60.00000           | Averaged   |
| 115 N-Nitrosopiperidine        | 0.15108      | 0.15347  | 0.15347       | 0.000      | 1.57938     | 60.00000           | Averaged   |
| 116 a,a-Dimethylphenethylamine | 1.11880      | 0.99593  | 0.99593       | 0.000      | -10.98276   | 60.00000           | Averaged   |
| 118 2,6-Dichlorophenol         | 0.21531      | 0.23318  | 0.23318       | 0.000      | 8.29726     | 60.00000           | Averaged   |
| 119 Hexachloropropene          | 0.11708      | 0.12685  | 0.12685       | 0.000      | 8.34183     | 60.00000           | Averaged   |
| 120 p-Phenylenediamine         | 0.24808      | 0.23848  | 0.23848       | 0.000      | -3.86681    | 60.00000           | Averaged   |
| 121 N-Nitrosodi-n-butylamine   | 0.23566      | 0.23977  | 0.23977       | 0.000      | 1.74370     | 60.00000           | Averaged   |
| 122 Safrole                    | 0.19323      | 0.20995  | 0.20995       | 0.000      | 8.65296     | 60.00000           | Averaged   |
| 123 1,2,4,5-Tetrachlorobenzene | 0.42534      | 0.48409  | 0.48409       | 0.000      | 13.81112    | 60.00000           | Averaged   |
| 124 Isosafrole                 | 0.35652      | 0.36171  | 0.36171       | 0.000      | 1.45483     | 60.00000           | Averaged   |
| 125 1,4-Naphthoquinone         | 0.33545      | 0.38516  | 0.38516       | 0.000      | 14.81964    | 60.00000           | Averaged   |
| 127 Pentachlorobenzene         | 0.37060      | 0.38042  | 0.38042       | 0.000      | 2.64735     | 60.00000           | Averaged   |
| 128 1-Naphthylamine            | 0.91242      | 0.92859  | 0.92859       | 0.000      | 1.77271     | 60.00000           | Averaged   |
| 129 2-Naphthylamine            | 1.00263      | 1.00907  | 1.00907       | 0.000      | 0.64223     | 60.00000           | Averaged   |
| 131 5-Nitro-o-toluidine        | 0.29533      | 0.30141  | 0.30141       | 0.000      | 2.06000     | 60.00000           | Averaged   |
| 136 1,3,5-Trinitrobenzene      | 0.14894      | 0.17691  | 0.17691       | 0.000      | 18.78290    | 60.00000           | Averaged   |
| 137 Phenacetin                 | 0.33125      | 0.32269  | 0.32269       | 0.000      | -2.58588    | 60.00000           | Averaged   |
| 138 Diallate                   | 0.31820      | 0.29968  | 0.29968       | 0.000      | -5.81867    | 60.00000           | Averaged   |

## GEL Laboratories LLC

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 28-JAN-2010 20:23  
Lab File ID: s3a2824.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010  
Analysis Type: Init. Cal. Times: 17:59 23:34  
Lab Sample ID: WBN100120-08.4 Quant Type: ISTD  
Method: /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m

| COMPOUND                          | RRF / AMOUNT | RF40     | CCAL    | MIN   | MAX         | CURVE TYPE |
|-----------------------------------|--------------|----------|---------|-------|-------------|------------|
|                                   |              |          | RRF40   | RRF   | %D / %DRIFT |            |
| 140 4-Aminobiphenyl               | 0.63580      | 0.55801  | 0.55801 | 0.000 | -12.23538   | Averaged   |
| 141 Pentachloronitrobenzene       | 0.07853      | 0.08109  | 0.08109 | 0.000 | 3.26315     | Averaged   |
| 142 Pronamide                     | 0.29619      | 0.31831  | 0.31831 | 0.000 | 7.46812     | Averaged   |
| 146 4-Nitroquinoline-1-oxide      | 0.03387      | 0.00667  | 0.00667 | 0.000 | -80.31873   | Averaged   |
| 147 Methapyrilene                 | 0.52598      | 0.47575  | 0.47575 | 0.000 | -9.54873    | Averaged   |
| 148 Isodrin                       | 0.11094      | 0.12247  | 0.12247 | 0.000 | 10.39489    | Averaged   |
| 149 Aramite                       | 0.04585      | 0.05401  | 0.05401 | 0.000 | 17.79395    | Averaged   |
| 150 Kepone                        | 0.06767      | 0.06950  | 0.06950 | 0.000 | 2.70418     | Averaged   |
| 151 p-(Dimethylamino)azobenzene   | 0.39647      | 0.44921  | 0.44921 | 0.000 | 13.30046    | Averaged   |
| 152 Chlorobenzilate               | 0.32229      | 0.36937  | 0.36937 | 0.000 | 14.60656    | Averaged   |
| 153 3,3'-Dimethylbenzidine        | 0.51678      | 0.56784  | 0.56784 | 0.000 | 9.87919     | Averaged   |
| 155 2-Acetylaminofluorene         | 47.15056     | 40.00000 | 0.37859 | 0.000 | 17.87640    | Linear     |
| 157 7,12Dimethylbenz(a)anthracene | 0.53008      | 0.61303  | 0.61303 | 0.000 | 15.64781    | Averaged   |
| 158 3-Methylcholanthrene          | 0.38427      | 0.41065  | 0.41065 | 0.000 | 6.86533     | Averaged   |
| 212 Cis Diallate                  | 0.33782      | 0.29981  | 0.29981 | 0.000 | -11.25150   | Averaged   |
| 213 Trans Diallate                | 0.37435      | 0.35257  | 0.35257 | 0.000 | -5.81867    | Averaged   |

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012810a.b/s3a2824.d  
 Lab Smp Id: WBN100120-08.4 Client Smp ID: APCVS  
 Inj Date : 28-JAN-2010 20:23  
 Operator : JLD1 Inst ID: MSD3.i  
 Smp Info : |WBN100120-08.4|40 PPM|1|SVMF|1|APCVS  
 Misc Info : |MSD8270|WBN100122-01|  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD3.i/s012810a.b/MSD3-8270R-AQA-012110.m  
 Meth Date : 28-Jan-2010 20:44 jen00986 Quant Type: ISTD  
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
 Als bottle: 4 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: AP12.sub  
 Target Version: 3.50  
 Processing Host: hpc1p1

| Compounds                     | QUANT STC<br>MASS | RT     | EXP RT | REL RT  | RESPONSE | AMOUNTS            |                   |
|-------------------------------|-------------------|--------|--------|---------|----------|--------------------|-------------------|
|                               |                   |        |        |         |          | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| =====                         | =====             | ==     | =====  | =====   | =====    | =====              | =====             |
| * 10 1,4-Dichlorobenzene-d4   | 152               | 4.722  | 4.722  | (1.000) | 549143   | 40.0000            |                   |
| * 29 Naphthalene-d8           | 136               | 5.998  | 5.998  | (1.000) | 2064024  | 40.0000            |                   |
| * 46 Acenaphthene-d10         | 164               | 7.870  | 7.870  | (1.000) | 1147205  | 40.0000            |                   |
| * 67 Phenanthrene-d10         | 188               | 9.486  | 9.486  | (1.000) | 1831921  | 40.0000            |                   |
| * 91 Chrysene-d12             | 240               | 12.477 | 12.477 | (1.000) | 1206894  | 40.0000            |                   |
| * 98 Perylene-d12             | 264               | 14.762 | 14.762 | (1.000) | 630012   | 40.0000            |                   |
| 209 Benzaldehyde              | 77                | 4.320  | 4.320  | (0.915) | 522892   | 40.0000            | 38.0              |
| 16 Acetophenone               | 105               | 5.103  | 5.103  | (1.081) | 729780   | 40.0000            | 40.2              |
| 189 Caprolactam               | 113               | 6.429  | 6.429  | (1.072) | 191109   | 40.0000            | 43.2              |
| 208 1,1'-Biphenyl             | 154               | 7.239  | 7.239  | (0.920) | 1459459  | 40.0000            | 42.0              |
| 207 Atrazine                  | 173               | 9.148  | 9.148  | (0.964) | 92901    | 40.0000            | 43.8              |
| 77 Benzidine                  | 184               | 10.935 | 10.935 | (0.876) | 341993   | 40.0000            | 33.8              |
| 90 3,3'-Dichlorobenzidine     | 252               | 12.412 | 12.412 | (0.995) | 351177   | 40.0000            | 42.3              |
| 102 1,4-Dioxane               | 88                | 2.361  | 2.361  | (0.500) | 202751   | 40.0000            | 39.9              |
| 103 Methyl methacrylate       | 100               | 2.358  | 2.358  | (0.499) | 120181   | 40.0000            | 41.0              |
| 104 Ethyl methacrylate        | 69                | 2.868  | 2.868  | (0.608) | 457972   | 40.0000            | 37.4              |
| 105 2-Picoline                | 93                | 3.127  | 3.127  | (0.662) | 693425   | 40.0000            | 38.8              |
| 106 N-Nitrosomethylethylamine | 88                | 3.197  | 3.197  | (0.677) | 291972   | 40.0000            | 36.8              |
| 107 Methyl methanesulfonate   | 80                | 3.426  | 3.426  | (0.726) | 318063   | 40.0000            | 38.4              |
| 108 N-Nitrosodiethylamine     | 102               | 3.754  | 3.754  | (0.795) | 317774   | 40.0000            | 39.8              |
| 109 Ethyl Methanesulfonate    | 79                | 3.995  | 3.995  | (0.846) | 383391   | 40.0000            | 37.4              |
| 110 Pentachloroethane         | 167               | 4.461  | 4.461  | (0.945) | 194167   | 40.0000            | 43.0              |
| 111 N-Nitrosopyrrolidine      | 100               | 5.088  | 5.088  | (1.078) | 337657   | 40.0000            | 41.0 (Q)          |
| 113 N-Nitrosomorpholine       | 56                | 5.124  | 5.124  | (1.085) | 503777   | 40.0000            | 37.2              |
| 114 o-Toluidine               | 106               | 5.138  | 5.138  | (1.088) | 1013222  | 40.0000            | 40.8              |
| 115 N-Nitrosopiperidine       | 114               | 5.432  | 5.432  | (0.906) | 316764   | 40.0000            | 40.6              |

| Compounds                         | QUANT STG |        |        |         | RESPONSE | AMOUNTS            |                   |
|-----------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                   | MASS      | RT     | EXP RT | REL RT  |          | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| =====                             | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| 116 a,a-Dimethylphenethylamine    | 58        | 5.798  | 5.798  | (0.967) | 2055620  | 40.0000            | 35.6              |
| 118 2,6-Dichlorophenol            | 162       | 6.074  | 6.074  | (1.013) | 481283   | 40.0000            | 43.3              |
| 119 Hexachloropropene             | 213       | 6.103  | 6.103  | (1.018) | 261818   | 40.0000            | 43.3              |
| 120 p-Phenylenediamine            | 108       | 6.441  | 6.441  | (1.074) | 492237   | 40.0000            | 38.4              |
| 121 N-Nitrosodi-n-butylamine      | 84        | 6.403  | 6.403  | (1.068) | 494898   | 40.0000            | 40.7(Q)           |
| 122 Safrole                       | 162       | 6.638  | 6.638  | (1.107) | 433333   | 40.0000            | 43.5              |
| 123 1,2,4,5-Tetrachlorobenzene    | 216       | 6.919  | 6.919  | (0.879) | 555348   | 40.0000            | 45.5              |
| 124 Isosafrole                    | 162       | 7.192  | 7.192  | (0.914) | 414956   | 40.0000            | 40.6              |
| 125 1,4-Naphthoquinone            | 158       | 7.460  | 7.460  | (0.948) | 441854   | 40.0000            | 45.9              |
| 127 Pentachlorobenzene            | 250       | 8.041  | 8.041  | (1.022) | 436414   | 40.0000            | 41.0              |
| 128 1-Naphthylamine               | 143       | 8.176  | 8.176  | (1.039) | 1065284  | 40.0000            | 40.7              |
| 129 2-Naphthylamine               | 143       | 8.261  | 8.261  | (1.050) | 1157605  | 40.0000            | 40.2              |
| 131 5-Nitro-o-toluidine           | 152       | 8.469  | 8.469  | (1.076) | 345781   | 40.0000            | 40.8              |
| 136 1,3,5-Trinitrobenzene         | 75        | 8.857  | 8.857  | (0.934) | 324085   | 40.0000            | 47.5              |
| 137 Phenacetin                    | 108       | 8.910  | 8.910  | (0.939) | 591138   | 40.0000            | 39.0(Q)           |
| 138 Diallate                      | 86        | 8.877  | 8.877  | (0.936) | 548993   | 40.0000            | 37.7              |
| 140 4-Aminobiphenyl               | 169       | 9.271  | 9.271  | (0.977) | 1022229  | 40.0000            | 35.1              |
| 141 Pentachloronitrobenzene       | 237       | 9.274  | 9.274  | (0.978) | 148546   | 40.0000            | 41.3(Q)           |
| 142 Pronamide                     | 173       | 9.313  | 9.313  | (0.982) | 583122   | 40.0000            | 43.0              |
| 146 4-Nitroquinoline-1-oxide      | 101       | 10.636 | 10.636 | (1.121) | 12213    | 40.0000            | 7.9               |
| 147 Methapyrilene                 | 58        | 10.403 | 10.403 | (1.097) | 871540   | 40.0000            | 36.2              |
| 148 Isodrin                       | 193       | 10.636 | 10.636 | (1.121) | 224355   | 40.0000            | 44.2              |
| 149 Aramite                       | 185       | 11.156 | 11.156 | (1.176) | 98939    | 40.0000            | 47.1              |
| 150 Kepone                        | 272       | 11.803 | 11.803 | (1.244) | 127314   | 40.0000            | 41.1              |
| 151 p-(Dimethylamino)azobenzene   | 120       | 11.350 | 11.350 | (0.910) | 542143   | 40.0000            | 45.3              |
| 152 Chlorobenzilate               | 251       | 11.388 | 11.388 | (0.913) | 445791   | 40.0000            | 45.8              |
| 153 3,3'-Dimethylbenzidine        | 212       | 11.727 | 11.727 | (0.940) | 685319   | 40.0000            | 44.0              |
| 155 2-Acetylaminofluorene         | 181       | 12.036 | 12.036 | (0.965) | 456919   | 40.0000            | 47.2              |
| 157 7,12Dimethylbenz(a)anthracene | 256       | 14.077 | 14.077 | (0.954) | 386214   | 40.0000            | 46.2              |
| 158 3-Methylcholanthrene          | 268       | 15.273 | 15.273 | (1.035) | 258712   | 40.0000            | 42.7(Q)           |
| 212 Cis Diallate                  | 86        | 8.977  | 8.977  | (0.946) | 82384    | 6.00000            | 5.3               |
| 213 Trans Diallate                | 86        | 8.877  | 8.877  | (0.936) | 548993   | 34.0000            | 32.0              |

#### QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/HSD3.i/s012810a.b/s3a2824.d

Date: 28-JAN-2010 20:23

Client ID: APCVS

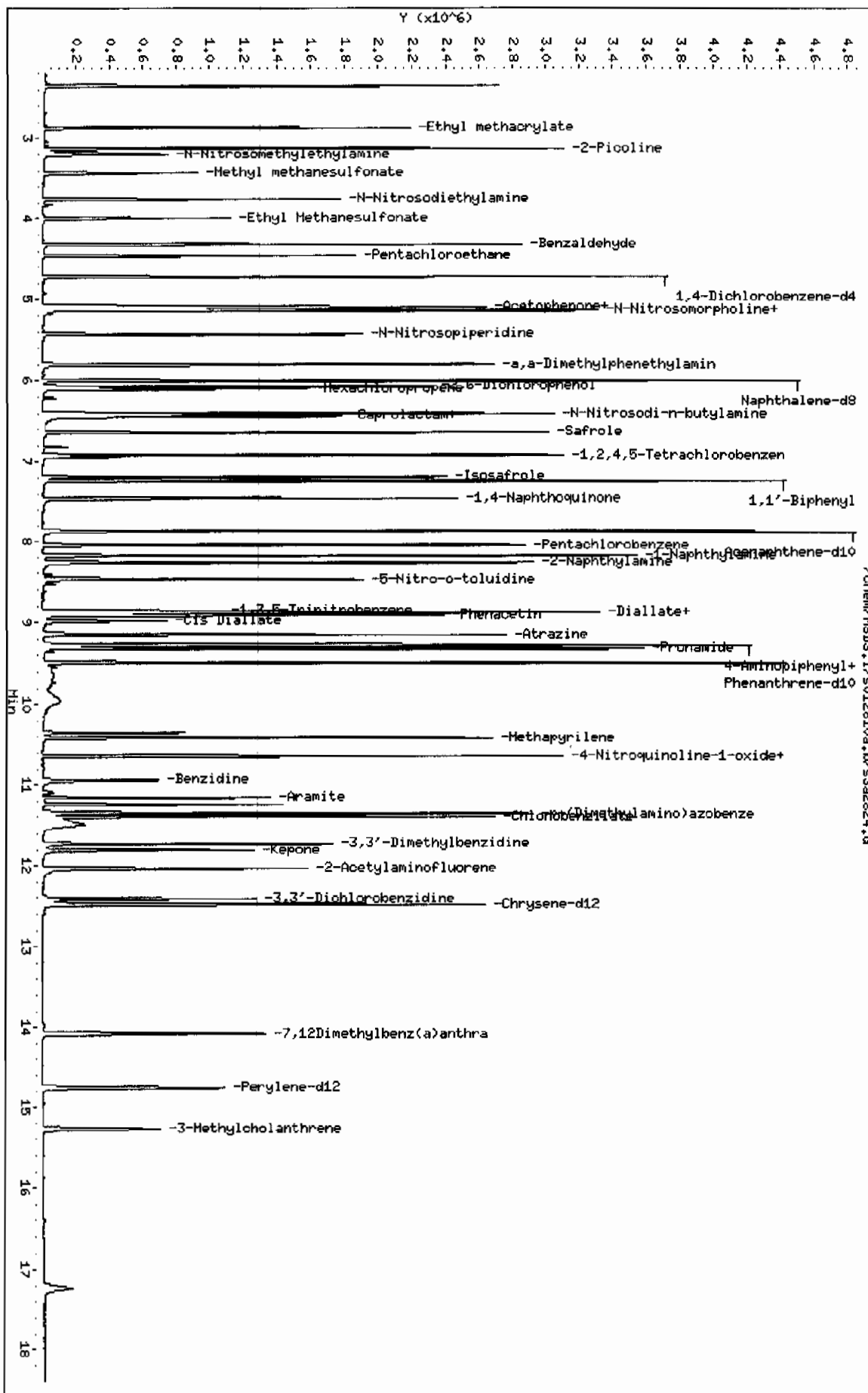
Sample Info: IABN00120-08.4140 PPM11SUMF11APCVS

Column Phase: J&W DB-5HS

Instrument: HSD3.i

Operator: JLD

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 29-JAN-2010 14:20  
Lab File ID: s3a2908.d Init. Cal. Date(s): 20-JAN-2010 29-JAN-2010  
Analysis Type: Init. Cal. Times: 17:59 22:17  
Lab Sample ID: WBN100121-17.2 Quant Type: ISTD  
Method: /chem/MSD3.i/s012910a.b/MSD3-8270R-AQA-012910.m

| COMPOUND                       | RRF / AMOUNT | RF40     | CCAL<br>RRF40 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE    |
|--------------------------------|--------------|----------|---------------|------------|-------------|--------------------|---------------|
| 3 2-Fluorophenol               | 1.04085      | 1.03384  | 1.03384       | 0.000      | -0.67325    | 60.00000           | Averaged      |
| 5 Phenol-d5                    | 1.30813      | 1.22998  | 1.22998       | 0.000      | -5.97357    | 60.00000           | Averaged      |
| 20 Nitrobenzene-d5             | 0.29548      | 0.30155  | 0.30155       | 0.000      | 2.05422     | 60.00000           | Averaged      |
| 39 2-Fluorobiphenyl            | 1.03392      | 1.11231  | 1.11231       | 0.000      | 7.58182     | 60.00000           | Averaged      |
| 60 2,4,6-Tribromophenol        | 0.11467      | 0.09666  | 0.09666       | 0.000      | -15.70663   | 60.00000           | Averaged      |
| 81 p-Terphenyl-d14             | 0.68752      | 0.79615  | 0.79615       | 0.000      | 15.79950    | 60.00000           | Averaged      |
| 1 N-Methyl-N-nitrosomethylami  | 0.72841      | 0.63876  | 0.63876       | 0.000      | -12.30646   | 60.00000           | Averaged      |
| 2 Pyridine                     | 0.81403      | 0.73507  | 0.73507       | 0.000      | -9.69957    | 60.00000           | Averaged      |
| 4 Aniline                      | 0.60975      | 0.56424  | 0.56424       | 0.000      | -7.46508    | 60.00000           | Averaged      |
| 6 Phenol                       | 1.38337      | 1.34008  | 1.34008       | 0.001      | -3.12909    | 20.00000           | Averaged ccc  |
| 7 bis(2-Chloroethyl) ether     | 1.09435      | 0.90626  | 0.90626       | 0.000      | -17.18790   | 60.00000           | Averaged      |
| 8 2-Chlorophenol               | 1.05048      | 1.13496  | 1.13496       | 0.000      | 8.04213     | 60.00000           | Averaged      |
| 203 n-Decane                   | 1.59470      | 1.42034  | 1.42034       | 0.000      | -10.93391   | 60.00000           | Averaged      |
| 9 1,3-Dichlorobenzene          | 1.20957      | 1.29409  | 1.29409       | 0.000      | 6.98759     | 60.00000           | Averaged      |
| 11 1,4-Dichlorobenzene         | 1.22630      | 1.30300  | 1.30300       | 0.001      | 6.25448     | 20.00000           | Averaged ccc  |
| 13 1,2-Dichlorobenzene         | 1.15004      | 1.21610  | 1.21610       | 0.000      | 5.74469     | 60.00000           | Averaged      |
| 14 bis(2-Chloroisopropyl)ether | 2.59104      | 2.16179  | 2.16179       | 0.000      | -16.56640   | 60.00000           | Averaged      |
| 12 Benzyl alcohol              | 0.73117      | 0.69145  | 0.69145       | 0.000      | -5.43352    | 60.00000           | Averaged      |
| 15 o-Cresol                    | 0.89964      | 0.88894  | 0.88894       | 0.000      | -1.18888    | 60.00000           | Averaged      |
| 18 m,p-Cresols                 | 1.17039      | 1.16734  | 1.16734       | 0.000      | -0.26101    | 60.00000           | Averaged      |
| 17 N-Nitrosodipropylamine      | 0.88907      | 0.86424  | 0.86424       | 0.050      | -2.79322    | 60.00000           | Averaged spcc |
| 19 Hexachloroethane            | 0.52660      | 0.53406  | 0.53406       | 0.000      | 1.41642     | 60.00000           | Averaged      |
| 21 Nitrobenzene                | 0.31068      | 0.30482  | 0.30482       | 0.000      | -1.88732    | 60.00000           | Averaged      |
| 22 Isophorone                  | 0.55065      | 0.54645  | 0.54645       | 0.000      | -0.76282    | 60.00000           | Averaged      |
| 23 2-Nitrophenol               | 0.14255      | 0.15178  | 0.15178       | 0.001      | 6.47728     | 20.00000           | Averaged ccc  |
| 24 2,4-Dimethylphenol          | 0.24644      | 0.26466  | 0.26466       | 0.000      | 7.39383     | 60.00000           | Averaged      |
| 25 bis(2-Chloroethoxy)methane  | 0.31970      | 0.30566  | 0.30566       | 0.000      | -4.39016    | 60.00000           | Averaged      |
| 26 2,4-Dichlorophenol          | 0.20739      | 0.23016  | 0.23016       | 0.001      | 10.98124    | 20.00000           | Averaged ccc  |
| 27 Benzoic acid                | 0.17347      | 0.12110  | 0.12110       | 0.000      | -30.18727   | 60.00000           | Averaged      |
| 28 1,2,4-Trichlorobenzene      | 0.23033      | 0.25367  | 0.25367       | 0.000      | 10.13315    | 60.00000           | Averaged      |
| 30 Naphthalene                 | 0.84122      | 0.75568  | 0.75568       | 0.000      | -10.16874   | 60.00000           | Averaged      |
| 204 alpha-Terpineol            | 0.27709      | 0.24778  | 0.24778       | 0.000      | -10.58053   | 60.00000           | Averaged      |
| 31 4-Chloroaniline             | 43.66641     | 40.00000 | 0.27795       | 0.000      | 9.16603     | 60.00000           | Linear        |
| 32 Hexachlorobutadiene         | 0.13146      | 0.14996  | 0.14996       | 0.001      | 14.07364    | 20.00000           | Averaged ccc  |
| 33 4-Chloro-3-methylphenol     | 0.23504      | 0.25071  | 0.25071       | 0.001      | 6.66906     | 20.00000           | Averaged ccc  |
| 34 2-Methylnaphthalene         | 0.50578      | 0.52185  | 0.52185       | 0.000      | 3.17696     | 60.00000           | Averaged      |



## GEL Laboratories LLC

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 29-JAN-2010 14:20  
Lab File ID: s3a2908.d Init. Cal. Date(s): 20-JAN-2010 29-JAN-2010  
Analysis Type: Init. Cal. Times: 17:59 22:17  
Lab Sample ID: WBN100121-17.2 Quant Type: ISTD  
Method: /chem/MSD3.i/s012910a.b/MSD3-8270R-AQA-012910.m

| COMPOUND                      | RRF / AMOUNT | RF40     | CCAL<br>RRF40 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE    |
|-------------------------------|--------------|----------|---------------|------------|-------------|--------------------|---------------|
| 35 1-Methylnaphthalene        | 0.51307      | 0.49671  | 0.49671       | 0.000      | -3.18853    | 60.00000           | Averaged      |
| 36 Hexachlorocyclopentadiene  | 0.22766      | 0.21479  | 0.21479       | 0.050      | -5.65171    | 60.00000           | Averaged spcc |
| 205 2,3-Dichloroaniline       | 0.50997      | 0.53019  | 0.53019       | 0.000      | 3.96503     | 60.00000           | Averaged      |
| 37 2,4,6-Trichlorophenol      | 0.28670      | 0.31741  | 0.31741       | 0.001      | 10.71290    | 20.00000           | Averaged ccc  |
| 38 2,4,5-Trichlorophenol      | 0.30976      | 0.35295  | 0.35295       | 0.000      | 13.94614    | 60.00000           | Averaged      |
| 40 2-Chloronaphthalene        | 0.94508      | 0.97760  | 0.97760       | 0.000      | 3.44094     | 60.00000           | Averaged      |
| 42 o-Nitroaniline             | 0.37117      | 0.33557  | 0.33557       | 0.000      | -9.59231    | 60.00000           | Averaged      |
| 41 m-Nitroaniline             | 42.06941     | 40.00000 | 0.23375       | 0.000      | 5.17353     | 60.00000           | Linear        |
| 43 Dimethylphthalate          | 1.08482      | 1.13800  | 1.13800       | 0.000      | 4.90216     | 60.00000           | Averaged      |
| 44 2,6-Dinitrotoluene         | 0.25779      | 0.27026  | 0.27026       | 0.000      | 4.83600     | 60.00000           | Averaged      |
| 50 2,4-Dinitrotoluene         | 0.32038      | 0.34013  | 0.34013       | 0.000      | 6.16544     | 60.00000           | Averaged      |
| 45 Acenaphthylene             | 1.48695      | 1.53258  | 1.53258       | 0.000      | 3.06914     | 60.00000           | Averaged      |
| 47 Acenaphthene               | 0.94692      | 0.89836  | 0.89836       | 0.001      | -5.12751    | 20.00000           | Averaged ccc  |
| 48 2,4-Dinitrophenol          | 0.11484      | 0.09747  | 0.09747       | 0.050      | -15.12478   | 60.00000           | Averaged spcc |
| 49 Dibenzofuran               | 1.21446      | 1.30211  | 1.30211       | 0.000      | 7.21771     | 60.00000           | Averaged      |
| 51 Diethylphthalate           | 1.07824      | 1.17965  | 1.17965       | 0.000      | 9.40492     | 60.00000           | Averaged      |
| 52 4-Nitrophenol              | 0.18279      | 0.19249  | 0.19249       | 0.050      | 5.30672     | 60.00000           | Averaged spcc |
| 53 Fluorene                   | 1.02579      | 1.05444  | 1.05444       | 0.000      | 2.79302     | 60.00000           | Averaged      |
| 54 4-Chlorophenylphenylether  | 0.48232      | 0.53335  | 0.53335       | 0.000      | 10.57818    | 60.00000           | Averaged      |
| 55 2-Methyl-4,6-dinitrophenol | 0.10303      | 0.12958  | 0.12958       | 0.000      | 25.77313    | 60.00000           | Averaged      |
| 56 p-Nitroaniline             | 38.48982     | 40.00000 | 0.20510       | 0.000      | -3.77544    | 60.00000           | Linear        |
| 133 Diphenylamine             | 0.53006      | 0.56175  | 0.56175       | 0.001      | 5.97788     | 20.00000           | Averaged ccc  |
| 58 1,2-Diphenylhydrazine      | 0.78142      | 0.73021  | 0.73021       | 0.000      | -6.55325    | 60.00000           | Averaged      |
| 61 4-Bromophenylphenylether   | 0.17043      | 0.17378  | 0.17378       | 0.000      | 1.96777     | 60.00000           | Averaged      |
| 63 Hexachlorobenzene          | 0.17700      | 0.16510  | 0.16510       | 0.000      | -6.72229    | 60.00000           | Averaged      |
| 65 Pentachlorophenol          | 0.10027      | 0.09540  | 0.09540       | 0.001      | -4.85020    | 20.00000           | Averaged ccc  |
| 206 n-Octadecane              | 0.65176      | 0.56576  | 0.56576       | 0.000      | -13.19462   | 60.00000           | Averaged      |
| 68 Phenanthrene               | 0.87923      | 0.88123  | 0.88123       | 0.000      | 0.22814     | 60.00000           | Averaged      |
| 69 Anthracene                 | 0.87768      | 0.89160  | 0.89160       | 0.000      | 1.58655     | 60.00000           | Averaged      |
| 72 Di-n-butylphthalate        | 1.06159      | 1.11064  | 1.11064       | 0.000      | 4.61980     | 60.00000           | Averaged      |
| 76 Fluoranthene               | 0.80003      | 0.85365  | 0.85365       | 0.001      | 6.70252     | 20.00000           | Averaged ccc  |
| 79 Pyrene                     | 1.14589      | 1.20363  | 1.20363       | 0.000      | 5.03877     | 60.00000           | Averaged      |
| 85 Butylbenzylphthalate       | 0.57344      | 0.59345  | 0.59345       | 0.000      | 3.49087     | 60.00000           | Averaged      |
| 89 Benzo(a)anthracene         | 0.91588      | 0.93522  | 0.93522       | 0.000      | 2.11186     | 60.00000           | Averaged      |
| 92 Chrysene                   | 0.86151      | 0.90668  | 0.90668       | 0.000      | 5.24370     | 60.00000           | Averaged      |
| 93 bis(2-Ethylhexyl)phthalate | 0.78921      | 0.76699  | 0.76699       | 0.000      | -2.81585    | 60.00000           | Averaged      |

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 29-JAN-2010 14:20  
 Lab File ID: s3a2908.d Init. Cal. Date(s): 20-JAN-2010 29-JAN-2010  
 Analysis Type: Init. Cal. Times: 17:59 22:17  
 Lab Sample ID: WBN100121-17.2 Quant Type: ISTD  
 Method: /chem/MSD3.i/s012910a.b/MSD3-8270R-AQA-012910.m

| COMPOUND                        | RRF / AMOUNT | RF40    | CCAL<br>RRF40 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE   |
|---------------------------------|--------------|---------|---------------|------------|-------------|--------------------|--------------|
| 94 Di-n-octylphthalate          | 1.61982      | 1.76662 | 1.76662       | 0.001      | 9.06311     | 20.00000           | Averaged ccc |
| 95 Benzo(b)fluoranthene         | 0.93870      | 1.06400 | 1.06400       | 0.000      | 13.34745    | 60.00000           | Averaged     |
| 96 Benzo(k)fluoranthene         | 0.97450      | 1.07685 | 1.07685       | 0.000      | 10.50378    | 60.00000           | Averaged     |
| 97 Benzo(a)pyrene               | 0.81798      | 0.93471 | 0.93471       | 0.001      | 14.27032    | 20.00000           | Averaged ccc |
| 99 Indeno(1,2,3-cd)pyrene       | 0.66728      | 0.76570 | 0.76570       | 0.000      | 14.74863    | 60.00000           | Averaged     |
| 100 Dibenzo(a,h)anthracene      | 0.54458      | 0.63805 | 0.63805       | 0.000      | 17.16237    | 60.00000           | Averaged     |
| 101 Benzo(ghi)perylene          | 0.54772      | 0.62274 | 0.62274       | 0.000      | 13.69809    | 60.00000           | Averaged     |
| 126 m-Dinitrobenzene            | 0.18506      | 0.18932 | 0.18932       | 0.000      | 2.30226     | 60.00000           | Averaged     |
| 130 2,3,4,6-Tetrachlorophenol   | 0.24334      | 0.26503 | 0.26503       | 0.000      | 8.91483     | 60.00000           | Averaged     |
| 143 Dinoseb                     | 0.14194      | 0.13870 | 0.13870       | 0.000      | -2.28439    | 60.00000           | Averaged     |
| 173 Carbazole                   | 0.71254      | 0.70159 | 0.70159       | 0.000      | -1.53672    | 60.00000           | Averaged     |
| 184 p-Benzoquinone              | 0.09247      | 0.10946 | 0.10946       | 0.000      | 18.37547    | 60.00000           | Averaged     |
| 192 Methoxychlor                | 0.51665      | 0.65828 | 0.65828       | 0.000      | 27.41350    | 60.00000           | Averaged     |
| 211 p-Toluidine                 | 0.91289      | 0.95429 | 0.95429       | 0.000      | 4.53578     | 60.00000           | Averaged     |
| 210 m-Toluidine                 | 1.30281      | 1.31917 | 1.31917       | 0.000      | 1.25569     | 60.00000           | Averaged     |
| 26 Phthalic anhydride           | 0.10481      | 0.11862 | 0.11862       | 0.000      | 13.18158    | 60.00000           | Averaged     |
| 179 Dibenzo(a,e)pyrene          | 0.23979      | 0.20643 | 0.20643       | 0.000      | -13.90986   | 60.00000           | Averaged     |
| 214 1,4-Dinitrobenzene          | 0.21468      | 0.20076 | 0.20076       | 0.000      | -6.48613    | 60.00000           | Averaged     |
| 215 2-Ethoxyethanol             | 0.84974      | 0.74813 | 0.74813       | 0.000      | -11.95767   | 60.00000           | Averaged     |
| 216 Methylenebis(2-chloroanilin | 0.10764      | 0.12892 | 0.12892       | 0.000      | 19.76042    | 60.00000           | Averaged     |
| M 225 Trichlorophenols          | 0.29823      | 0.33518 | 0.33518       | 0.000      | 12.39201    | 60.00000           | Averaged     |
| M 226 Tetrachlorophenols        | 0.24334      | 0.26503 | 0.26503       | 0.000      | 8.91483     | 60.00000           | Averaged     |
| M 227 Benzo(b,k)fluoranthene    | 0.95660      | 1.07043 | 1.07043       | 0.000      | 11.89902    | 60.00000           | Averaged     |

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012910a.b/s3a2908.d  
Lab Smp Id: WBN100121-17.2 Client Smp ID: MEGACVS  
Inj Date : 29-JAN-2010 14:20  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |WBN100121-17.2|40 PPM|1|SVMF|1|MEGACVS  
Misc Info : |MSD8270|WBN100122-01|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012910a.b/MSD3-8270R-AQA-012910.m  
Meth Date : 04-Feb-2010 10:52 jen00986 Quant Type: ISTD  
Cal Date : 29-JAN-2010 22:17 Cal File: s3a2925.d  
Als bottle: 2 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: MEGAIL.sub  
Target Version: 3.50  
Processing Host: hpc1pl

| Compounds                       | QUANT SIG |        |        |         | AMOUNTS  |                    |                   |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                 | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| * 10 1,4-Dichlorobenzene-d4     | 152       | 4.648  | 4.648  | (1.000) | 571899   | 40.0000            |                   |
| * 29 Naphthalene-d8             | 136       | 5.923  | 5.923  | (1.000) | 2336765  | 40.0000            |                   |
| * 46 Acenaphthene-d10           | 164       | 7.792  | 7.792  | (1.000) | 1194351  | 40.0000            |                   |
| * 67 Phenanthrene-d10           | 188       | 9.403  | 9.403  | (1.000) | 1880547  | 40.0000            |                   |
| * 91 Chrysene-d12               | 240       | 12.377 | 12.377 | (1.000) | 1354768  | 40.0000            |                   |
| * 98 Perylene-d12               | 264       | 14.616 | 14.616 | (1.000) | 840914   | 40.0000            |                   |
| \$ 3 2-Fluorophenol             | 112       | 3.481  | 3.481  | (0.749) | 591254   | 40.0000            | 39.7              |
| \$ 5 Phenol-d5                  | 99        | 4.261  | 4.261  | (0.917) | 703427   | 40.0000            | 37.6              |
| \$ 20 Nitrobenzene-d5           | 82        | 5.186  | 5.186  | (0.876) | 704640   | 40.0000            | 40.8              |
| \$ 39 2-Fluorobiphenyl          | 172       | 7.051  | 7.051  | (0.905) | 1328484  | 40.0000            | 43.0              |
| \$ 60 2,4,6-Tribromophenol      | 329       | 8.642  | 8.642  | (1.109) | 115444   | 40.0000            | 33.7              |
| \$ 81 p-Terphenyl-d14           | 244       | 11.113 | 11.113 | (0.898) | 1078599  | 40.0000            | 46.3              |
| 1 N-Methyl-N-nitrosomethylamine | 74        | 2.510  | 2.510  | (0.540) | 365309   | 40.0000            | 35.1              |
| 2 Pyridine                      | 79        | 2.551  | 2.551  | (0.549) | 420387   | 40.0000            | 36.1              |
| 4 Aniline                       | 66        | 4.337  | 4.337  | (0.933) | 322686   | 40.0000            | 37.0              |
| 6 Phenol                        | 94        | 4.273  | 4.273  | (0.919) | 766393   | 40.0000            | 38.7              |
| 7 bis(2-Chloroethyl) ether      | 63        | 4.378  | 4.378  | (0.942) | 518287   | 40.0000            | 33.1              |
| 8 2-Chlorophenol                | 128       | 4.449  | 4.449  | (0.957) | 649082   | 40.0000            | 43.2              |
| 203 n-Decane                    | 43        | 4.455  | 4.455  | (0.958) | 812290   | 40.0000            | 35.6              |
| 9 1,3-Dichlorobenzene           | 146       | 4.595  | 4.595  | (0.989) | 740090   | 40.0000            | 42.8              |
| 11 1,4-Dichlorobenzene          | 146       | 4.663  | 4.663  | (1.003) | 745183   | 40.0000            | 42.5              |
| 13 1,2-Dichlorobenzene          | 146       | 4.813  | 4.813  | (1.035) | 695489   | 40.0000            | 42.3              |
| 14 bis(2-Chloroisopropyl)ether  | 45        | 4.883  | 4.883  | (1.051) | 1236328  | 40.0000            | 33.4              |
| 12 Benzyl alcohol               | 108       | 4.763  | 4.763  | (1.025) | 395437   | 40.0000            | 37.8              |
| 15 o-Cresol                     | 107       | 4.848  | 4.848  | (1.043) | 508385   | 40.0000            | 39.5              |
| 18 m,p-Cresols                  | 107       | 5.004  | 5.004  | (1.076) | 667598   | 40.0000            | 39.9              |

| Compounds                     | QUANT STG |        |        | REL RT  | RESPONSE | AMOUNTS            |                   |
|-------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                               | MASS      | RT     | EXP RT |         |          | CAI-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| =====                         | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| 17 N-Nitrosodipropylamine     | 70        | 5.024  | 5.024  | (1.081) | 494257   | 40.0000            | 38.9              |
| 19 Hexachloroethane           | 117       | 5.142  | 5.142  | (1.106) | 305426   | 40.0000            | 40.6              |
| 21 Nitrobenzene               | 77        | 5.206  | 5.206  | (0.879) | 712293   | 40.0000            | 39.2              |
| 22 Isophorone                 | 82        | 5.441  | 5.441  | (0.919) | 1276922  | 40.0000            | 39.7              |
| 23 2-Nitrophenol              | 139       | 5.521  | 5.521  | (0.932) | 354684   | 40.0000            | 42.6              |
| 24 2,4-Dimethylphenol         | 122       | 5.538  | 5.538  | (0.935) | 618451   | 40.0000            | 43.0              |
| 25 bis(2-Chloroethoxy)methane | 93        | 5.641  | 5.641  | (0.952) | 714258   | 40.0000            | 38.2              |
| 26 2,4-Dichlorophenol         | 162       | 5.761  | 5.761  | (0.973) | 537833   | 40.0000            | 44.4              |
| 27 Benzoic acid               | 105       | 5.641  | 5.641  | (0.952) | 282990   | 40.0000            | 27.9              |
| 28 1,2,4-Trichlorobenzene     | 180       | 5.852  | 5.852  | (0.988) | 592767   | 40.0000            | 44.0              |
| 30 Naphthalene                | 128       | 5.947  | 5.947  | (1.004) | 1765853  | 40.0000            | 35.9              |
| 204 alpha-Terpineol           | 59        | 5.935  | 5.935  | (1.002) | 578992   | 40.0000            | 35.8              |
| 31 4-Chloroaniline            | 127       | 5.988  | 5.988  | (1.011) | 649506   | 40.0000            | 43.7              |
| 32 Hexachlorobutadiene        | 225       | 6.052  | 6.052  | (1.022) | 350429   | 40.0000            | 45.6              |
| 33 4-Chloro-3-methylphenol    | 107       | 6.475  | 6.475  | (1.093) | 585853   | 40.0000            | 42.7              |
| 34 2-Methylnaphthalene        | 142       | 6.669  | 6.669  | (1.126) | 1219436  | 40.0000            | 41.3              |
| 35 1-Methylnaphthalene        | 142       | 6.775  | 6.775  | (1.144) | 1160702  | 40.0000            | 38.7              |
| 36 Hexachlorocyclopentadiene  | 237       | 6.822  | 6.822  | (0.876) | 256533   | 40.0000            | 37.7              |
| 205 2,3-Dichloroaniline       | 161       | 6.966  | 6.966  | (0.894) | 633234   | 40.0000            | 41.6              |
| 37 2,4,6-Trichlorophenol      | 196       | 6.960  | 6.960  | (0.893) | 379104   | 40.0000            | 44.3              |
| 38 2,4,5-Trichlorophenol      | 196       | 6.995  | 6.995  | (0.898) | 421552   | 40.0000            | 45.6              |
| 40 2-Chloronaphthalene        | 162       | 7.192  | 7.192  | (0.923) | 1167594  | 40.0000            | 41.4              |
| 42 o-Nitroaniline             | 65        | 7.295  | 7.295  | (0.936) | 400783   | 40.0000            | 36.2              |
| 41 m-Nitroaniline             | 138       | 7.742  | 7.742  | (0.994) | 279181   | 40.0000            | 42.1              |
| 43 Dimethylphthalate          | 163       | 7.486  | 7.486  | (0.961) | 1359173  | 40.0000            | 42.0              |
| 44 2,6-Dinitrotoluene         | 165       | 7.557  | 7.557  | (0.970) | 322786   | 40.0000            | 41.9              |
| 50 2,4-Dinitrotoluene         | 165       | 7.989  | 7.989  | (1.025) | 406238   | 40.0000            | 42.5              |
| 45 Acenaphthylene             | 152       | 7.642  | 7.642  | (0.981) | 1830441  | 40.0000            | 41.2              |
| 47 Acenaphthene               | 154       | 7.827  | 7.827  | (1.005) | 1072961  | 40.0000            | 37.9              |
| 48 2,4-Dinitrophenol          | 184       | 7.848  | 7.848  | (1.007) | 116418   | 40.0000            | 34.0              |
| 49 Dibenzofuran               | 168       | 8.012  | 8.012  | (1.028) | 1555180  | 40.0000            | 42.9              |
| 51 Diethylphthalate           | 149       | 8.239  | 8.239  | (1.057) | 1408911  | 40.0000            | 43.8              |
| 52 4-Nitrophenol              | 139       | 7.901  | 7.901  | (1.014) | 229902   | 40.0000            | 42.1              |
| 53 Fluorene                   | 166       | 8.383  | 8.383  | (1.076) | 1259375  | 40.0000            | 41.1              |
| 54 4-Chlorophenylphenylether  | 204       | 8.371  | 8.371  | (1.074) | 637002   | 40.0000            | 44.2              |
| 55 2-Methyl-4,6-dinitrophenol | 198       | 8.430  | 8.430  | (0.896) | 243689   | 40.0000            | 50.3              |
| 56 p-Nitroaniline             | 138       | 8.403  | 8.403  | (1.078) | 244963   | 40.0000            | 38.5              |
| 133 Diphenylamine             | 169       | 8.500  | 8.500  | (0.904) | 1056400  | 40.0000            | 42.4              |
| 58 1,2-Diphenylhydrazine      | 77        | 8.545  | 8.545  | (0.909) | 1373203  | 40.0000            | 37.4              |
| 61 4-Bromophenylphenylether   | 248       | 8.903  | 8.903  | (0.947) | 326810   | 40.0000            | 40.8              |
| 63 Hexachlorobenzene          | 284       | 8.971  | 8.971  | (0.954) | 310484   | 40.0000            | 37.3              |
| 65 Pentachlorophenol          | 266       | 9.179  | 9.179  | (0.976) | 179411   | 40.0000            | 38.0              |
| 206 n-Octadecane              | 57        | 9.235  | 9.235  | (0.982) | 1063940  | 40.0000            | 34.7              |
| 68 Phenanthrene               | 178       | 9.430  | 9.430  | (1.003) | 1657198  | 40.0000            | 40.1              |
| 69 Anthracene                 | 178       | 9.486  | 9.486  | (1.009) | 1676696  | 40.0000            | 40.6              |
| 72 Di-n-butylphthalate        | 149       | 10.000 | 10.000 | (1.063) | 2088604  | 40.0000            | 41.8              |
| 76 Fluoranthene               | 202       | 10.716 | 10.716 | (1.140) | 1605326  | 40.0000            | 42.7              |

| Compounds                         | QUANT STG |        |        |         | RESPONSE | AMOUNTS            |                   |
|-----------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                   | MASS      | RT     | EXP RT | REL RT  |          | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| =====                             | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| 79 Pyrene                         | 202       | 10.966 | 10.966 | (0.886) | 1630643  | 40.0000            | 42.0              |
| 85 Butylbenzylphthalate           | 149       | 11.639 | 11.639 | (0.940) | 803993   | 40.0000            | 41.4              |
| 89 Benzo(a)anthracene             | 228       | 12.357 | 12.357 | (0.998) | 1267006  | 40.0000            | 40.8              |
| 92 Chrysene                       | 228       | 12.410 | 12.410 | (1.003) | 1228345  | 40.0000            | 42.1              |
| 93 bis(2-Ethylhexyl)phthalate     | 149       | 12.333 | 12.333 | (0.996) | 1039093  | 40.0000            | 38.9              |
| 94 Di-n-octylphthalate            | 149       | 13.282 | 13.282 | (0.909) | 1485579  | 40.0000            | 43.6              |
| 95 Benzo(b)fluoranthene           | 252       | 13.961 | 13.961 | (0.955) | 894730   | 40.0000            | 45.3              |
| 96 Benzo(k)fluoranthene           | 252       | 14.008 | 14.008 | (0.958) | 905542   | 40.0000            | 44.2              |
| 97 Benzo(a)pyrene                 | 252       | 14.516 | 14.516 | (0.993) | 786007   | 40.0000            | 45.7              |
| 99 Indeno(1,2,3-cd)pyrene         | 276       | 16.541 | 16.541 | (1.132) | 643887   | 40.0000            | 45.9              |
| 100 Dibenzo(a,h)anthracene        | 278       | 16.576 | 16.576 | (1.134) | 536542   | 40.0000            | 46.9              |
| 101 Benzo(ghi)perylene            | 276       | 17.038 | 17.038 | (1.166) | 523673   | 40.0000            | 45.5              |
| 126 m-Dinitrobenzene              | 168       | 7.530  | 7.530  | (0.966) | 226118   | 40.0000            | 40.9              |
| 130 2,3,4,6-Tetrachlorophenol     | 232       | 8.133  | 8.133  | (1.044) | 316537   | 40.0000            | 43.6              |
| 143 Dinoseb                       | 211       | 9.368  | 9.368  | (0.996) | 260829   | 40.0000            | 39.1              |
| 173 Carbazole                     | 167       | 9.653  | 9.653  | (1.027) | 1319369  | 40.0000            | 39.4              |
| 184 p-Benzoquinone                | 54        | 3.912  | 3.912  | (0.842) | 62598    | 40.0000            | 47.4              |
| 192 Methoxychlor                  | 227       | 12.239 | 12.239 | (0.989) | 891823   | 40.0000            | 51.0              |
| 211 p-Toluidine                   | 106       | 5.068  | 5.068  | (1.090) | 545760   | 40.0000            | 41.8              |
| 210 m-Toluidine                   | 106       | 5.104  | 5.104  | (1.098) | 754431   | 40.0000            | 40.5              |
| 26 Phthalic anhydride             | 104       | 6.728  | 6.728  | (1.136) | 277197   | 40.0000            | 45.3              |
| 179 Dibenzo(a,e)pyrene            | 302       | 20.485 | 20.485 | (1.401) | 173593   | 40.0000            | 34.4              |
| 214 1,4-Dinitrobenzene            | 75        | 7.448  | 7.448  | (0.956) | 239772   | 40.0000            | 37.4              |
| 215 2-Ethoxyethanol               | 59        | 2.302  | 2.302  | (0.495) | 427856   | 40.0000            | 35.2              |
| 216 Methylenebis(2-chloroaniline) | 231       | 12.312 | 12.312 | (0.995) | 174650   | 40.0000            | 47.9              |
| M 225 Trichlorophenols            | 196       |        |        |         | 800656   | 80.0000            | 89.9              |
| M 226 Tetrachlorophenols          | 232       |        |        |         | 316537   | 40.0000            | 43.6              |
| M 227 Benzo(b,k)fluoranthene      | 252       |        |        |         | 1800272  | 80.0000            | 89.5              |

Data File: /chem/HSD3.i/s012910a,b/s3a2908.c

Date : 29-JAN-2010 14:20

Client ID: MEGACUS

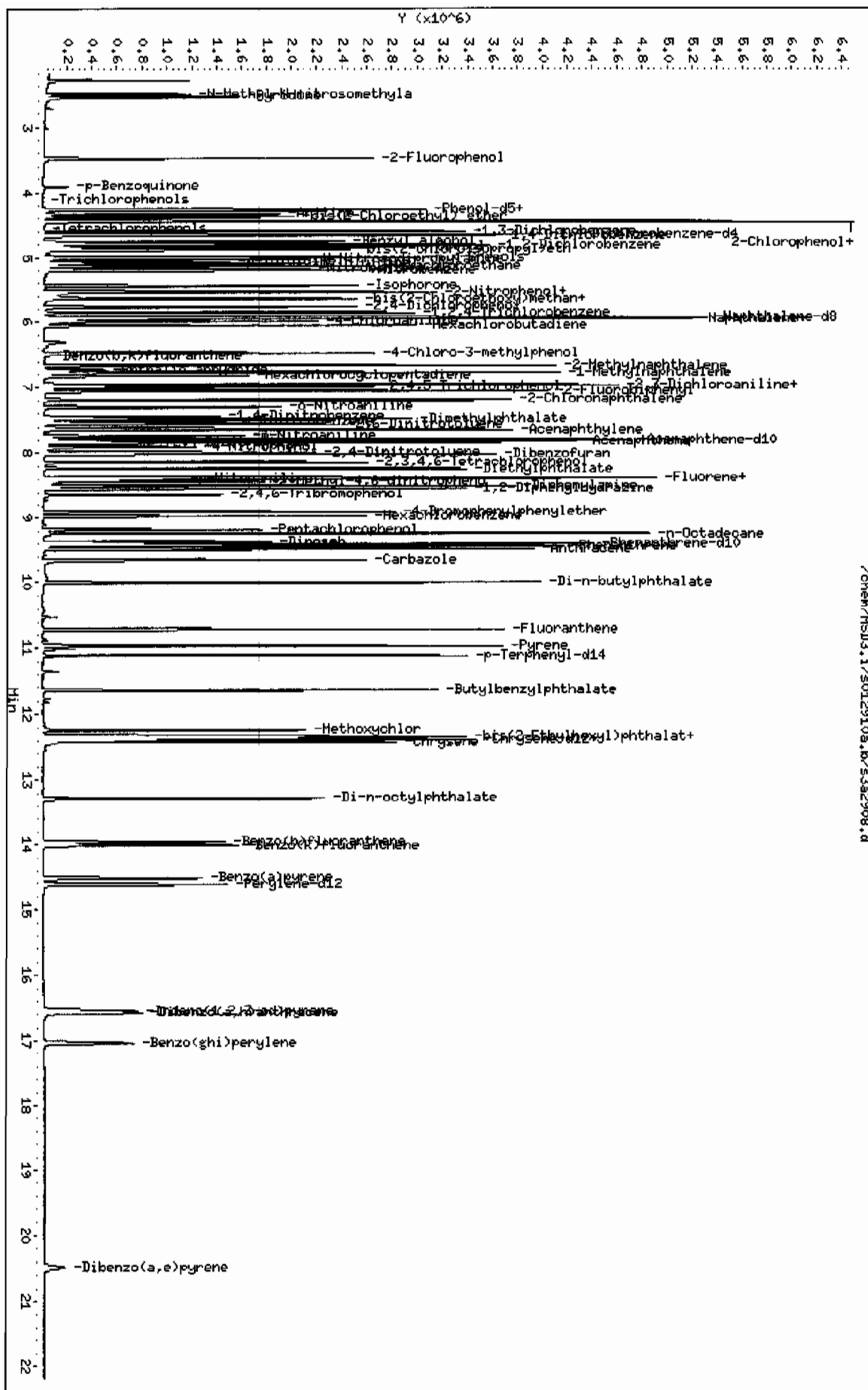
Sample Info: 1WBH00121-17,2140 PPH11SVHF11HEGACVS

Column phase: J&amp;W DB-5MS

Instrument: MSD3.1

Operator: JLD

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 29-JAN-2010 15:22  
Lab File ID: s3a2910.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010  
Analysis Type: Init. Cal. Times: 17:59 23:34  
Lab Sample ID: WBN100120-08.3 Quant Type: ISTD  
Method: /chem/MSD3.i/s012910a.b/MSD3-8270R-AQA-012110.m

| COMPOUND                       | RRF / AMOUNT | RF40     | CCAL<br>RRF40 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE |
|--------------------------------|--------------|----------|---------------|------------|-------------|--------------------|------------|
| 209 Benzaldehyde               | 1.00310      | 0.74485  | 0.74485       | 0.000      | -25.74525   | 60.00000           | Averaged   |
| 16 Acetophenone                | 1.32216      | 1.18584  | 1.18584       | 0.000      | -10.31029   | 60.00000           | Averaged   |
| 189 Caprolactam                | 0.08576      | 0.09062  | 0.09062       | 0.000      | 5.67376     | 60.00000           | Averaged   |
| 208 1,1'-Biphenyl              | 1.21038      | 1.19951  | 1.19951       | 0.000      | -0.89825    | 60.00000           | Averaged   |
| 207 Atrazine                   | 0.04628      | 0.04838  | 0.04838       | 0.000      | 4.53813     | 60.00000           | Averaged   |
| 77 Benzidine                   | 42.78210     | 40.00000 | 0.38013       | 0.000      | 6.95526     | 60.00000           | Linear     |
| 90 3,3'-Dichlorobenzidine      | 41.28806     | 40.00000 | 0.28343       | 0.000      | 3.22015     | 60.00000           | Linear     |
| 102 1,4-Dioxane                | 0.37050      | 0.38916  | 0.38916       | 0.000      | 5.03700     | 60.00000           | Averaged   |
| 103 Methyl methacrylate        | 0.21351      | 0.23560  | 0.23560       | 0.000      | 10.34709    | 60.00000           | Averaged   |
| 104 Ethyl methacrylate         | 0.89246      | 0.92338  | 0.92338       | 0.000      | 3.46502     | 60.00000           | Averaged   |
| 105 2-Picoline                 | 1.30074      | 1.11633  | 1.11633       | 0.000      | -14.17710   | 60.00000           | Averaged   |
| 106 N-Nitrosomethylethylamine  | 0.57807      | 0.50009  | 0.50009       | 0.000      | -13.48919   | 60.00000           | Averaged   |
| 107 Methyl methanesulfonate    | 0.60378      | 0.58189  | 0.58189       | 0.000      | -3.62574    | 60.00000           | Averaged   |
| 108 N-Nitrosodiethylamine      | 0.58167      | 0.53028  | 0.53028       | 0.000      | -8.83598    | 60.00000           | Averaged   |
| 109 Ethyl Methanesulfonate     | 0.74637      | 0.78650  | 0.78650       | 0.000      | 5.37603     | 60.00000           | Averaged   |
| 110 Pentachloroethane          | 0.32905      | 0.43494  | 0.43494       | 0.000      | 32.18270    | 60.00000           | Averaged   |
| 111 N-Nitrosopyrrolidine       | 0.60059      | 0.55236  | 0.55236       | 0.000      | -8.02949    | 60.00000           | Averaged   |
| 113 N-Nitrosomorpholine        | 0.98604      | 0.83059  | 0.83059       | 0.000      | -15.76587   | 60.00000           | Averaged   |
| 114 o-Toluidine                | 1.80736      | 1.63870  | 1.63870       | 0.000      | -9.33188    | 60.00000           | Averaged   |
| 115 N-Nitrosopiperidine        | 0.15108      | 0.14008  | 0.14008       | 0.000      | -7.28250    | 60.00000           | Averaged   |
| 116 a,a-Dimethylphenethylamine | 1.11880      | 0.88209  | 0.88209       | 0.000      | -21.15815   | 60.00000           | Averaged   |
| 118 2,6-Dichlorophenol         | 0.21531      | 0.22054  | 0.22054       | 0.000      | 2.42787     | 60.00000           | Averaged   |
| 119 Hexachloropropene          | 0.11708      | 0.17621  | 0.17621       | 0.000      | 50.50508    | 60.00000           | Averaged   |
| 120 p-Phenylenediamine         | 0.24808      | 0.25657  | 0.25657       | 0.000      | 3.42458     | 60.00000           | Averaged   |
| 121 N-Nitrosodi-n-butylamine   | 0.23566      | 0.22278  | 0.22278       | 0.000      | -5.46597    | 60.00000           | Averaged   |
| 122 Safrole                    | 0.19323      | 0.22185  | 0.22185       | 0.000      | 14.81154    | 60.00000           | Averaged   |
| 123 1,2,4,5-Tetrachlorobenzene | 0.42534      | 0.47146  | 0.47146       | 0.000      | 10.84160    | 60.00000           | Averaged   |
| 124 Isosafrole                 | 0.35652      | 0.44485  | 0.44485       | 0.000      | 24.77309    | 60.00000           | Averaged   |
| 125 1,4-Naphthoquinone         | 0.33545      | 0.32296  | 0.32296       | 0.000      | -3.72188    | 60.00000           | Averaged   |
| 127 Pentachlorobenzene         | 0.37060      | 0.35890  | 0.35890       | 0.000      | -3.15939    | 60.00000           | Averaged   |
| 128 1-Naphthylamine            | 0.91242      | 0.91772  | 0.91772       | 0.000      | 0.58159     | 60.00000           | Averaged   |
| 129 2-Naphthylamine            | 1.00263      | 1.00489  | 1.00489       | 0.000      | 0.22551     | 60.00000           | Averaged   |
| 131 5-Nitro-o-toluidine        | 0.29533      | 0.29217  | 0.29217       | 0.000      | -1.06834    | 60.00000           | Averaged   |
| 136 1,3,5-Trinitrobenzene      | 0.14894      | 0.18742  | 0.18742       | 0.000      | 25.83795    | 60.00000           | Averaged   |
| 137 Phenacetin                 | 0.33125      | 0.31780  | 0.31780       | 0.000      | -4.05997    | 60.00000           | Averaged   |
| 138 Diallate                   | 0.31820      | 0.25697  | 0.25697       | 0.000      | -19.24114   | 60.00000           | Averaged   |

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 29-JAN-2010 15:22  
 Lab File ID: s3a2910.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010  
 Analysis Type: Init. Cal. Times: 17:59 23:34  
 Lab Sample ID: WBN100120-08.3 Quant Type: ISTD  
 Method: /chem/MSD3.i/s012910a.b/MSD3-8270R-AQA-012110.m

| COMPOUND                          | RRF / AMOUNT | RF40     | CCAL<br>RRF40 | MTN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE |
|-----------------------------------|--------------|----------|---------------|------------|-------------|--------------------|------------|
| 140 4-Aminobiphenyl               | 0.63580      | 0.63188  | 0.63188       | 0.000      | -0.61612    | 60.00000           | Averaged   |
| 141 Pentachloronitrobenzene       | 0.07853      | 0.07402  | 0.07402       | 0.000      | -5.73235    | 60.00000           | Averaged   |
| 142 Pronamide                     | 0.29619      | 0.30031  | 0.30031       | 0.000      | 1.39138     | 60.00000           | Averaged   |
| 146 4-Nitroquinoline-1-oxide      | 0.03387      | 0.00552  | 0.00552       | 0.000      | -83.69009   | 60.00000           | Averaged<- |
| 147 Methapyrilene                 | 0.52598      | 0.48001  | 0.48001       | 0.000      | -8.73888    | 60.00000           | Averaged   |
| 148 Isodrin                       | 0.11094      | 0.09785  | 0.09785       | 0.000      | -11.79402   | 60.00000           | Averaged   |
| 149 Aramite                       | 0.04585      | 0.04339  | 0.04339       | 0.000      | -5.37106    | 60.00000           | Averaged   |
| 150 Kepone                        | 0.06767      | 0.05415  | 0.05415       | 0.000      | -19.98266   | 60.00000           | Averaged   |
| 151 p-(Dimethylamino)azobenzene   | 0.39647      | 0.36624  | 0.36624       | 0.000      | -7.62538    | 60.00000           | Averaged   |
| 152 Chlorobenzilate               | 0.32229      | 0.30782  | 0.30782       | 0.000      | -4.49154    | 60.00000           | Averaged   |
| 153 3,3'-Dimethylbenzidine        | 0.51678      | 0.55008  | 0.55008       | 0.000      | 6.44337     | 60.00000           | Averaged   |
| 155 2-Acetylaminofluorene         | 44.85389     | 40.00000 | 0.35792       | 0.000      | 12.13474    | 60.00000           | Linear     |
| 157 7,12Dimethylbenz(a)anthracene | 0.53008      | 0.49786  | 0.49786       | 0.000      | -6.07814    | 60.00000           | Averaged   |
| 158 3-Methylcholanthrene          | 0.38427      | 0.41792  | 0.41792       | 0.000      | 8.75798     | 60.00000           | Averaged   |
| 212 Cis Diallate                  | 0.33782      | 0.34549  | 0.34549       | 0.000      | 2.27168     | 60.00000           | Averaged   |
| 213 Trans Diallate                | 0.37435      | 0.30232  | 0.30232       | 0.000      | -19.24114   | 60.00000           | Averaged   |



GEL Laboratories LLC

Data file : /chem/MSD3.i/s012910a.b/s3a2910.d  
Lab Smp Id: WBN100120-08.3 Client Smp ID: APCVS  
Inj Date : 29-JAN-2010 15:22  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |WBN100120-08.3|40 PPM|1|SVMF|1|APCVS  
Misc Info : |MSD8270|WBN100122-01|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012910a.b/MSD3-8270R-AQA-012110.m  
Meth Date : 30-Jan-2010 14:30 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 4 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: AP12.sub  
Target Version: 3.50  
Processing Host: hpclp1

| Compounds                     | QUANT SIG<br>MASS | RT     | EXP RT | REL RT  | RESPONSE | AMOUNTS            |                   |
|-------------------------------|-------------------|--------|--------|---------|----------|--------------------|-------------------|
|                               |                   |        |        |         |          | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| * 10 1,4-Dichlorobenzene-d4   | 152               | 4.645  | 4.645  | (1.000) | 655746   | 40.0000            |                   |
| * 29 Naphthalene-d8           | 136               | 5.922  | 5.922  | (1.000) | 2427728  | 40.0000            |                   |
| * 46 Acenaphthene-d10         | 164               | 7.789  | 7.789  | (1.000) | 1339375  | 40.0000            |                   |
| * 67 Phenanthrene-d10         | 188               | 9.405  | 9.405  | (1.000) | 2172760  | 40.0000            |                   |
| * 91 Chrysene-d12             | 240               | 12.370 | 12.370 | (1.000) | 1553416  | 40.0000            |                   |
| * 98 Perylene-d12             | 264               | 14.611 | 14.611 | (1.000) | 949921   | 40.0000            |                   |
| 209 Benzaldehyde              | 77                | 4.247  | 4.247  | (0.914) | 488430   | 40.0000            | 29.7 (H)          |
| 16 Acetophenone               | 105               | 5.027  | 5.027  | (1.082) | 777608   | 40.0000            | 35.9 (H)          |
| 189 Caprolactam               | 113               | 6.359  | 6.359  | (1.074) | 220012   | 40.0000            | 42.3              |
| 208 1,1'-Biphenyl             | 154               | 7.164  | 7.164  | (0.920) | 1606593  | 40.0000            | 39.6 (H)          |
| 207 Atrazine                  | 173               | 9.073  | 9.073  | (0.965) | 105115   | 40.0000            | 41.8 (H)          |
| 77 Benzidine                  | 184               | 10.853 | 10.853 | (0.877) | 590506   | 40.0000            | 42.8              |
| 90 3,3'-Dichlorobenzidine     | 252               | 12.309 | 12.309 | (0.995) | 440291   | 40.0000            | 41.3 (H)          |
| 102 1,4-Dioxane               | 88                | 2.302  | 2.302  | (0.496) | 255189   | 40.0000            | 42.0              |
| 103 Methyl methacrylate       | 100               | 2.299  | 2.299  | (0.495) | 154492   | 40.0000            | 44.1 (H)          |
| 104 Ethyl methacrylate        | 69                | 2.804  | 2.804  | (0.604) | 605502   | 40.0000            | 41.4              |
| 105 2-Picoline                | 93                | 3.059  | 3.059  | (0.658) | 732030   | 40.0000            | 34.3 (H)          |
| 106 N-Nitrosomethylethylamine | 88                | 3.129  | 3.129  | (0.674) | 327934   | 40.0000            | 34.6 (H)          |
| 107 Methyl methanesulfonate   | 80                | 3.361  | 3.361  | (0.723) | 381572   | 40.0000            | 38.5 (H)          |
| 108 N-Nitrosodiethylamine     | 102               | 3.684  | 3.684  | (0.793) | 347726   | 40.0000            | 36.5              |
| 109 Ethyl Methanesulfonate    | 79                | 3.927  | 3.927  | (0.845) | 515741   | 40.0000            | 42.2 (H)          |
| 110 Pentachloroethane         | 167               | 4.387  | 4.387  | (0.944) | 285211   | 40.0000            | 52.9              |
| 111 N-Nitrosopyrrolidine      | 100               | 5.018  | 5.018  | (1.080) | 362211   | 40.0000            | 36.8 (QH)         |
| 113 N-Nitrosomorpholine       | 56                | 5.050  | 5.050  | (1.087) | 544653   | 40.0000            | 33.7 (H)          |
| 114 o-Toluidine               | 106               | 5.065  | 5.065  | (1.090) | 1074570  | 40.0000            | 36.3 (H)          |
| 115 N-Nitrosopiperidine       | 114               | 5.356  | 5.356  | (0.904) | 340077   | 40.0000            | 37.1              |

| Compounds                         | QUANT STG |        |        |         |          | AMOUNTS            |                   |
|-----------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                   | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>(ng/ul) | ON-COL<br>(ng/ul) |
| =====                             | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| 116 a,a-Dimethylphenethylamine    | 58        | 5.722  | 5.722  | (0.966) | 2141464  | 40.0000            | 31.5              |
| 118 2,6-Dichlorophenol            | 162       | 5.995  | 5.995  | (1.012) | 535410   | 40.0000            | 41.0 (H)          |
| 119 Hexachloropropene             | 213       | 6.025  | 6.025  | (1.017) | 427799   | 40.0000            | 60.2              |
| 120 p-Phenylenediamine            | 108       | 6.365  | 6.365  | (1.075) | 622888   | 40.0000            | 41.4 (H)          |
| 121 N-Nitrosodi-n-butylamine      | 84        | 6.330  | 6.330  | (1.069) | 540856   | 40.0000            | 37.8 (QH)         |
| 122 Safrole                       | 162       | 6.562  | 6.562  | (1.108) | 538581   | 40.0000            | 45.9 (H)          |
| 123 1,2,4,5-Tetrachlorobenzene    | 216       | 6.841  | 6.841  | (0.878) | 631458   | 40.0000            | 44.3              |
| 124 Isosafrole                    | 162       | 7.117  | 7.117  | (0.914) | 595815   | 40.0000            | 49.9 (H)          |
| 125 1,4-Naphthoquinone            | 158       | 7.381  | 7.381  | (0.948) | 432565   | 40.0000            | 38.5 (H)          |
| 127 Pentachlorobenzene            | 250       | 7.959  | 7.959  | (1.022) | 480695   | 40.0000            | 38.7              |
| 128 1-Naphthylamine               | 143       | 8.094  | 8.094  | (1.039) | 1229175  | 40.0000            | 40.2 (H)          |
| 129 2-Naphthylamine               | 143       | 8.182  | 8.182  | (1.051) | 1345921  | 40.0000            | 40.1 (H)          |
| 131 5-Nitro-o-toluidine           | 152       | 8.388  | 8.388  | (1.077) | 391329   | 40.0000            | 39.6 (H)          |
| 136 1,3,5-Trinitrobenzene         | 75        | 8.779  | 8.779  | (0.933) | 407213   | 40.0000            | 50.3 (H)          |
| 137 Phenacetin                    | 108       | 8.835  | 8.835  | (0.939) | 690513   | 40.0000            | 38.4 (QH)         |
| 138 Diallate                      | 86        | 8.796  | 8.796  | (0.935) | 558338   | 40.0000            | 32.3 (H)          |
| 140 4-Aminobiphenyl               | 169       | 9.190  | 9.190  | (0.977) | 1372934  | 40.0000            | 39.8 (H)          |
| 141 Pentachloronitrobenzene       | 237       | 9.193  | 9.193  | (0.977) | 160836   | 40.0000            | 37.7 (QH)         |
| 142 Pronamide                     | 173       | 9.235  | 9.235  | (0.982) | 652508   | 40.0000            | 40.6 (H)          |
| 146 4-Nitroquinoline-1-oxide      | 101       | 10.547 | 10.547 | (1.121) | 12004    | 40.0000            | 6.5 (H)           |
| 147 Methapyrilene                 | 58        | 10.321 | 10.321 | (1.097) | 1042950  | 40.0000            | 36.5 (H)          |
| 148 Isodrin                       | 193       | 10.547 | 10.547 | (1.121) | 212613   | 40.0000            | 35.3              |
| 149 Aramite                       | 185       | 11.076 | 11.076 | (1.178) | 94270    | 40.0000            | 37.8 (H)          |
| 150 Kepone                        | 272       | 11.708 | 11.708 | (1.245) | 117646   | 40.0000            | 32.0 (H)          |
| 151 p-(Dimethylamino)azobenzene   | 120       | 11.265 | 11.265 | (0.911) | 568923   | 40.0000            | 36.9 (H)          |
| 152 Chlorobenzilate               | 251       | 11.306 | 11.306 | (0.914) | 478170   | 40.0000            | 38.2 (H)          |
| 153 3,3'-Dimethylbenzidine        | 212       | 11.638 | 11.638 | (0.941) | 854505   | 40.0000            | 42.6 (H)          |
| 155 2-Acetylaminofluorene         | 181       | 11.941 | 11.941 | (0.965) | 555996   | 40.0000            | 44.8 (H)          |
| 157 7,12Dimethylbenz(a)anthracene | 256       | 13.939 | 13.939 | (0.954) | 472929   | 40.0000            | 37.6 (H)          |
| 158 3-Methylcholanthrene          | 268       | 15.120 | 15.120 | (1.035) | 396990   | 40.0000            | 43.5 (QH)         |
| 212 Cis Diallate                  | 86        | 8.896  | 8.896  | (0.946) | 112601   | 6.00000            | 6.1 (H)           |
| 213 Trans Diallate                | 86        | 8.796  | 8.796  | (0.935) | 558338   | 34.0000            | 27.4 (H)          |

# QC Flag Legend

Q - Qualifier signal failed the ratio test.  
H - Operator selected an alternate compound hit.

Data File: /chem/MSD3.i/s012910a,b/s3a2910.d

Date: 29-JAN-2010 15:22

Client ID: APCVS

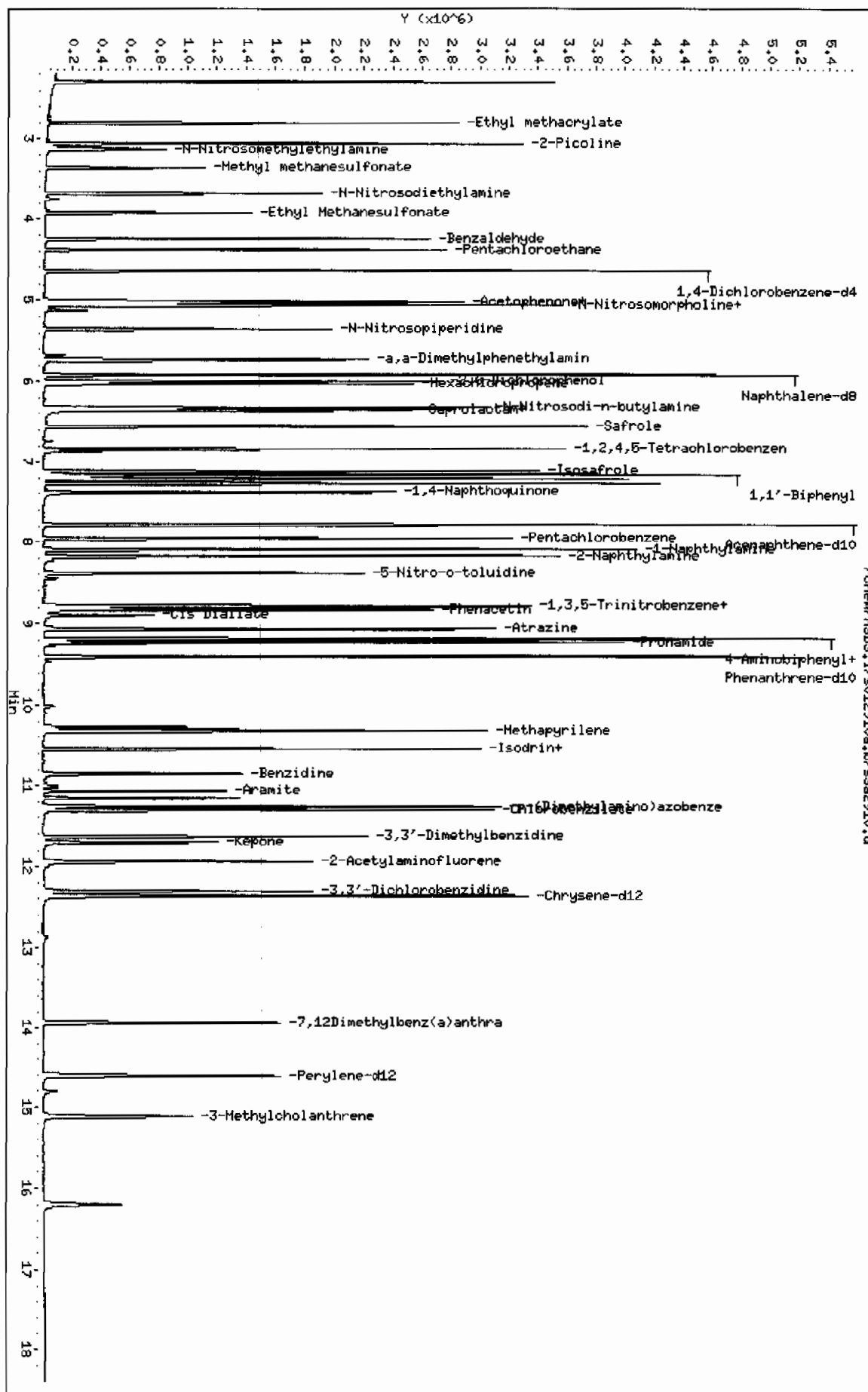
Sample Info: IADR00120-08.3140 PPH11SVF11APCVS

Column Phase: JMI DB-SHS

Instrument: MSD3.i

Operator: JLI

Column diameter: 0.20



# QC Data

Data File: /chem/HSD3,i/s012010a,b/s3a2013,d

Page 1

Date : 20-JAN-2010 17:17

Client ID: DFTPP

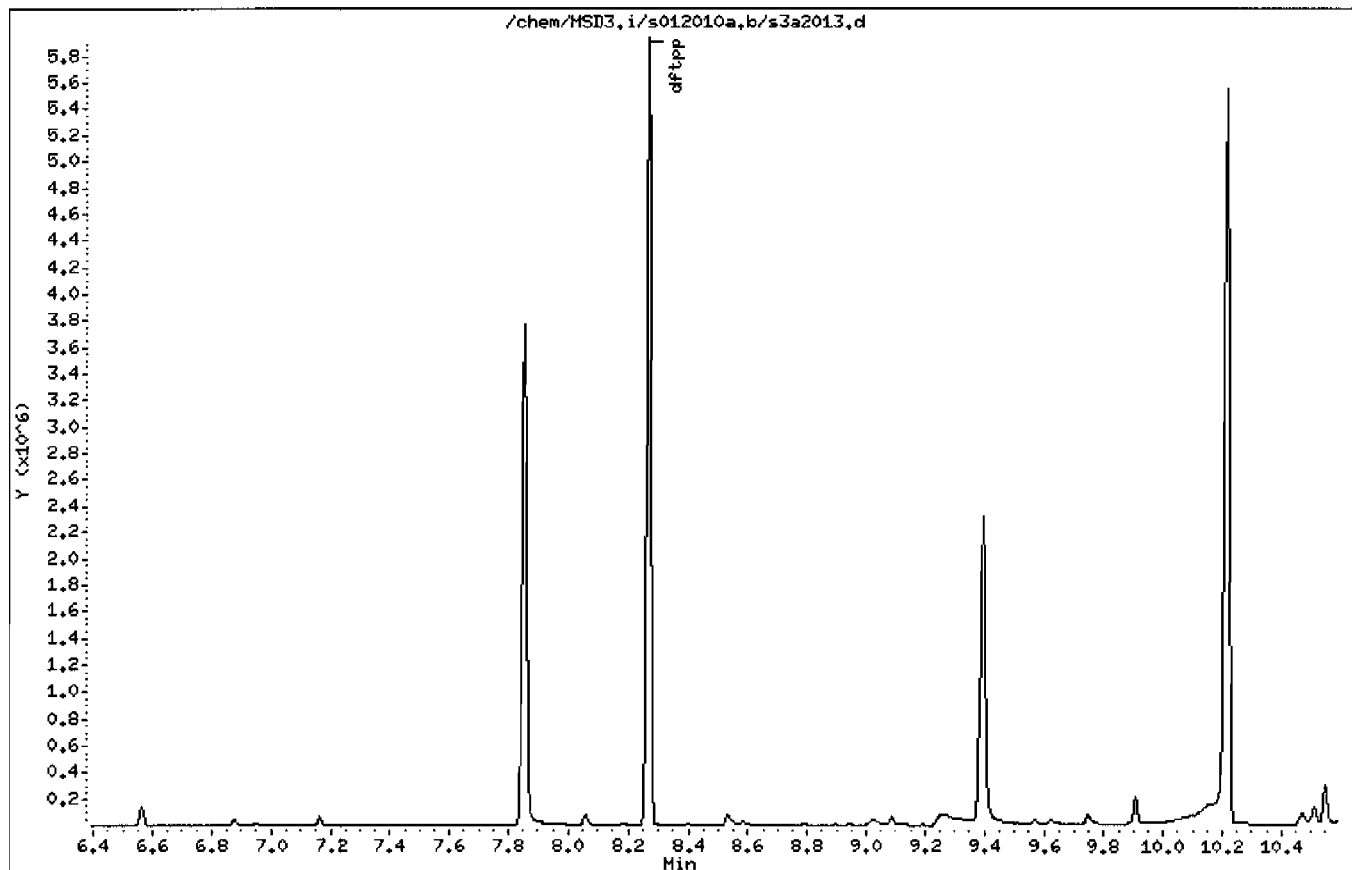
Instrument: HSD3,i

Sample Info: IWBNI00107-01:DFTPP11:SVMI11:DFTPP1

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0,20



Date : 20-JAN-2010 17:17

Client ID: DFTPP

Instrument: MSD3.i

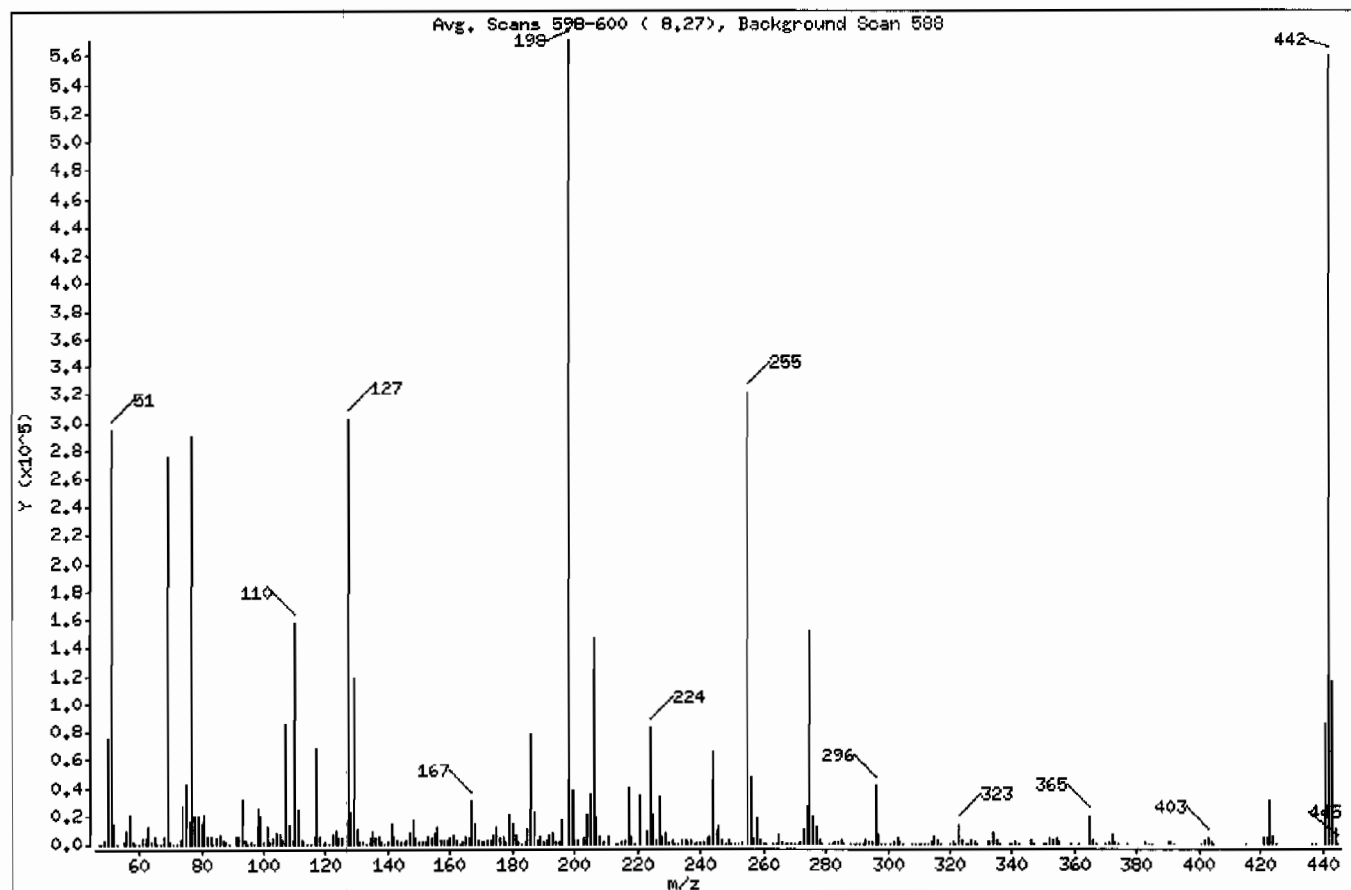
Sample Info: (WEN100107-01)DFTPP11|SVH11|DFTPP1

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

1 dftpp



| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 198 | Base Peak, 100% relative abundance | 100.00               |
| 51  | 30.00 - 60.00% of mass 198         | 51.61                |
| 68  | Less than 2.00% of mass 69         | 0.89 ( 1.85)         |
| 69  | Mass 69 relative abundance         | 48.28                |
| 70  | Less than 2.00% of mass 69         | 0.24 ( 0.49)         |
| 127 | 40.00 - 60.00% of mass 198         | 52.97                |
| 197 | Less than 1.00% of mass 198        | 0.00                 |
| 199 | 5.00 - 9.00% of mass 198           | 6.71                 |
| 275 | 10.00 - 30.00% of mass 198         | 26.39                |
| 365 | Greater than 1.00% of mass 198     | 3.48                 |
| 441 | Present, but less than mass 443    | 14.91                |
| 442 | Greater than 40.00% of mass 198    | 97.96                |
| 443 | 17.00 - 23.00% of mass 442         | 20.16 ( 20.58)       |

Date : 20-JAN-2010 17:17

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: |WBH100107-01|DFTPP|1|SVH|1|DFTPP|

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s3a2013.d

Spectrum: Avg. Scans 598-600 ( 8.27), Background Scan 588

Location of Maximum: 198.00

Number of points: 317

| m/z   | Y      | m/z    | Y     | m/z    | Y     | m/z    | Y     |
|-------|--------|--------|-------|--------|-------|--------|-------|
| 47.00 | 71     | 130.00 | 10080 | 214.00 | 173   | 301.00 | 490   |
| 48.00 | 215    | 131.00 | 1922  | 215.00 | 1637  | 302.00 | 731   |
| 49.00 | 1992   | 132.00 | 1040  | 216.00 | 3255  | 303.00 | 4594  |
| 50.00 | 74976  | 133.00 | 396   | 217.00 | 38984 | 304.00 | 1332  |
| 51.00 | 294720 | 134.00 | 3380  | 218.00 | 4866  | 305.00 | 157   |
| 52.00 | 14845  | 135.00 | 9473  | 219.00 | 515   | 308.00 | 596   |
| 53.00 | 653    | 136.00 | 3795  | 221.00 | 33936 | 309.00 | 359   |
| 55.00 | 1342   | 137.00 | 4700  | 223.00 | 8682  | 310.00 | 471   |
| 56.00 | 9017   | 138.00 | 1054  | 224.00 | 82472 | 311.00 | 77    |
| 57.00 | 20728  | 139.00 | 626   | 225.00 | 21400 | 312.00 | 75    |
| 58.00 | 925    | 140.00 | 1431  | 226.00 | 2177  | 313.00 | 319   |
| 59.00 | 258    | 141.00 | 14888 | 227.00 | 34304 | 314.00 | 1886  |
| 60.00 | 180    | 142.00 | 4915  | 228.00 | 4806  | 315.00 | 4776  |
| 61.00 | 3855   | 143.00 | 3193  | 229.00 | 7275  | 316.00 | 2628  |
| 62.00 | 4152   | 144.00 | 888   | 230.00 | 959   | 317.00 | 508   |
| 63.00 | 11447  | 145.00 | 759   | 231.00 | 3027  | 320.00 | 140   |
| 64.00 | 1645   | 146.00 | 2722  | 232.00 | 642   | 321.00 | 1328  |
| 65.00 | 5508   | 147.00 | 7667  | 233.00 | 641   | 322.00 | 621   |
| 66.00 | 373    | 148.00 | 17112 | 234.00 | 2259  | 323.00 | 13004 |
| 67.00 | 401    | 149.00 | 3399  | 235.00 | 2452  | 324.00 | 2330  |
| 68.00 | 5108   | 150.00 | 1015  | 236.00 | 1606  | 325.00 | 228   |
| 69.00 | 275712 | 151.00 | 1867  | 237.00 | 2669  | 326.00 | 281   |
| 70.00 | 1360   | 152.00 | 1209  | 238.00 | 408   | 327.00 | 2511  |
| 71.00 | 126    | 153.00 | 4709  | 239.00 | 1373  | 328.00 | 1262  |
| 72.00 | 92     | 154.00 | 3367  | 240.00 | 1044  | 329.00 | 201   |
| 73.00 | 2123   | 155.00 | 8100  | 241.00 | 1937  | 332.00 | 958   |
| 74.00 | 26656  | 156.00 | 12062 | 242.00 | 4382  | 333.00 | 1303  |
| 75.00 | 42640  | 157.00 | 2327  | 243.00 | 4685  | 334.00 | 8529  |
| 76.00 | 15152  | 158.00 | 2803  | 244.00 | 65856 | 335.00 | 2354  |
| 77.00 | 290112 | 159.00 | 2124  | 245.00 | 8735  | 336.00 | 285   |
| 78.00 | 20048  | 160.00 | 4463  | 246.00 | 12559 | 339.00 | 180   |
| 79.00 | 19176  | 161.00 | 6742  | 247.00 | 2716  | 340.00 | 192   |
| 80.00 | 14978  | 162.00 | 1977  | 248.00 | 586   | 341.00 | 1630  |
| 81.00 | 21032  | 163.00 | 552   | 249.00 | 2429  | 342.00 | 424   |
| 82.00 | 5241   | 164.00 | 785   | 250.00 | 440   | 346.00 | 3171  |

Date : 20-JAN-2010 17:17

Client ID: DFTPP

Instrument: MSD3.1

Sample Info: IWBH100107-01|DFTPP|1|SVH|1|DFTPP|

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s3a2013.d

Spectrum: Avg. Scans 598-600 ( 8.27), Background Scan 588

Location of Maximum: 198.00

Number of points: 317

| m/z    | Y      | m/z    | Y      | m/z    | Y      | m/z    | Y     |
|--------|--------|--------|--------|--------|--------|--------|-------|
| 83.00  | 4854   | 165.00 | 5288   | 251.00 | 493    | 347.00 | 557   |
| 84.00  | 419    | 166.00 | 4276   | 252.00 | 604    | 350.00 | 127   |
| 85.00  | 3785   | 167.00 | 29592  | 253.00 | 1354   | 351.00 | 248   |
| 86.00  | 6173   | 168.00 | 13942  | 255.00 | 319808 | 352.00 | 3954  |
| 87.00  | 2798   | 169.00 | 2462   | 256.00 | 47472  | 353.00 | 2730  |
| 88.00  | 1095   | 170.00 | 1019   | 257.00 | 3415   | 354.00 | 4049  |
| 89.00  | 472    | 171.00 | 1253   | 258.00 | 18800  | 355.00 | 813   |
| 91.00  | 4699   | 172.00 | 2641   | 259.00 | 2905   | 359.00 | 249   |
| 92.00  | 5188   | 173.00 | 3263   | 260.00 | 441    | 361.00 | 68    |
| 93.00  | 31992  | 174.00 | 6267   | 261.00 | 543    | 365.00 | 19880 |
| 94.00  | 2223   | 175.00 | 11398  | 263.00 | 185    | 366.00 | 3135  |
| 95.00  | 515    | 176.00 | 3378   | 264.00 | 460    | 367.00 | 191   |
| 96.00  | 1464   | 177.00 | 5542   | 265.00 | 7188   | 370.00 | 406   |
| 97.00  | 609    | 178.00 | 1755   | 266.00 | 1380   | 371.00 | 1007  |
| 98.00  | 24728  | 179.00 | 21648  | 267.00 | 143    | 372.00 | 7125  |
| 99.00  | 19224  | 180.00 | 14476  | 268.00 | 157    | 373.00 | 1815  |
| 100.00 | 1766   | 181.00 | 6936   | 269.00 | 33     | 374.00 | 114   |
| 101.00 | 11457  | 182.00 | 1104   | 270.00 | 428    | 377.00 | 170   |
| 102.00 | 667    | 183.00 | 598    | 271.00 | 542    | 383.00 | 1878  |
| 103.00 | 4115   | 184.00 | 1734   | 272.00 | 880    | 384.00 | 495   |
| 104.00 | 7470   | 185.00 | 10368  | 273.00 | 9910   | 385.00 | 155   |
| 105.00 | 6606   | 186.00 | 78664  | 274.00 | 25968  | 390.00 | 921   |
| 106.00 | 2421   | 187.00 | 22736  | 275.00 | 150720 | 391.00 | 700   |
| 107.00 | 85448  | 188.00 | 2180   | 276.00 | 19760  | 392.00 | 528   |
| 108.00 | 13681  | 189.00 | 4878   | 277.00 | 11944  | 401.00 | 477   |
| 109.00 | 2749   | 190.00 | 775    | 278.00 | 2043   | 402.00 | 2667  |
| 110.00 | 156928 | 191.00 | 2381   | 279.00 | 417    | 403.00 | 3854  |
| 111.00 | 23736  | 192.00 | 7053   | 281.00 | 157    | 404.00 | 1417  |
| 112.00 | 3017   | 193.00 | 7872   | 282.00 | 276    | 405.00 | 208   |
| 113.00 | 950    | 194.00 | 1545   | 283.00 | 1456   | 415.00 | 192   |
| 114.00 | 218    | 195.00 | 941    | 284.00 | 958    | 421.00 | 3844  |
| 115.00 | 308    | 196.00 | 17480  | 285.00 | 2218   | 422.00 | 3784  |
| 116.00 | 4903   | 198.00 | 571136 | 286.00 | 378    | 423.00 | 29736 |
| 117.00 | 68016  | 199.00 | 38344  | 288.00 | 138    | 424.00 | 5833  |
| 118.00 | 4862   | 200.00 | 3066   | 289.00 | 459    | 425.00 | 528   |



Date : 20-JAN-2010 17:17

Client ID: DFTPP

Instrument: MSD3.1

Sample Info: IWBH100107-01|DFTPP|1|SWH|1|DFTPP|

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s3a2013.d

Spectrum: Avg. Scans 598-600 ( 8.27), Background Scan 588

Location of Maximum: 198.00

Number of points: 317

| m/z    | Y      | m/z    | Y      | m/z    | Y     | m/z    | Y      |
|--------|--------|--------|--------|--------|-------|--------|--------|
| 119.00 | 619    | 201.00 | 2806   | 290.00 | 427   | 437.00 | 75     |
| 120.00 | 1124   | 203.00 | 3981   | 291.00 | 255   | 438.00 | 34     |
| 121.00 | 421    | 204.00 | 20728  | 292.00 | 552   | 441.00 | 85168  |
| 122.00 | 5938   | 205.00 | 35552  | 293.00 | 2690  | 442.00 | 559488 |
| 123.00 | 8803   | 206.00 | 147008 | 294.00 | 703   | 443.00 | 115120 |
| 124.00 | 4068   | 207.00 | 18872  | 295.00 | 963   | 444.00 | 10969  |
| 125.00 | 3625   | 208.00 | 4964   | 296.00 | 41336 | 445.00 | 603    |
| 127.00 | 302528 | 209.00 | 1534   | 297.00 | 5911  |        |        |
| 128.00 | 22944  | 211.00 | 5840   | 298.00 | 340   |        |        |
| 129.00 | 118808 | 213.00 | 416    | 299.00 | 70    |        |        |

Date : 26-JAN-2010 11:36

Client ID: DFTPP

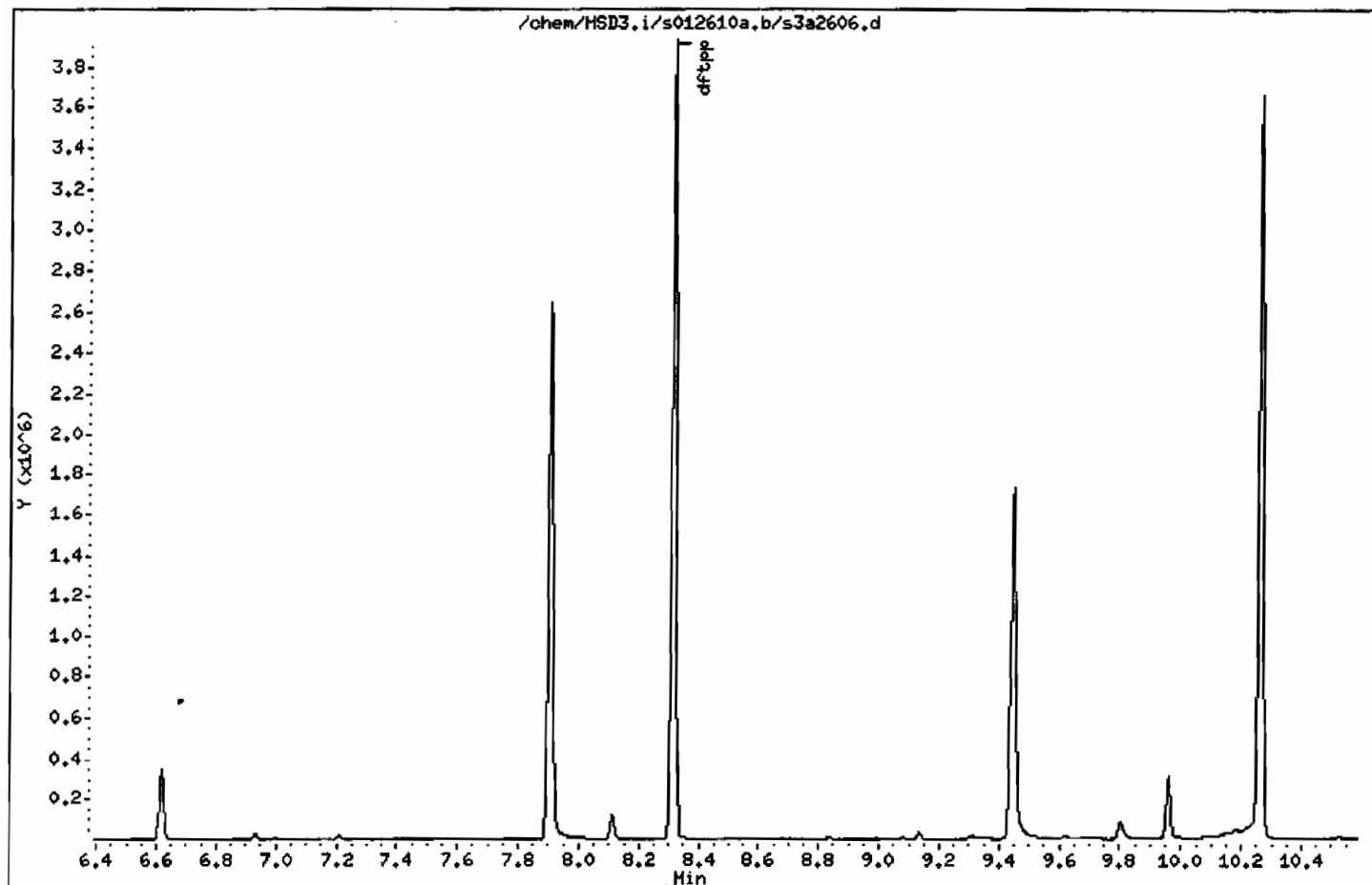
Instrument: MSD3.i

Sample Info: IWBNI00107-01IDFTPP11ISVH11IDFTPP1

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD3.i/s012610a,b/s3a2606.d

Page 2

Date : 26-JAN-2010 11:36

Client ID: DFTPP

Instrument: MSD3.i

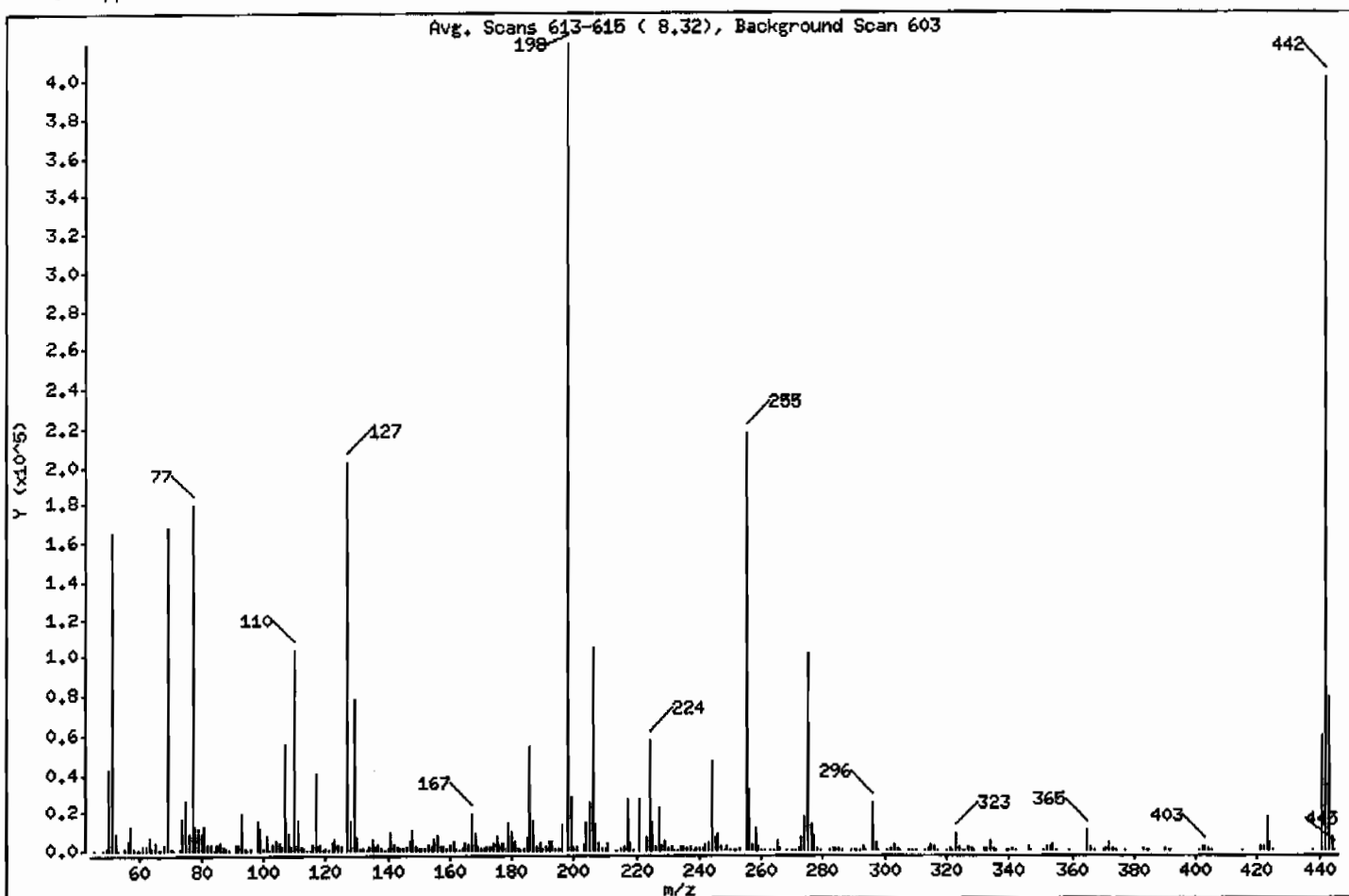
Sample Info: IWBNI00107-01IDFTPP11SVMI1IDFTPP1

Operator: JLM1

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp



| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 198 | Base Peak, 100% relative abundance | 100.00               |
| 51  | 30.00 - 60.00% of mass 198         | 39.50                |
| 68  | Less than 2.00% of mass 69         | 0.72 ( 1.80)         |
| 69  | Mass 69 relative abundance         | 40.07                |
| 70  | Less than 2.00% of mass 69         | 0.21 ( 0.52)         |
| 127 | 40.00 - 60.00% of mass 198         | 48.29                |
| 197 | Less than 1.00% of mass 198        | 0.00                 |
| 199 | 5.00 - 9.00% of mass 198           | 6.70                 |
| 275 | 10.00 - 30.00% of mass 198         | 24.17                |
| 365 | Greater than 1.00% of mass 198     | 2.61                 |
| 441 | Present, but less than mass 443    | 14.07                |
| 442 | Greater than 40.00% of mass 198    | 95.78                |
| 443 | 17.00 - 23.00% of mass 442         | 18.55 ( 19.37)       |

Date : 26-JAN-2010 11:36

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBNI00107-01IDFTPP11SVH11IDFTPP1

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s3a2606.d

Spectrum: Avg. Scans 613-615 ( 8.32), Background Scan 603

Location of Maximum: 198.00

Number of points: 305

| m/z   | Y      | m/z    | Y     | m/z    | Y     | m/z    | Y    |
|-------|--------|--------|-------|--------|-------|--------|------|
| 45.00 | 187    | 129.00 | 79072 | 208.00 | 3553  | 297.00 | 3692 |
| 48.00 | 70     | 130.00 | 6665  | 209.00 | 1057  | 298.00 | 248  |
| 49.00 | 1177   | 131.00 | 1262  | 210.00 | 1314  | 301.00 | 339  |
| 50.00 | 42304  | 132.00 | 661   | 211.00 | 4263  | 302.00 | 498  |
| 51.00 | 165312 | 133.00 | 325   | 213.00 | 263   | 303.00 | 2782 |
| 52.00 | 8697   | 134.00 | 2232  | 214.00 | 35    | 304.00 | 700  |
| 53.00 | 345    | 135.00 | 6259  | 215.00 | 1142  | 305.00 | 35   |
| 55.00 | 732    | 136.00 | 2403  | 216.00 | 2184  | 308.00 | 374  |
| 56.00 | 5233   | 137.00 | 3145  | 217.00 | 27120 | 309.00 | 184  |
| 57.00 | 12250  | 138.00 | 726   | 218.00 | 3450  | 310.00 | 357  |
| 58.00 | 513    | 139.00 | 388   | 219.00 | 273   | 313.00 | 197  |
| 59.00 | 176    | 140.00 | 918   | 221.00 | 27416 | 314.00 | 1184 |
| 60.00 | 145    | 141.00 | 9806  | 223.00 | 6323  | 315.00 | 2697 |
| 61.00 | 2241   | 142.00 | 3146  | 224.00 | 57136 | 316.00 | 1558 |
| 62.00 | 2404   | 143.00 | 2265  | 225.00 | 14659 | 317.00 | 273  |
| 63.00 | 6899   | 144.00 | 574   | 226.00 | 1524  | 320.00 | 37   |
| 64.00 | 936    | 145.00 | 535   | 227.00 | 22416 | 321.00 | 808  |
| 65.00 | 3387   | 146.00 | 1770  | 228.00 | 3128  | 322.00 | 400  |
| 66.00 | 223    | 147.00 | 4948  | 229.00 | 4750  | 323.00 | 8415 |
| 67.00 | 249    | 148.00 | 10772 | 230.00 | 676   | 324.00 | 1535 |
| 68.00 | 3025   | 149.00 | 2221  | 231.00 | 2189  | 325.00 | 143  |
| 69.00 | 167744 | 150.00 | 626   | 232.00 | 369   | 326.00 | 173  |
| 70.00 | 870    | 151.00 | 1327  | 233.00 | 426   | 327.00 | 1533 |
| 71.00 | 78     | 152.00 | 868   | 234.00 | 1492  | 328.00 | 841  |
| 73.00 | 1185   | 153.00 | 3137  | 235.00 | 1670  | 329.00 | 74   |
| 74.00 | 15995  | 154.00 | 2280  | 236.00 | 1068  | 332.00 | 596  |
| 75.00 | 26000  | 155.00 | 5456  | 237.00 | 1980  | 333.00 | 795  |
| 76.00 | 8946   | 156.00 | 8045  | 238.00 | 258   | 334.00 | 4950 |
| 77.00 | 179392 | 157.00 | 1687  | 239.00 | 928   | 335.00 | 1172 |
| 78.00 | 12092  | 158.00 | 1846  | 240.00 | 700   | 336.00 | 84   |
| 79.00 | 11544  | 159.00 | 1347  | 241.00 | 1337  | 339.00 | 116  |
| 80.00 | 8989   | 160.00 | 2888  | 242.00 | 2963  | 340.00 | 124  |
| 81.00 | 12762  | 161.00 | 4541  | 243.00 | 3439  | 341.00 | 867  |
| 82.00 | 3199   | 162.00 | 1356  | 244.00 | 46768 | 342.00 | 234  |
| 83.00 | 3002   | 163.00 | 314   | 245.00 | 6276  | 346.00 | 1859 |

Date : 26-JAN-2010 11:36

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBNI00107-01|DFTPP|1|SVH11|DFTPP|

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s3a2606.d

Spectrum: Avg. Scans 613-615 ( 8.32), Background Scan 603

Location of Maximum: 198.00

Number of points: 305

| m/z    | Y      | m/z    | Y      | m/z    | Y      | m/z    | Y     |
|--------|--------|--------|--------|--------|--------|--------|-------|
| 84.00  | 315    | 164.00 | 511    | 246.00 | 8379   | 347.00 | 321   |
| 85.00  | 2605   | 165.00 | 3570   | 247.00 | 1608   | 351.00 | 175   |
| 86.00  | 3696   | 166.00 | 2827   | 248.00 | 376    | 352.00 | 2385  |
| 87.00  | 1708   | 167.00 | 19312  | 249.00 | 1562   | 353.00 | 1771  |
| 88.00  | 731    | 168.00 | 8625   | 250.00 | 264    | 354.00 | 2600  |
| 89.00  | 285    | 169.00 | 1666   | 251.00 | 367    | 355.00 | 480   |
| 91.00  | 2991   | 170.00 | 652    | 252.00 | 390    | 359.00 | 171   |
| 92.00  | 3145   | 171.00 | 812    | 253.00 | 813    | 365.00 | 10936 |
| 93.00  | 19728  | 172.00 | 1643   | 255.00 | 217280 | 366.00 | 1708  |
| 94.00  | 1340   | 173.00 | 2245   | 256.00 | 32048  | 367.00 | 81    |
| 95.00  | 344    | 174.00 | 3997   | 257.00 | 2478   | 370.00 | 218   |
| 96.00  | 818    | 175.00 | 7607   | 258.00 | 11905  | 371.00 | 622   |
| 98.00  | 15030  | 176.00 | 2577   | 259.00 | 1862   | 372.00 | 4047  |
| 99.00  | 11773  | 177.00 | 3740   | 260.00 | 337    | 373.00 | 1070  |
| 100.00 | 1079   | 178.00 | 1266   | 261.00 | 367    | 374.00 | 72    |
| 101.00 | 7352   | 179.00 | 14593  | 263.00 | 23     | 377.00 | 114   |
| 102.00 | 373    | 180.00 | 9827   | 264.00 | 461    | 383.00 | 1135  |
| 103.00 | 2598   | 181.00 | 4566   | 265.00 | 4820   | 384.00 | 281   |
| 104.00 | 4675   | 182.00 | 704    | 266.00 | 768    | 385.00 | 35    |
| 105.00 | 4169   | 183.00 | 472    | 268.00 | 153    | 390.00 | 492   |
| 106.00 | 1468   | 184.00 | 1180   | 270.00 | 295    | 391.00 | 385   |
| 107.00 | 54696  | 185.00 | 7029   | 271.00 | 411    | 392.00 | 288   |
| 108.00 | 8921   | 186.00 | 54440  | 272.00 | 607    | 401.00 | 249   |
| 109.00 | 1717   | 187.00 | 15228  | 273.00 | 6929   | 402.00 | 1535  |
| 110.00 | 103248 | 188.00 | 1567   | 274.00 | 17784  | 403.00 | 2365  |
| 111.00 | 15383  | 189.00 | 3474   | 275.00 | 101152 | 404.00 | 761   |
| 112.00 | 1918   | 190.00 | 565    | 276.00 | 13735  | 405.00 | 71    |
| 113.00 | 590    | 191.00 | 1565   | 277.00 | 7645   | 415.00 | 76    |
| 114.00 | 82     | 192.00 | 4521   | 278.00 | 1156   | 421.00 | 2205  |
| 115.00 | 252    | 193.00 | 5200   | 279.00 | 265    | 422.00 | 2293  |
| 116.00 | 3296   | 194.00 | 1138   | 282.00 | 211    | 423.00 | 17768 |
| 117.00 | 40688  | 195.00 | 689    | 283.00 | 861    | 424.00 | 3553  |
| 118.00 | 2992   | 196.00 | 13521  | 284.00 | 581    | 425.00 | 391   |
| 119.00 | 408    | 198.00 | 418560 | 285.00 | 1302   | 438.00 | 41    |
| 120.00 | 730    | 199.00 | 28024  | 286.00 | 226    | 441.00 | 58912 |

Data File: /chem/MSD3.i/s012610a.b/s3a2606.d

Page 5

Date : 26-JAN-2010 11:36

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBNI00107-01IDFTPP11ISVHI1IDFTPP1

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s3a2606.d

Spectrum: Avg. Scans 613-615 ( 8.32), Background Scan 603

Location of Maximum: 198.00

Number of points: 305

| m/z    | Y      | m/z    | Y      | m/z    | Y     | m/z    | Y      |
|--------|--------|--------|--------|--------|-------|--------|--------|
| 121.00 | 272    | 200.00 | 2176   | 289.00 | 322   | 442.00 | 400896 |
| 122.00 | 3676   | 201.00 | 2189   | 290.00 | 275   | 443.00 | 77648  |
| 123.00 | 5759   | 203.00 | 2739   | 291.00 | 165   | 444.00 | 7035   |
| 124.00 | 2553   | 204.00 | 14253  | 292.00 | 358   | 445.00 | 421    |
| 125.00 | 2313   | 205.00 | 24720  | 293.00 | 1686  |        |        |
| 127.00 | 202112 | 206.00 | 104504 | 294.00 | 419   |        |        |
| 128.00 | 15498  | 207.00 | 13708  | 296.00 | 25328 |        |        |

Date : 27-JAN-2010 08:57

Client ID: DFTPP

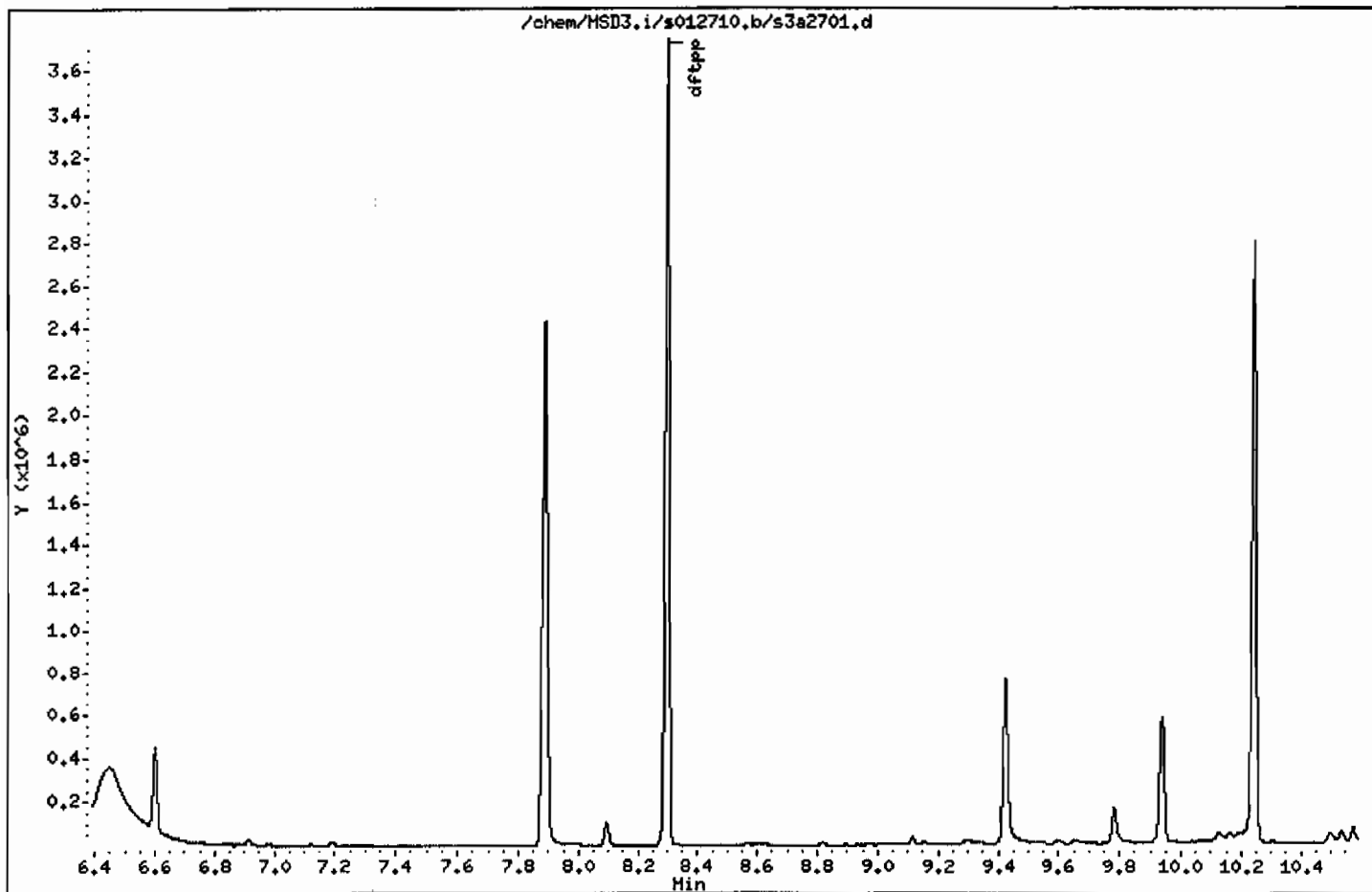
Instrument: MSD3.i

Sample Info: IWBNI00107-01|DFTPP|1|SVMI1|DFTPP|

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20



Date : 27-JAN-2010 08:57

Client ID: DFTPP

Instrument: MSD3.i

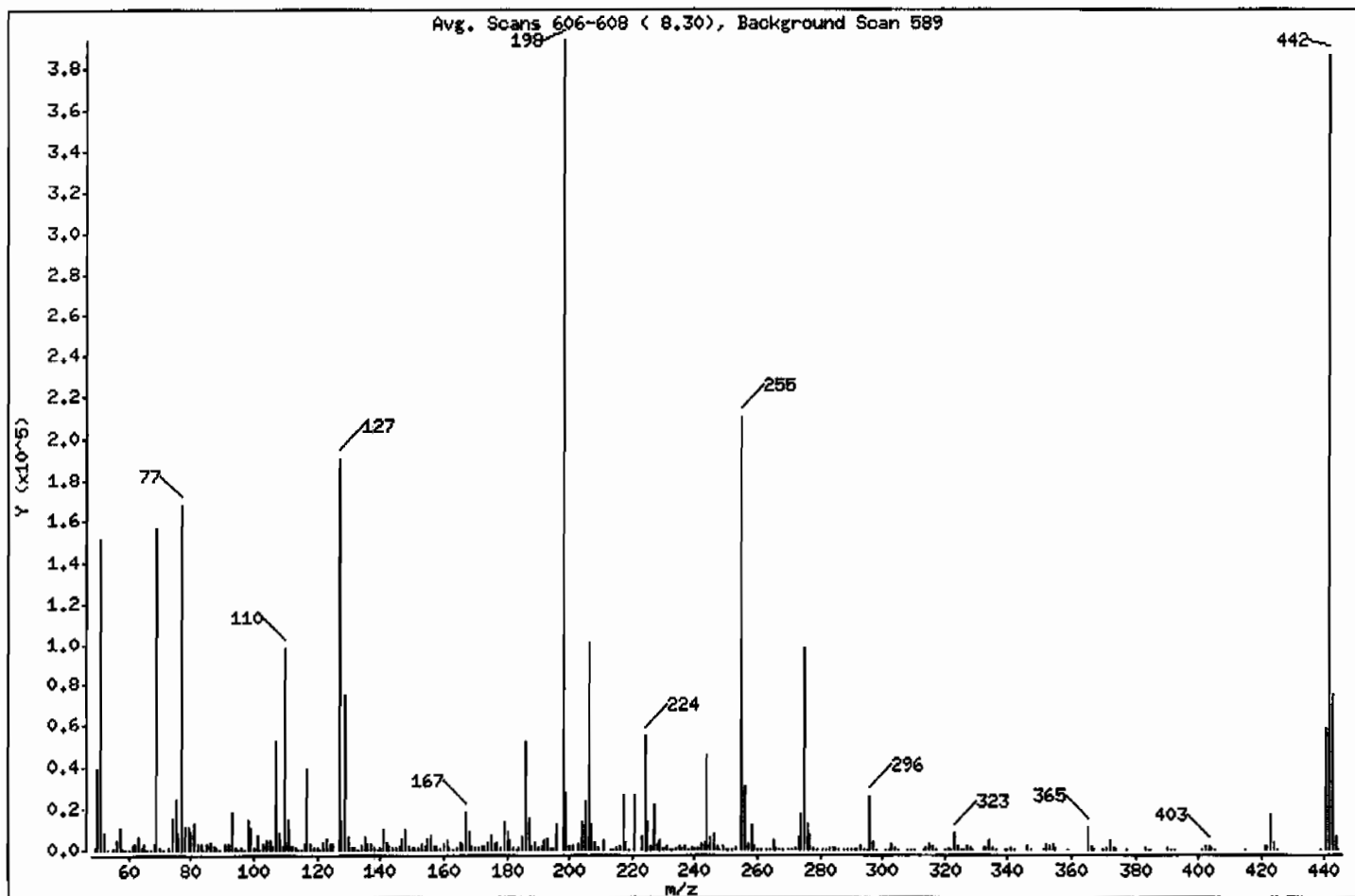
Sample Info: WBN100107-01|DFTPP|1|SVH|1|DFTPP|

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

1 dftpp



| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 198 | Base Peak, 100% relative abundance | 100.00               |
| 51  | 30.00 - 60.00% of mass 198         | 38.59                |
| 68  | Less than 2.00% of mass 69         | 0.73 ( 1.84)         |
| 69  | Mass 69 relative abundance         | 39.92                |
| 70  | Less than 2.00% of mass 69         | 0.21 ( 0.52)         |
| 127 | 40.00 - 60.00% of mass 198         | 48.68                |
| 197 | Less than 1.00% of mass 198        | 0.00                 |
| 199 | 5.00 - 9.00% of mass 198           | 6.87                 |
| 275 | 10.00 - 30.00% of mass 198         | 24.94                |
| 365 | Greater than 1.00% of mass 198     | 2.72                 |
| 441 | Present, but less than mass 443    | 14.73                |
| 442 | Greater than 40.00% of mass 198    | 98.17                |
| 443 | 17.00 - 23.00% of mass 442         | 18.97 ( 19.32)       |



Date : 27-JAN-2010 08:57

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBH100107-01IDFTPP11SVH11IDFTPP1

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s3a2701.d

Spectrum: Avg. Scans 606-608 ( 8.30), Background Scan 589

Location of Maximum: 198.00

Number of points: 307

| m/z   | Y      | m/z    | Y     | m/z    | Y     | m/z    | Y     |
|-------|--------|--------|-------|--------|-------|--------|-------|
| 49.00 | 1011   | 130.00 | 6291  | 209.00 | 1084  | 295.00 | 422   |
| 50.00 | 39392  | 131.00 | 1291  | 211.00 | 4098  | 296.00 | 25112 |
| 51.00 | 151808 | 132.00 | 725   | 213.00 | 249   | 297.00 | 3450  |
| 52.00 | 7967   | 133.00 | 248   | 214.00 | 138   | 298.00 | 262   |
| 53.00 | 351    | 134.00 | 2101  | 215.00 | 1066  | 301.00 | 325   |
| 55.00 | 819    | 135.00 | 6202  | 216.00 | 2139  | 302.00 | 442   |
| 56.00 | 4849   | 136.00 | 2452  | 217.00 | 26048 | 303.00 | 2783  |
| 57.00 | 11257  | 137.00 | 3072  | 218.00 | 3274  | 304.00 | 777   |
| 58.00 | 517    | 138.00 | 689   | 219.00 | 306   | 305.00 | 110   |
| 59.00 | 165    | 139.00 | 434   | 221.00 | 25856 | 308.00 | 302   |
| 60.00 | 68     | 140.00 | 931   | 223.00 | 5914  | 309.00 | 196   |
| 61.00 | 2066   | 141.00 | 9522  | 224.00 | 54096 | 310.00 | 324   |
| 62.00 | 2378   | 142.00 | 3189  | 225.00 | 13970 | 313.00 | 237   |
| 63.00 | 6289   | 143.00 | 2028  | 226.00 | 1533  | 314.00 | 1173  |
| 64.00 | 838    | 144.00 | 541   | 227.00 | 21536 | 315.00 | 2569  |
| 65.00 | 3157   | 145.00 | 538   | 228.00 | 2987  | 316.00 | 1508  |
| 66.00 | 200    | 146.00 | 1663  | 229.00 | 4585  | 317.00 | 263   |
| 67.00 | 190    | 147.00 | 5090  | 230.00 | 616   | 320.00 | 71    |
| 68.00 | 2891   | 148.00 | 10292 | 231.00 | 2070  | 321.00 | 761   |
| 69.00 | 156992 | 149.00 | 2132  | 232.00 | 342   | 322.00 | 441   |
| 70.00 | 818    | 150.00 | 611   | 233.00 | 436   | 323.00 | 7982  |
| 71.00 | 146    | 151.00 | 1150  | 234.00 | 1346  | 324.00 | 1456  |
| 73.00 | 1095   | 152.00 | 832   | 235.00 | 1618  | 325.00 | 126   |
| 74.00 | 15336  | 153.00 | 3028  | 236.00 | 1003  | 326.00 | 183   |
| 75.00 | 24368  | 154.00 | 2240  | 237.00 | 1818  | 327.00 | 1610  |
| 76.00 | 8294   | 155.00 | 5263  | 238.00 | 253   | 328.00 | 748   |
| 77.00 | 167552 | 156.00 | 7590  | 239.00 | 915   | 329.00 | 144   |
| 78.00 | 11281  | 157.00 | 1669  | 240.00 | 733   | 332.00 | 546   |
| 79.00 | 11142  | 158.00 | 1861  | 241.00 | 1282  | 333.00 | 752   |
| 80.00 | 8866   | 159.00 | 1299  | 242.00 | 2908  | 334.00 | 4760  |
| 81.00 | 12371  | 160.00 | 2920  | 243.00 | 3247  | 335.00 | 1235  |
| 82.00 | 3019   | 161.00 | 4259  | 244.00 | 44880 | 336.00 | 121   |
| 83.00 | 2848   | 162.00 | 1246  | 245.00 | 6115  | 339.00 | 121   |
| 84.00 | 259    | 163.00 | 351   | 246.00 | 8083  | 340.00 | 121   |
| 85.00 | 2326   | 164.00 | 515   | 247.00 | 1521  | 341.00 | 864   |

Date : 27-JAN-2010 08:57

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBNI00107-01IDFTPP11SVN11IDFTPP1

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s3a2701.d

Spectrum: Avg. Scans 606-608 ( 8.30), Background Scan 589

Location of Maximum: 198.00

Number of points: 307

| m/z    | Y     | m/z    | Y      | m/z    | Y      | m/z    | Y     |
|--------|-------|--------|--------|--------|--------|--------|-------|
| -----  |       |        |        |        |        |        |       |
| 86.00  | 3490  | 165.00 | 3516   | 248.00 | 353    | 342.00 | 223   |
| 87.00  | 1579  | 166.00 | 2777   | 249.00 | 1546   | 346.00 | 1861  |
| 88.00  | 608   | 167.00 | 18176  | 250.00 | 308    | 347.00 | 305   |
| 89.00  | 283   | 168.00 | 8695   | 251.00 | 351    | 351.00 | 154   |
| 91.00  | 2661  | 169.00 | 1542   | 252.00 | 397    | 352.00 | 2330  |
| -----  |       |        |        |        |        |        |       |
| 92.00  | 3096  | 170.00 | 580    | 253.00 | 880    | 353.00 | 1698  |
| 93.00  | 18520 | 171.00 | 828    | 255.00 | 210048 | 354.00 | 2485  |
| 94.00  | 1314  | 172.00 | 1667   | 256.00 | 31272  | 355.00 | 455   |
| 95.00  | 296   | 173.00 | 2220   | 257.00 | 2318   | 359.00 | 137   |
| 96.00  | 936   | 174.00 | 3863   | 258.00 | 11425  | 365.00 | 10690 |
| -----  |       |        |        |        |        |        |       |
| 97.00  | 288   | 175.00 | 7331   | 259.00 | 1796   | 366.00 | 1596  |
| 98.00  | 14368 | 176.00 | 2311   | 260.00 | 344    | 367.00 | 132   |
| 99.00  | 11308 | 177.00 | 3408   | 261.00 | 314    | 370.00 | 186   |
| 100.00 | 1009  | 178.00 | 1156   | 263.00 | 37     | 371.00 | 594   |
| 101.00 | 6967  | 179.00 | 13654  | 264.00 | 387    | 372.00 | 4099  |
| -----  |       |        |        |        |        |        |       |
| 102.00 | 409   | 180.00 | 9323   | 265.00 | 4550   | 373.00 | 1027  |
| 103.00 | 2466  | 181.00 | 4446   | 266.00 | 654    | 374.00 | 79    |
| 104.00 | 4424  | 182.00 | 669    | 267.00 | 108    | 377.00 | 69    |
| 105.00 | 4164  | 183.00 | 384    | 268.00 | 173    | 383.00 | 1033  |
| 106.00 | 1402  | 184.00 | 1106   | 270.00 | 266    | 384.00 | 295   |
| -----  |       |        |        |        |        |        |       |
| 107.00 | 52024 | 185.00 | 6694   | 271.00 | 424    | 385.00 | 79    |
| 108.00 | 8296  | 186.00 | 51664  | 272.00 | 575    | 390.00 | 490   |
| 109.00 | 1735  | 187.00 | 14975  | 273.00 | 6543   | 391.00 | 422   |
| 110.00 | 98120 | 188.00 | 1418   | 274.00 | 17248  | 392.00 | 244   |
| 111.00 | 14871 | 189.00 | 3269   | 275.00 | 98104  | 401.00 | 214   |
| -----  |       |        |        |        |        |        |       |
| 112.00 | 1842  | 190.00 | 587    | 276.00 | 13109  | 402.00 | 1476  |
| 113.00 | 587   | 191.00 | 1617   | 277.00 | 7483   | 403.00 | 2181  |
| 114.00 | 147   | 192.00 | 4477   | 278.00 | 1336   | 404.00 | 752   |
| 115.00 | 270   | 193.00 | 5033   | 279.00 | 255    | 405.00 | 34    |
| 116.00 | 3034  | 194.00 | 1098   | 281.00 | 124    | 415.00 | 121   |
| -----  |       |        |        |        |        |        |       |
| 117.00 | 38592 | 195.00 | 684    | 282.00 | 224    | 421.00 | 2209  |
| 118.00 | 2886  | 196.00 | 12957  | 283.00 | 774    | 422.00 | 2228  |
| 119.00 | 454   | 198.00 | 393408 | 284.00 | 607    | 423.00 | 17216 |
| 120.00 | 645   | 199.00 | 27024  | 285.00 | 1305   | 424.00 | 3425  |
| 121.00 | 281   | 200.00 | 2050   | 286.00 | 200    | 425.00 | 332   |

Data File: /chem/MSD3.i/s012810a,b/s3a2819.d

Page 1

Date : 28-JAN-2010 18:28

Client ID: DFTPP

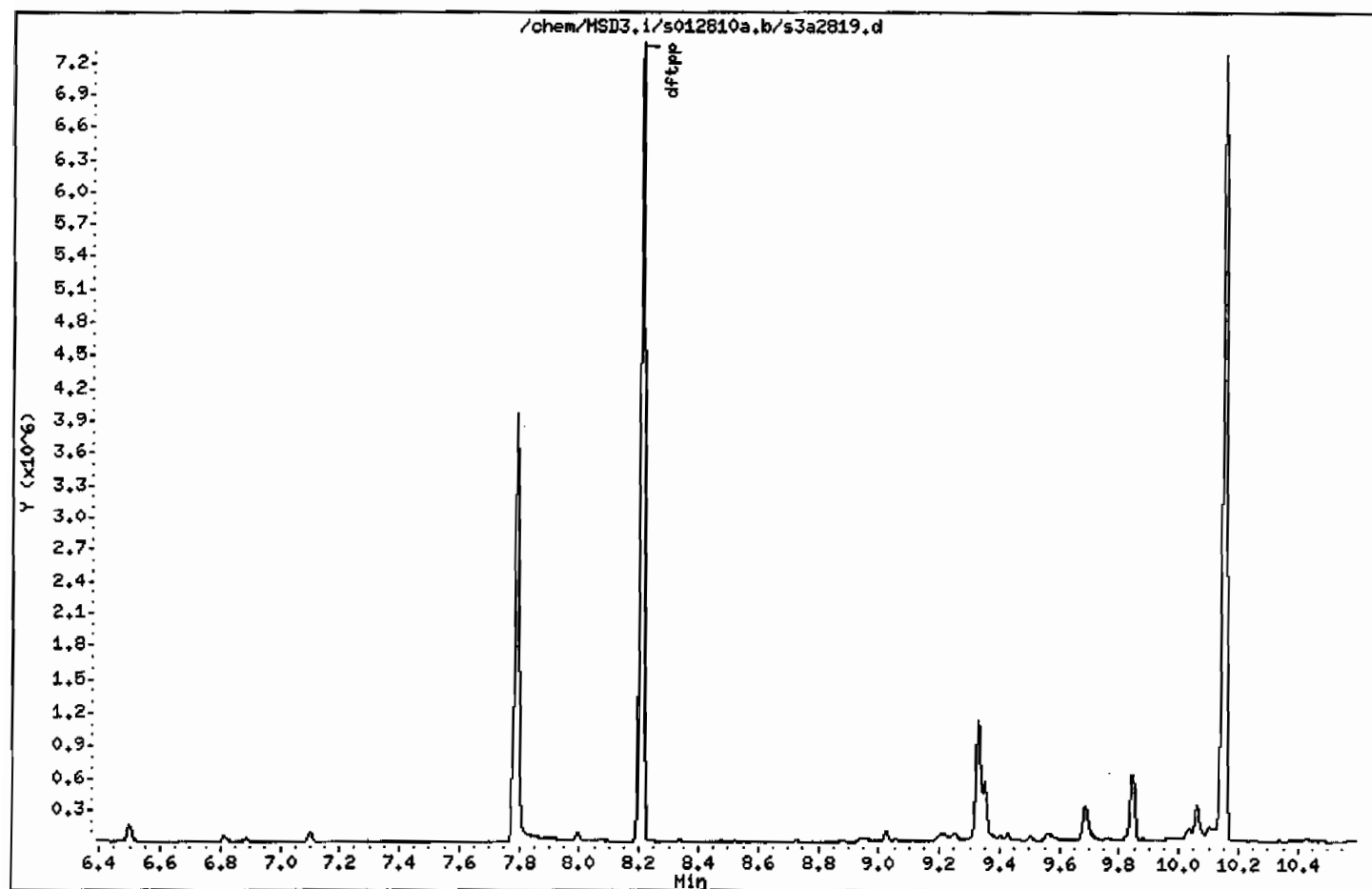
Instrument: MSD3.i

Sample Info: IWBH100107-01IDFTPP11SVH11IDFTPP1

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20



Date : 28-JAN-2010 18:28

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBNI00107-01IDFTPP11SVMI1IDFTPP1

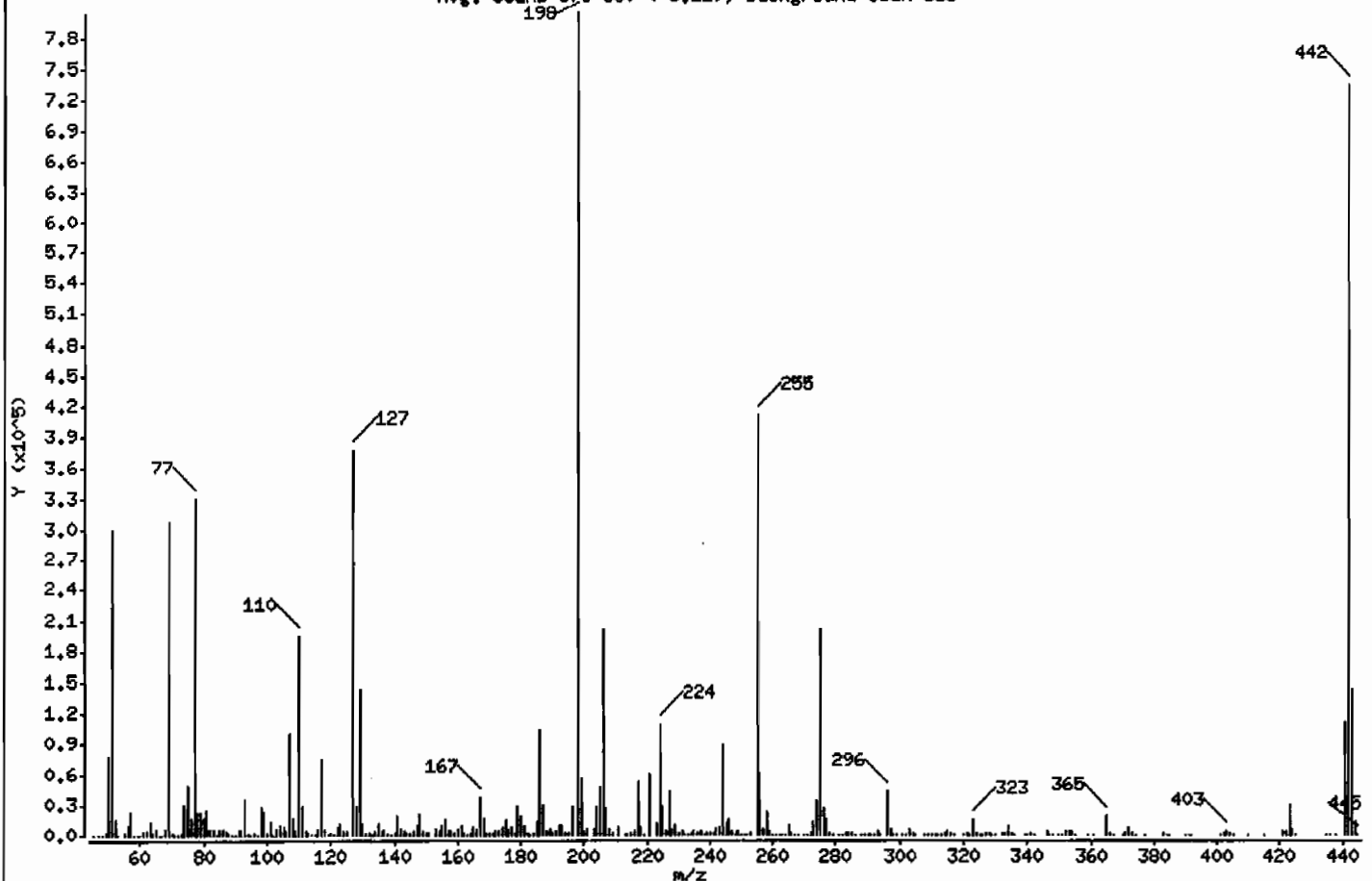
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

1 dftpp

Avg. Scans 578-580 ( 8.21), Background Scan 568



| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 198 | Base Peak, 100% relative abundance | 100.00               |
| 51  | 30.00 - 60.00% of mass 198         | 37.41                |
| 68  | Less than 2.00% of mass 69         | 0.72 ( 1.88)         |
| 69  | Mass 69 relative abundance         | 38.30                |
| 70  | Less than 2.00% of mass 69         | 0.20 ( 0.51)         |
| 127 | 40.00 - 60.00% of mass 198         | 47.06                |
| 197 | Less than 1.00% of mass 198        | 0.00                 |
| 199 | 5.00 - 9.00% of mass 198           | 6.86                 |
| 275 | 10.00 - 30.00% of mass 198         | 24.84                |
| 365 | Greater than 1.00% of mass 198     | 2.26                 |
| 441 | Present, but less than mass 443    | 13.76                |
| 442 | Greater than 40.00% of mass 198    | 91.30                |
| 443 | 17.00 - 23.00% of mass 442         | 17.75 ( 19.44)       |

Date : 28-JAN-2010 18:28

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: INBN100107-01IDFTPP11SVH11IDFTPP1

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s3a2819.d

Spectrum: Avg. Scans 578-580 ( 8.21), Background Scan 568

Location of Maximum: 198.00

Number of points: 321

| m/z   | Y      | m/z    | Y      | m/z    | Y      | m/z    | Y     |
|-------|--------|--------|--------|--------|--------|--------|-------|
| 45.00 | 354    | 129.00 | 143296 | 215.00 | 2116   | 304.00 | 1467  |
| 47.00 | 15     | 130.00 | 12008  | 216.00 | 4320   | 305.00 | 208   |
| 48.00 | 221    | 131.00 | 2172   | 217.00 | 51440  | 308.00 | 631   |
| 49.00 | 2123   | 132.00 | 1257   | 218.00 | 6810   | 309.00 | 361   |
| 50.00 | 76984  | 133.00 | 554    | 219.00 | 665    | 310.00 | 573   |
| 51.00 | 300544 | 134.00 | 3938   | 221.00 | 59016  | 311.00 | 129   |
| 52.00 | 15388  | 135.00 | 11860  | 223.00 | 11784  | 312.00 | 144   |
| 53.00 | 663    | 136.00 | 4570   | 224.00 | 109984 | 313.00 | 367   |
| 55.00 | 1333   | 137.00 | 5512   | 225.00 | 28360  | 314.00 | 2154  |
| 56.00 | 9654   | 138.00 | 1183   | 226.00 | 3100   | 315.00 | 4597  |
| 57.00 | 21672  | 139.00 | 740    | 227.00 | 41688  | 316.00 | 2636  |
| 58.00 | 925    | 140.00 | 1832   | 228.00 | 5956   | 317.00 | 453   |
| 59.00 | 270    | 141.00 | 18280  | 229.00 | 9072   | 320.00 | 180   |
| 60.00 | 213    | 142.00 | 5849   | 230.00 | 1360   | 321.00 | 1358  |
| 61.00 | 3800   | 143.00 | 4046   | 231.00 | 4186   | 322.00 | 912   |
| 62.00 | 4460   | 144.00 | 1097   | 232.00 | 657    | 323.00 | 14624 |
| 63.00 | 12137  | 145.00 | 1015   | 233.00 | 773    | 324.00 | 2557  |
| 64.00 | 1758   | 146.00 | 3235   | 234.00 | 2652   | 325.00 | 233   |
| 65.00 | 5925   | 147.00 | 8889   | 235.00 | 3056   | 326.00 | 284   |
| 66.00 | 494    | 148.00 | 19864  | 236.00 | 2093   | 327.00 | 2510  |
| 67.00 | 318    | 149.00 | 4192   | 237.00 | 3324   | 328.00 | 1221  |
| 68.00 | 5777   | 150.00 | 1074   | 238.00 | 600    | 329.00 | 215   |
| 69.00 | 307648 | 151.00 | 2598   | 239.00 | 1656   | 330.00 | 34    |
| 70.00 | 1570   | 153.00 | 5861   | 240.00 | 1242   | 332.00 | 990   |
| 71.00 | 156    | 154.00 | 4553   | 241.00 | 2454   | 333.00 | 1295  |
| 72.00 | 145    | 155.00 | 9837   | 242.00 | 5792   | 334.00 | 9372  |
| 73.00 | 2243   | 156.00 | 14774  | 243.00 | 6547   | 335.00 | 2354  |
| 74.00 | 29576  | 157.00 | 3245   | 244.00 | 89648  | 336.00 | 251   |
| 75.00 | 47920  | 158.00 | 3493   | 245.00 | 11680  | 339.00 | 214   |
| 76.00 | 16752  | 159.00 | 2465   | 246.00 | 15256  | 340.00 | 195   |
| 77.00 | 329600 | 160.00 | 5555   | 247.00 | 3154   | 341.00 | 1745  |
| 78.00 | 22264  | 161.00 | 8507   | 248.00 | 828    | 342.00 | 460   |
| 79.00 | 21608  | 162.00 | 2488   | 249.00 | 3296   | 346.00 | 3135  |
| 80.00 | 16560  | 163.00 | 757    | 250.00 | 512    | 347.00 | 499   |
| 81.00 | 23224  | 164.00 | 1024   | 251.00 | 689    | 348.00 | 34    |

Date : 28-JAN-2010 18:28

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBNI00107-01IDFTPP11SVMI1IDFTPP1

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s3a2819.d

Spectrum: Avg. Scans 578-580 ( 8.21), Background Scan 568

Location of Maximum: 198.00

Number of points: 321

| m/z    | Y      | m/z    | Y      | m/z    | Y      | m/z    | Y     |
|--------|--------|--------|--------|--------|--------|--------|-------|
| 82.00  | 5946   | 165.00 | 6485   | 252.00 | 745    | 350.00 | 127   |
| 83.00  | 5546   | 166.00 | 5473   | 253.00 | 1629   | 351.00 | 283   |
| 84.00  | 524    | 167.00 | 36224  | 255.00 | 410496 | 352.00 | 4065  |
| 85.00  | 4637   | 168.00 | 16816  | 256.00 | 60632  | 353.00 | 3027  |
| 86.00  | 6423   | 169.00 | 2740   | 257.00 | 4739   | 354.00 | 4230  |
| 87.00  | 3241   | 170.00 | 1336   | 258.00 | 21632  | 355.00 | 815   |
| 88.00  | 1234   | 171.00 | 1690   | 259.00 | 3314   | 359.00 | 343   |
| 89.00  | 515    | 172.00 | 3301   | 260.00 | 629    | 361.00 | 124   |
| 90.00  | 54     | 173.00 | 4197   | 261.00 | 691    | 365.00 | 18136 |
| 91.00  | 5364   | 174.00 | 7487   | 262.00 | 112    | 366.00 | 2746  |
| 92.00  | 6117   | 175.00 | 14464  | 263.00 | 265    | 367.00 | 190   |
| 93.00  | 35760  | 176.00 | 4771   | 264.00 | 639    | 370.00 | 391   |
| 94.00  | 2496   | 177.00 | 6898   | 265.00 | 8559   | 371.00 | 1061  |
| 95.00  | 433    | 178.00 | 2364   | 266.00 | 1402   | 372.00 | 6892  |
| 96.00  | 1607   | 179.00 | 27488  | 267.00 | 163    | 373.00 | 1625  |
| 97.00  | 424    | 180.00 | 18456  | 268.00 | 111    | 374.00 | 208   |
| 98.00  | 27816  | 181.00 | 8892   | 270.00 | 434    | 377.00 | 165   |
| 99.00  | 21672  | 182.00 | 1413   | 271.00 | 708    | 383.00 | 1836  |
| 100.00 | 2040   | 183.00 | 907    | 272.00 | 1202   | 384.00 | 576   |
| 101.00 | 13571  | 184.00 | 2287   | 273.00 | 12843  | 385.00 | 142   |
| 102.00 | 864    | 185.00 | 13433  | 274.00 | 32904  | 390.00 | 910   |
| 103.00 | 4688   | 186.00 | 103472 | 275.00 | 199552 | 391.00 | 665   |
| 104.00 | 8447   | 187.00 | 29200  | 276.00 | 26696  | 392.00 | 539   |
| 105.00 | 8083   | 188.00 | 2972   | 277.00 | 14077  | 401.00 | 365   |
| 106.00 | 2858   | 189.00 | 6055   | 278.00 | 2415   | 402.00 | 2533  |
| 107.00 | 99800  | 190.00 | 1082   | 279.00 | 502    | 403.00 | 3696  |
| 108.00 | 16303  | 191.00 | 3057   | 281.00 | 203    | 404.00 | 1210  |
| 109.00 | 3406   | 192.00 | 8715   | 282.00 | 391    | 405.00 | 167   |
| 110.00 | 194432 | 193.00 | 9507   | 283.00 | 1588   | 410.00 | 76    |
| 111.00 | 28632  | 194.00 | 2086   | 284.00 | 1025   | 415.00 | 161   |
| 112.00 | 3308   | 195.00 | 1520   | 285.00 | 2387   | 421.00 | 3607  |
| 113.00 | 1070   | 196.00 | 28112  | 286.00 | 480    | 422.00 | 3805  |
| 114.00 | 320    | 198.00 | 803328 | 288.00 | 188    | 423.00 | 30376 |
| 115.00 | 379    | 199.00 | 55088  | 289.00 | 614    | 424.00 | 5831  |
| 116.00 | 6021   | 200.00 | 4183   | 290.00 | 505    | 425.00 | 547   |

Date : 28-JAN-2010 18:28

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBH100107-01|DFTPP|1|SVH|1|DFTPP|

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s3a2819.d

Spectrum: Avg. Scans 578-580 ( 8.21), Background Scan 568

Location of Maximum: 198.00

Number of points: 321

| m/z    | Y      | m/z    | Y      | m/z    | Y     | m/z    | Y      |
|--------|--------|--------|--------|--------|-------|--------|--------|
| 117.00 | 74512  | 201.00 | 4810   | 291.00 | 344   | 435.00 | 185    |
| 118.00 | 5344   | 203.00 | 5053   | 292.00 | 658   | 436.00 | 188    |
| 119.00 | 821    | 204.00 | 27536  | 293.00 | 3419  | 438.00 | 123    |
| 120.00 | 1437   | 205.00 | 46760  | 294.00 | 822   | 441.00 | 110512 |
| 121.00 | 492    | 206.00 | 199936 | 296.00 | 43168 | 442.00 | 733440 |
| 122.00 | 6868   | 207.00 | 26120  | 297.00 | 6048  | 443.00 | 142592 |
| 123.00 | 10748  | 208.00 | 6220   | 298.00 | 452   | 444.00 | 12502  |
| 124.00 | 4572   | 209.00 | 2032   | 299.00 | 78    | 445.00 | 803    |
| 125.00 | 4404   | 211.00 | 8162   | 301.00 | 605   |        |        |
| 127.00 | 378048 | 213.00 | 529    | 302.00 | 801   |        |        |
| 128.00 | 28520  | 214.00 | 250    | 303.00 | 5159  |        |        |

Date : 29-JAN-2010 14:07

Client ID: DFTPP

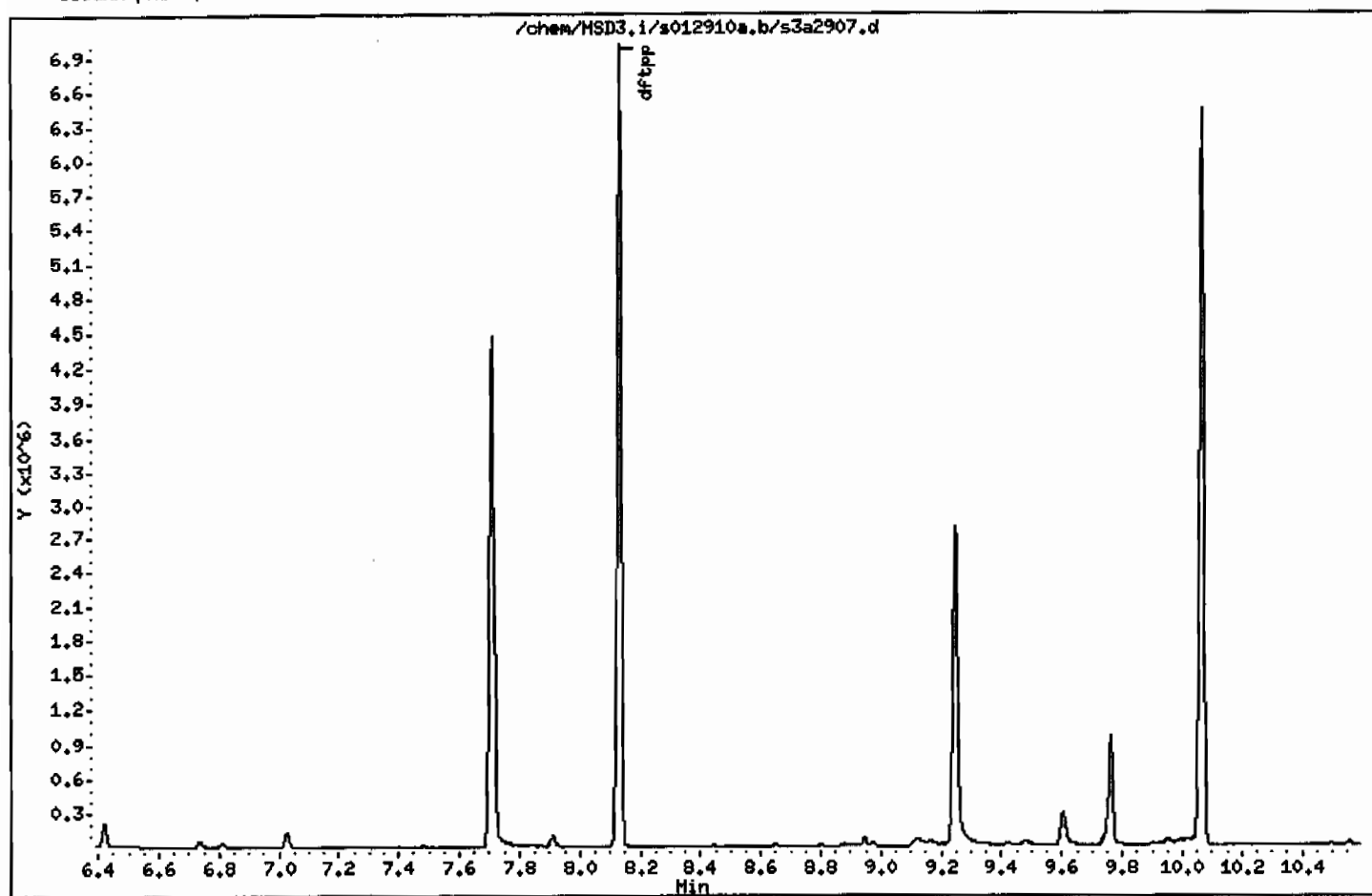
Instrument: MSD3.i

Sample Info: 1WBN100107-01|DFTPP|1|SVH11|DFTPP|

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20





Date : 29-JAN-2010 14:07

Client ID: DFTPP

Instrument: HSD3.i

Sample Info: IWBNI00107-01IDFTPP11ISVMI1IDFTPP1

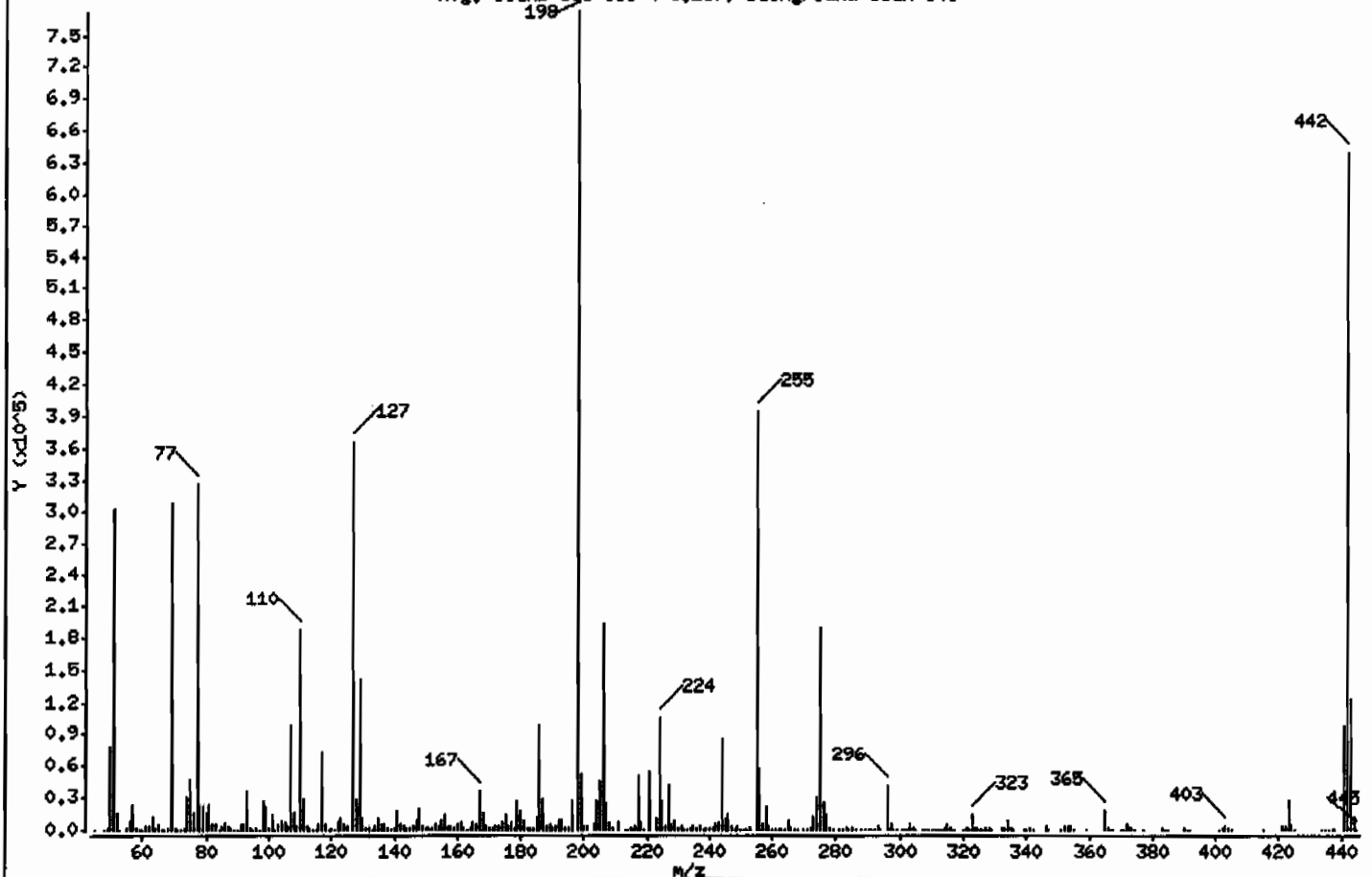
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

1 dftpp

Avg. Scans 553-555 ( 8.13), Background Scan 543



| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 198 | Base Peak, 100% relative abundance | 100.00               |
| 51  | 30.00 - 60.00% of mass 198         | 39.26                |
| 68  | Less than 2.00% of mass 69         | 0.23 ( 0.57)         |
| 69  | Mass 69 relative abundance         | 39.84                |
| 70  | Less than 2.00% of mass 69         | 0.20 ( 0.51)         |
| 127 | 40.00 - 60.00% of mass 198         | 47.20                |
| 197 | Less than 1.00% of mass 198        | 0.00                 |
| 199 | 5.00 - 9.00% of mass 198           | 6.73                 |
| 275 | 10.00 - 30.00% of mass 198         | 24.37                |
| 365 | Greater than 1.00% of mass 198     | 2.28                 |
| 441 | Present, but less than mass 443    | 12.68                |
| 442 | Greater than 40.00% of mass 198    | 82.68                |
| 443 | 17.00 - 23.00% of mass 442         | 15.95 ( 19.29)       |

Date : 29-JAN-2010 14:07

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBNI00107-01IDFTPP11ISVH11IDFTPP1

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s3a2907.d

Spectrum: Avg. Scans 553-555 ( 8.13), Background Scan 543

Location of Maximum: 198.00

Number of points: 319

| m/z   | Y      | m/z    | Y      | m/z    | Y      | m/z    | Y     |
|-------|--------|--------|--------|--------|--------|--------|-------|
| 45.00 | 226    | 129.00 | 139968 | 213.00 | 534    | 301.00 | 520   |
| 48.00 | 205    | 130.00 | 11508  | 214.00 | 204    | 302.00 | 781   |
| 49.00 | 2072   | 131.00 | 2395   | 215.00 | 1940   | 303.00 | 5222  |
| 50.00 | 77512  | 132.00 | 1297   | 216.00 | 4140   | 304.00 | 1460  |
| 51.00 | 303296 | 133.00 | 576    | 217.00 | 49304  | 305.00 | 174   |
| 52.00 | 15565  | 134.00 | 4014   | 218.00 | 6521   | 307.00 | 34    |
| 53.00 | 704    | 135.00 | 11226  | 219.00 | 616    | 308.00 | 672   |
| 55.00 | 1520   | 136.00 | 4452   | 221.00 | 54072  | 309.00 | 380   |
| 56.00 | 9408   | 137.00 | 5848   | 223.00 | 11427  | 310.00 | 578   |
| 57.00 | 22456  | 138.00 | 1291   | 224.00 | 104512 | 311.00 | 132   |
| 58.00 | 1016   | 139.00 | 817    | 225.00 | 27264  | 312.00 | 138   |
| 59.00 | 256    | 140.00 | 1658   | 226.00 | 3049   | 313.00 | 406   |
| 60.00 | 222    | 141.00 | 17272  | 227.00 | 40352  | 314.00 | 2015  |
| 61.00 | 3914   | 142.00 | 5928   | 228.00 | 5540   | 315.00 | 4579  |
| 62.00 | 4319   | 143.00 | 4134   | 229.00 | 8688   | 316.00 | 2531  |
| 63.00 | 12345  | 144.00 | 1046   | 230.00 | 1366   | 317.00 | 458   |
| 64.00 | 1747   | 145.00 | 1017   | 231.00 | 3868   | 320.00 | 159   |
| 65.00 | 5875   | 146.00 | 3226   | 232.00 | 638    | 321.00 | 1390  |
| 66.00 | 457    | 147.00 | 9089   | 233.00 | 751    | 322.00 | 779   |
| 67.00 | 372    | 148.00 | 19536  | 234.00 | 2483   | 323.00 | 13813 |
| 68.00 | 1749   | 149.00 | 4151   | 235.00 | 2838   | 324.00 | 2358  |
| 69.00 | 307776 | 150.00 | 1134   | 236.00 | 1937   | 325.00 | 252   |
| 70.00 | 1560   | 151.00 | 2273   | 237.00 | 3258   | 326.00 | 283   |
| 71.00 | 99     | 152.00 | 1703   | 238.00 | 475    | 327.00 | 2566  |
| 72.00 | 88     | 153.00 | 5556   | 239.00 | 1606   | 328.00 | 1197  |
| 73.00 | 2115   | 154.00 | 4436   | 240.00 | 1172   | 329.00 | 223   |
| 74.00 | 29832  | 155.00 | 9681   | 241.00 | 2476   | 332.00 | 969   |
| 75.00 | 46704  | 156.00 | 14264  | 242.00 | 5803   | 333.00 | 1374  |
| 76.00 | 16656  | 157.00 | 2997   | 243.00 | 6325   | 334.00 | 8243  |
| 77.00 | 326336 | 158.00 | 3324   | 244.00 | 85976  | 335.00 | 2178  |
| 78.00 | 22168  | 159.00 | 2663   | 245.00 | 11341  | 336.00 | 253   |
| 79.00 | 21856  | 160.00 | 5565   | 246.00 | 14850  | 339.00 | 169   |
| 80.00 | 16448  | 161.00 | 7984   | 247.00 | 3040   | 340.00 | 191   |
| 81.00 | 23496  | 162.00 | 2403   | 248.00 | 758    | 341.00 | 1616  |
| 82.00 | 5711   | 163.00 | 707    | 249.00 | 2909   | 342.00 | 381   |

Date : 29-JAN-2010 14:07

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBNI00107-01IDFTPP1ISVMI1IDFTPP1

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s3a2907.d

Spectrum: Avg. Scans 553-555 ( 8.13), Background Scan 543

Location of Maximum: 198.00

Number of points: 319

| m/z    | Y      | m/z    | Y      | m/z    | Y      | m/z    | Y     |
|--------|--------|--------|--------|--------|--------|--------|-------|
| 83.00  | 5387   | 164.00 | 1041   | 250.00 | 567    | 346.00 | 3094  |
| 84.00  | 565    | 165.00 | 6647   | 251.00 | 609    | 347.00 | 493   |
| 85.00  | 4279   | 166.00 | 5211   | 252.00 | 706    | 351.00 | 218   |
| 86.00  | 6511   | 167.00 | 34840  | 253.00 | 1591   | 352.00 | 3869  |
| 87.00  | 3061   | 168.00 | 16632  | 255.00 | 392768 | 353.00 | 2747  |
| 88.00  | 1138   | 169.00 | 2891   | 256.00 | 57656  | 354.00 | 3965  |
| 89.00  | 563    | 170.00 | 1266   | 257.00 | 4712   | 355.00 | 684   |
| 90.00  | 40     | 171.00 | 1825   | 258.00 | 21200  | 359.00 | 302   |
| 91.00  | 5419   | 172.00 | 3226   | 259.00 | 3384   | 365.00 | 17600 |
| 92.00  | 6058   | 173.00 | 3971   | 260.00 | 560    | 366.00 | 2406  |
| 93.00  | 36000  | 174.00 | 7431   | 261.00 | 713    | 367.00 | 190   |
| 94.00  | 2530   | 175.00 | 13723  | 262.00 | 76     | 370.00 | 349   |
| 95.00  | 593    | 176.00 | 4441   | 263.00 | 93     | 371.00 | 880   |
| 96.00  | 1603   | 177.00 | 6658   | 264.00 | 743    | 372.00 | 6156  |
| 97.00  | 116    | 178.00 | 2348   | 265.00 | 8172   | 373.00 | 1563  |
| 98.00  | 27232  | 179.00 | 26288  | 266.00 | 1225   | 374.00 | 196   |
| 99.00  | 22152  | 180.00 | 17680  | 267.00 | 1      | 377.00 | 129   |
| 100.00 | 1961   | 181.00 | 8375   | 268.00 | 314    | 383.00 | 1705  |
| 101.00 | 13548  | 182.00 | 1482   | 270.00 | 517    | 384.00 | 399   |
| 102.00 | 695    | 183.00 | 911    | 271.00 | 751    | 385.00 | 137   |
| 103.00 | 4668   | 184.00 | 2162   | 272.00 | 1074   | 390.00 | 896   |
| 104.00 | 8144   | 185.00 | 12680  | 273.00 | 12026  | 391.00 | 569   |
| 105.00 | 7678   | 186.00 | 98720  | 274.00 | 30968  | 392.00 | 436   |
| 106.00 | 2823   | 187.00 | 28376  | 275.00 | 188224 | 401.00 | 306   |
| 107.00 | 98472  | 188.00 | 3020   | 276.00 | 25648  | 402.00 | 2377  |
| 108.00 | 15761  | 189.00 | 5830   | 277.00 | 13830  | 403.00 | 3460  |
| 109.00 | 3513   | 190.00 | 1024   | 278.00 | 2282   | 404.00 | 1249  |
| 110.00 | 187328 | 191.00 | 2864   | 279.00 | 473    | 405.00 | 152   |
| 111.00 | 27968  | 192.00 | 8453   | 281.00 | 150    | 415.00 | 164   |
| 112.00 | 3205   | 193.00 | 9358   | 282.00 | 395    | 421.00 | 3311  |
| 113.00 | 1087   | 194.00 | 2079   | 283.00 | 1434   | 422.00 | 3505  |
| 114.00 | 249    | 195.00 | 1276   | 284.00 | 868    | 423.00 | 27480 |
| 115.00 | 462    | 196.00 | 26960  | 285.00 | 2442   | 424.00 | 5452  |
| 116.00 | 5722   | 198.00 | 772480 | 286.00 | 452    | 425.00 | 543   |
| 117.00 | 72960  | 199.00 | 51960  | 288.00 | 170    | 434.00 | 36    |

Date : 29-JAN-2010 14:07

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBH100107-01IDFTPP11SVH11IDFTPP1

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s3a2907.d

Spectrum: Avg. Scans 553-555 ( 8.13), Background Scan 543

Location of Maximum: 198.00

Number of points: 319

| m/z    | Y      | m/z    | Y      | m/z    | Y     | m/z    | Y      |
|--------|--------|--------|--------|--------|-------|--------|--------|
| 118.00 | 5435   | 200.00 | 3850   | 289.00 | 542   | 435.00 | 106    |
| 119.00 | 779    | 201.00 | 4213   | 290.00 | 461   | 436.00 | 91     |
| 120.00 | 1298   | 203.00 | 4964   | 291.00 | 294   | 437.00 | 212    |
| 121.00 | 816    | 204.00 | 26136  | 292.00 | 642   | 438.00 | 215    |
| 122.00 | 6974   | 205.00 | 45360  | 293.00 | 2983  | 441.00 | 97984  |
| 123.00 | 10549  | 206.00 | 191488 | 294.00 | 798   | 442.00 | 638720 |
| 124.00 | 4652   | 207.00 | 25040  | 296.00 | 41664 | 443.00 | 123200 |
| 125.00 | 4267   | 208.00 | 6260   | 297.00 | 5911  | 444.00 | 11597  |
| 127.00 | 364608 | 209.00 | 2037   | 298.00 | 446   | 445.00 | 778    |
| 128.00 | 27776  | 211.00 | 7792   | 299.00 | 117   |        |        |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1324

Matrix: SOIL

Lab Sample ID: 1202023496

Client Sample: QC for batch 944873

Client: LANL010

Project: QC

Client ID: MB for batch 944873

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 944874

Inst: MSD3.I

Dilution: 1

Run Date: 01/26/2010 13:18

Analyst: JLD1

Inj. Vol: .5 uL

Prep Date: 01/25/2010 21:06

Aliquot: 30 g

Final Volume: 1 mL

Data File: s3a2610.d

Column: J&amp;W DB-5MS

Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine | U         | 333    | ug/kg | 66.7    | 333     |
| 108-95-2   | Phenol                        | U         | 333    | ug/kg | 66.7    | 333     |
| 95-57-8    | 2-Chlorophenol                | U         | 333    | ug/kg | 66.7    | 333     |
| 106-46-7   | 1,4-Dichlorobenzene           | U         | 333    | ug/kg | 66.7    | 333     |
| 621-64-7   | N-Nitrosodipropylamine        | U         | 333    | ug/kg | 66.7    | 333     |
| 59-50-7    | 4-Chloro-3-methylphenol       | U         | 333    | ug/kg | 66.7    | 333     |
| 83-32-9    | Acenaphthene                  | U         | 33.3   | ug/kg | 11.0    | 33.3    |
| 121-14-2   | 2,4-Dinitrotoluene            | U         | 333    | ug/kg | 33.3    | 333     |
| 100-02-7   | 4-Nitrophenol                 | U         | 333    | ug/kg | 110     | 333     |
| 87-86-5    | Pentachlorophenol             | U         | 333    | ug/kg | 83.3    | 333     |
| 129-00-0   | Pyrene                        | U         | 33.3   | ug/kg | 10.0    | 33.3    |
| 110-86-1   | Pyridine                      | U         | 333    | ug/kg | 66.7    | 333     |
| 62-53-3    | Aniline                       | U         | 333    | ug/kg | 100     | 333     |
| 111-44-4   | bis(2-Chloroethyl) ether      | U         | 333    | ug/kg | 66.7    | 333     |
| 541-73-1   | 1,3-Dichlorobenzene           | U         | 333    | ug/kg | 66.7    | 333     |
| 100-51-6   | Benzyl alcohol                | U         | 333    | ug/kg | 100     | 333     |
| 95-50-1    | 1,2-Dichlorobenzene           | U         | 333    | ug/kg | 66.7    | 333     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   | U         | 333    | ug/kg | 66.7    | 333     |
| 95-48-7    | o-Cresol                      | U         | 333    | ug/kg | 66.7    | 333     |
| 65794-96-9 | m,p-Cresols                   | U         | 333    | ug/kg | 100     | 333     |
| 67-72-1    | Hexachloroethane              | U         | 333    | ug/kg | 66.7    | 333     |
| 98-95-3    | Nitrobenzene                  | U         | 333    | ug/kg | 66.7    | 333     |
| 78-59-1    | Isophorone                    | U         | 333    | ug/kg | 66.7    | 333     |
| 88-75-5    | 2-Nitrophenol                 | U         | 333    | ug/kg | 66.7    | 333     |
| 105-67-9   | 2,4-Dimethylphenol            | U         | 333    | ug/kg | 117     | 333     |
| 111-91-1   | bis(2-Chloroethoxy)methane    | U         | 333    | ug/kg | 66.7    | 333     |
| 120-83-2   | 2,4-Dichlorophenol            | U         | 333    | ug/kg | 66.7    | 333     |
| 65-85-0    | Benzoic acid                  | U         | 667    | ug/kg | 167     | 667     |
| 91-20-3    | Naphthalene                   | U         | 33.3   | ug/kg | 10.0    | 33.3    |
| 106-47-8   | 4-Chloroaniline               | U         | 333    | ug/kg | 66.7    | 333     |
| 87-68-3    | Hexachlorobutadiene           | U         | 333    | ug/kg | 66.7    | 333     |
| 91-57-6    | 2-Methylnaphthalene           | U         | 33.3   | ug/kg | 6.67    | 33.3    |
| 77-47-4    | Hexachlorocyclopentadiene     | U         | 333    | ug/kg | 66.7    | 333     |
| 88-06-2    | 2,4,6-Trichlorophenol         | U         | 333    | ug/kg | 66.7    | 333     |
| 95-95-4    | 2,4,5-Trichlorophenol         | U         | 333    | ug/kg | 66.7    | 333     |
| 91-58-7    | 2-Chloronaphthalene           | U         | 33.3   | ug/kg | 11.0    | 33.3    |
| 88-74-4    | 2-Nitroaniline                | U         | 333    | ug/kg | 66.7    | 333     |
|            | <i>o</i> -Nitroaniline        |           |        |       |         |         |
| 99-09-2    | 3-Nitroaniline                | U         | 333    | ug/kg | 66.7    | 333     |

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 1202023496  
Client Sample: QC for batch 944873  
Client ID: MB for batch 944873  
Batch ID: 944874  
Run Date: 01/26/2010 13:18  
Prep Date: 01/25/2010 21:06  
Data File: s3a2610.d

Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30 g  
Column: J&W DB-5MS

Matrix: SOIL  
Project: QC  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|-------------------------------|-----------|--------|-------|---------|---------|
|           | <i>m</i> -Nitroaniline        |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate             | U         | 333    | ug/kg | 66.7    | 333     |
| 606-20-2  | 2,6-Dinitrotoluene            | U         | 333    | ug/kg | 33.3    | 333     |
| 208-96-8  | Acenaphthylene                | U         | 33.3   | ug/kg | 10.0    | 33.3    |
| 51-28-5   | 2,4-Dinitrophenol             | U         | 667    | ug/kg | 127     | 667     |
| 132-64-9  | Dibenzofuran                  | U         | 333    | ug/kg | 66.7    | 333     |
| 84-66-2   | Diethylphthalate              | U         | 333    | ug/kg | 66.7    | 333     |
| 86-73-7   | Fluorene                      | U         | 33.3   | ug/kg | 10.0    | 33.3    |
| 7005-72-3 | 4-Chlorophenylphenylether     | U         | 333    | ug/kg | 66.7    | 333     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol    | U         | 333    | ug/kg | 66.7    | 333     |
| 100-01-6  | 4-Nitroaniline                | U         | 333    | ug/kg | 100     | 333     |
|           | <i>p</i> -Nitroaniline        |           |        |       |         |         |
| 122-39-4  | Diphenylamine                 | U         | 333    | ug/kg | 66.7    | 333     |
| 122-66-7  | Azobenzene                    | U         | 333    | ug/kg | 66.7    | 333     |
|           | <i>1,2</i> -Diphenylhydrazine |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether      | U         | 333    | ug/kg | 66.7    | 333     |
| 118-74-1  | Hexachlorobenzene             | U         | 333    | ug/kg | 66.7    | 333     |
| 85-01-8   | Phenanthrene                  | U         | 33.3   | ug/kg | 10.0    | 33.3    |
| 120-12-7  | Anthracene                    | U         | 33.3   | ug/kg | 6.67    | 33.3    |
| 84-74-2   | Di-n-butylphthalate           | U         | 333    | ug/kg | 66.7    | 333     |
| 206-44-0  | Fluoranthene                  | U         | 33.3   | ug/kg | 10.0    | 33.3    |
| 85-68-7   | Butylbenzylphthalate          | U         | 333    | ug/kg | 66.7    | 333     |
| 56-55-3   | Benzo(a)anthracene            | U         | 33.3   | ug/kg | 10.0    | 33.3    |
| 91-94-1   | 3,3'-Dichlorobenzidine        | U         | 333    | ug/kg | 100     | 333     |
| 218-01-9  | Chrysene                      | U         | 33.3   | ug/kg | 10.0    | 33.3    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate    | U         | 333    | ug/kg | 66.7    | 333     |
| 117-84-0  | Di-n-octylphthalate           | U         | 333    | ug/kg | 66.7    | 333     |
| 205-99-2  | Benzo(b)fluoranthene          | U         | 33.3   | ug/kg | 10.0    | 33.3    |
| 207-08-9  | Benzo(k)fluoranthene          | U         | 33.3   | ug/kg | 10.0    | 33.3    |
| 50-32-8   | Benzo(a)pyrene                | U         | 33.3   | ug/kg | 10.0    | 33.3    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene        | U         | 33.3   | ug/kg | 10.0    | 33.3    |
| 53-70-3   | Dibenzo(a,h)anthracene        | U         | 33.3   | ug/kg | 10.0    | 33.3    |
| 191-24-2  | Benzo(ghi)perylene            | U         | 33.3   | ug/kg | 10.0    | 33.3    |
| 120-82-1  | 1,2,4-Trichlorobenzene        | U         | 333    | ug/kg | 66.7    | 333     |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT   | Estimated | Units | Fit | Qual |
|---------|---------------------------------------|------|-----------|-------|-----|------|
|         | Unknown                               | 1.74 | 755       | ug/kg |     | J    |
|         | Unknown Aldol Condensate              | 3.42 | 206       | ug/kg |     | JA   |

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012610a.b/s3a2610.d  
Lab Smp Id: 1202023496 Client Smp ID: SBLK01  
Inj Date : 26-JAN-2010 13:18  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |1202023496|944874|1|SVMF|1|SBLK01  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
Meth Date : 26-Jan-2010 13:48 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 5 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1324.sub  
Target Version: 3.50  
Processing Host: hpclp1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.00000  | weight of sample          |
| M    | 0.00000   | % moisture                |

Cpnd Variable Local Compound Variable

| Compounds                   | QUANT SIG |        |                | RESPONSE | CONCENTRATIONS       |                  |
|-----------------------------|-----------|--------|----------------|----------|----------------------|------------------|
|                             | MASS      | RT     | EXP RT REL RT  |          | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/Kg) |
| * 10 1,4-Dichlorobenzene-d4 | 152       | 4.826  | 4.832 (1.000)  | 295272   | 40.0000              |                  |
| * 29 Naphthalene-d8         | 136       | 6.110  | 6.114 (1.000)  | 1122963  | 40.0000              |                  |
| * 46 Acenaphthene-d10       | 164       | 7.986  | 7.990 (1.000)  | 621437   | 40.0000              |                  |
| * 67 Phenanthrene-d10       | 188       | 9.603  | 9.605 (1.000)  | 1045631  | 40.0000              |                  |
| * 91 Chrysene-d12           | 240       | 12.628 | 12.634 (1.000) | 912675   | 40.0000              |                  |
| * 98 Perylene-d12           | 264       | 14.973 | 14.975 (1.000) | 569151   | 40.0000              |                  |
| \$ 3 2-Fluorophenol         | 112       | 3.654  | 3.644 (0.757)  | 555980   | 72.3616              | 2410             |
| \$ 5 Phenol-d5              | 99        | 4.425  | 4.430 (0.917)  | 647210   | 67.0244              | 2230             |
| \$ 20 Nitrobenzene-d5       | 82        | 5.366  | 5.372 (0.878)  | 308773   | 37.2231              | 1240             |
| \$ 39 2-Fluorobiphenyl      | 172       | 7.239  | 7.244 (0.906)  | 611009   | 38.0386              | 1270             |
| \$ 60 2,4,6-Tribromophenol  | 329       | 8.838  | 8.842 (1.107)  | 137708   | 77.2994              | 2580             |
| \$ 81 p-Terphenyl-d14       | 244       | 11.315 | 11.316 (0.896) | 749548   | 47.7810              | 1590             |

Report Date: 26-Jan-2010 13:56

## GEL Laboratories LLC

Data file : /chem/MSD3.i/s012610a.b/s3a2610.d

Lab Smp Id: 1202023496

Client Smp ID: SBLK01

Inj Date : 26-JAN-2010 13:18

Operator : JLD1

Inst ID: MSD3.i

Smp Info : |1202023496|944874|1|SVMF|1|SBLK01

Misc Info : |MSD8270\_S|WBN100107-02|

Comment : Column: J&amp;W DB-5MS, 25 m x 0.20 mm x 0.33 micron film

Method : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m

Meth Date : 26-Jan-2010 13:48 jen00986 Quant Type: ISTD

Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d

Als bottle: 5 QC Sample: BLANK

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1324.sub

Target Version: 3.50

Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.00000  | weight of sample          |
| M    | 0.00000   | % moisture                |

Cpnd Variable

Local Compound Variable

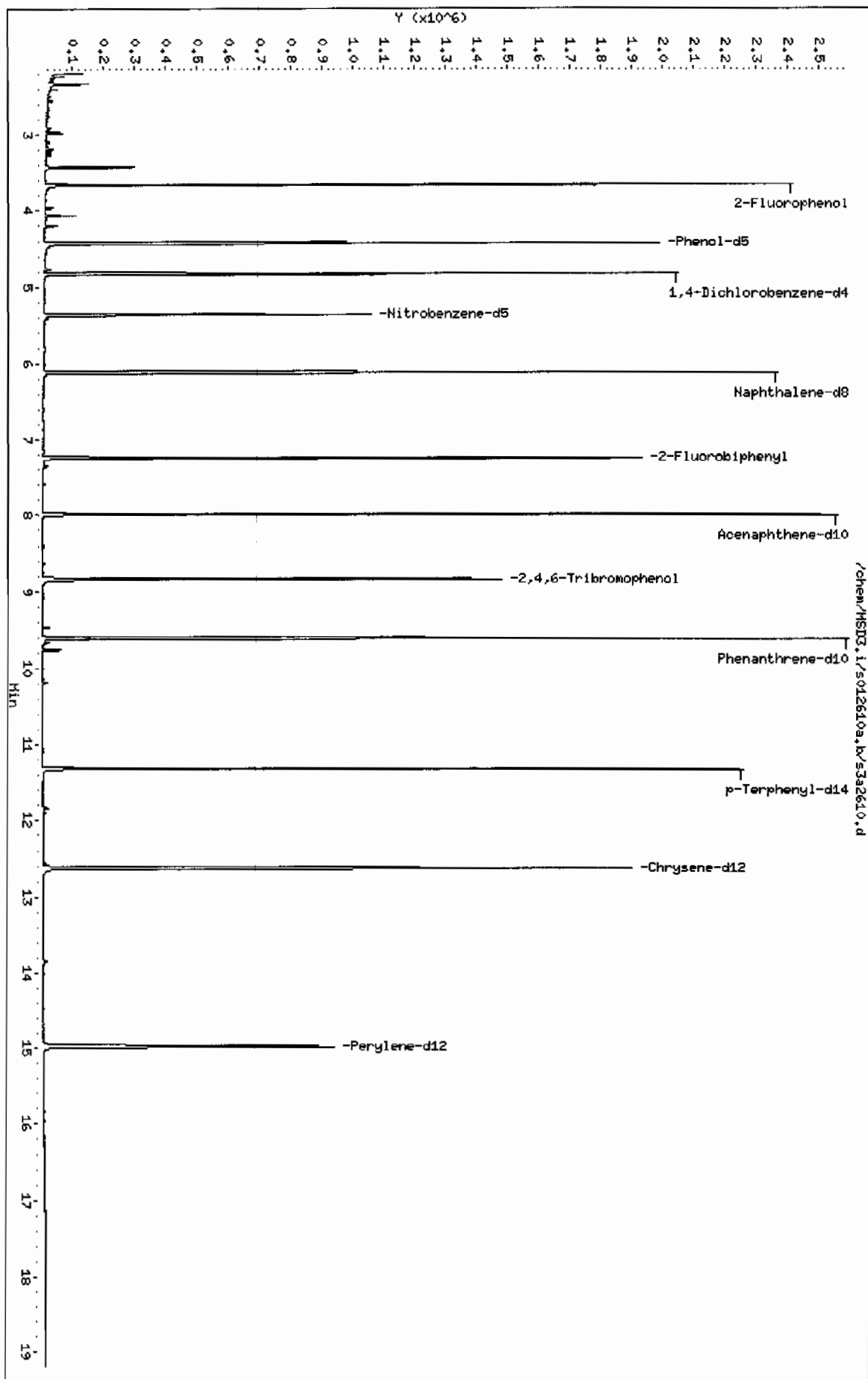
| ISTD                        | RT    | AREA    | AMOUNT |
|-----------------------------|-------|---------|--------|
| =====                       | ===== | =====   | =====  |
| * 10 1,4-Dichlorobenzene-d4 | 4.826 | 1890045 | 40.000 |

| CONCENTRATIONS           |         |               |              |       | QUANT   |           |        |
|--------------------------|---------|---------------|--------------|-------|---------|-----------|--------|
| RT                       | AREA    | ON-COL(ng/ul) | FINAL(ug/Kg) | QUAL  | LIBRARY | LIB ENTRY | CPND # |
| =====                    | =====   | =====         | =====        | ===== | =====   | =====     | =====  |
| Unknown                  |         |               |              |       | CAS #:  |           |        |
| 1.736                    | 1070779 | 22.6614322    | 755          | 0     |         | 0         | 10     |
| Unknown Aldol Condensate |         |               |              |       | CAS #:  |           |        |
| 3.419                    | 292061  | 6.18103940    | 206          | 0     |         | 0         | 10     |



Data File: /chem/HSD3.i/5012610a,b/33a2610.d  
Date: 26-JAN-2010 13:18  
Client ID: SBLK01  
Sample Info: 1202023496194487411SWH11SBLK01  
Volume Injected (uL): 0.5  
Column Phase: J&W DB-SMS

Instrument: HSD3.i  
Operator: JLD  
Column diameter: 0.20



Date : 26-JAN-2010 13:18

Client ID: SBLK01

Instrument: MSD3.i

Sample Info: I1202023496I944874I1ISVHF11ISBLK01

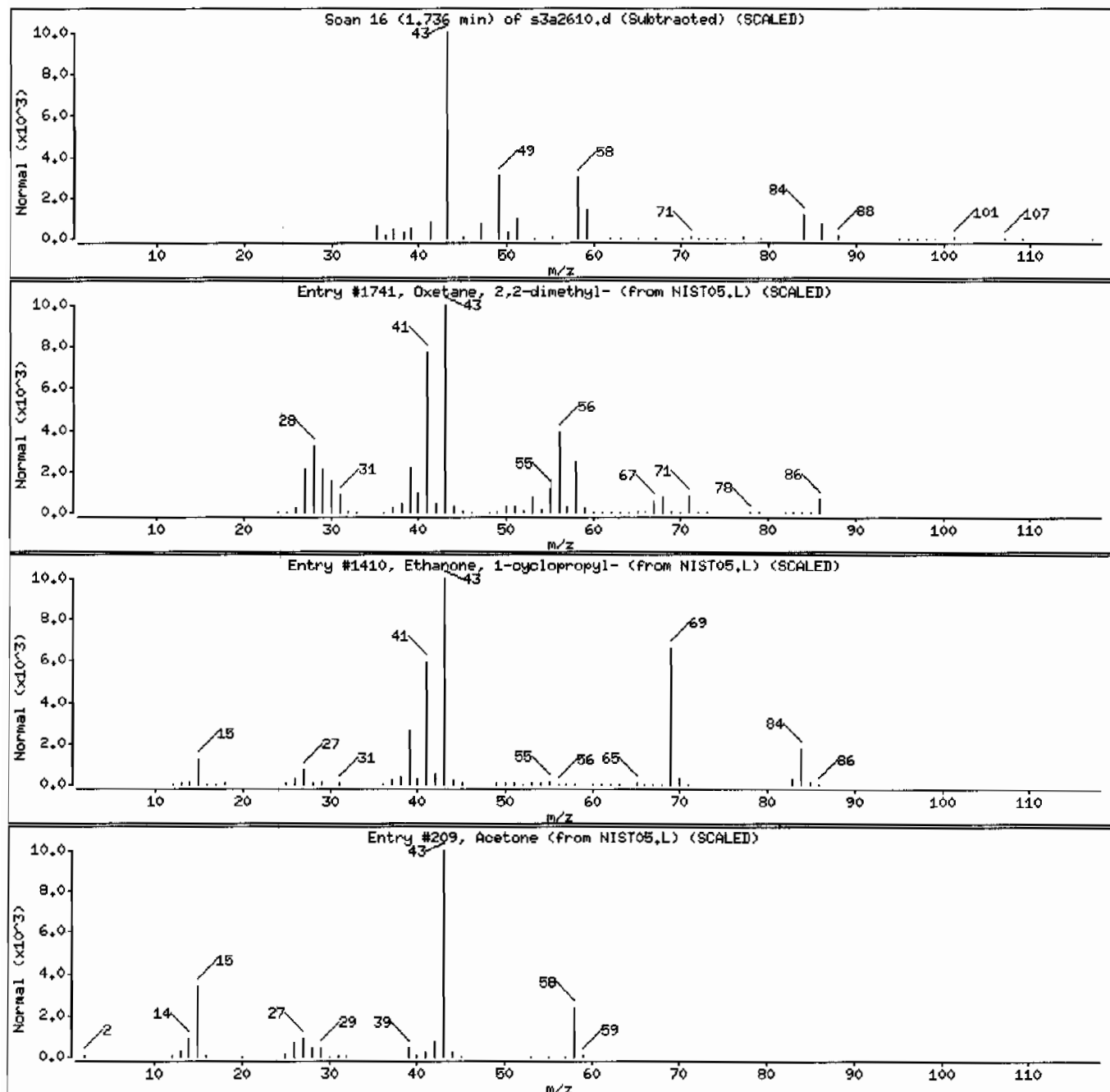
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown                       |            |          |       |         |         |        |
| Oxetane, 2,2-dimethyl-        | 6245-99-4  | NIST05.L | 1741  | 9       | C5H10O  | 86     |
| Ethanone, 1-cyclopropyl-      | 765-43-5   | NIST05.L | 1410  | 5       | C5H8O   | 84     |
| Acetone                       | 67-64-1    | NIST05.L | 209   | 5       | C3H6O   | 58     |



Date: 26-JAN-2010 13:18

Client ID: SBLK01

Instrument: MSD3.i

Sample Info: I1202023496I9448741IISVMFI1ISBLK01

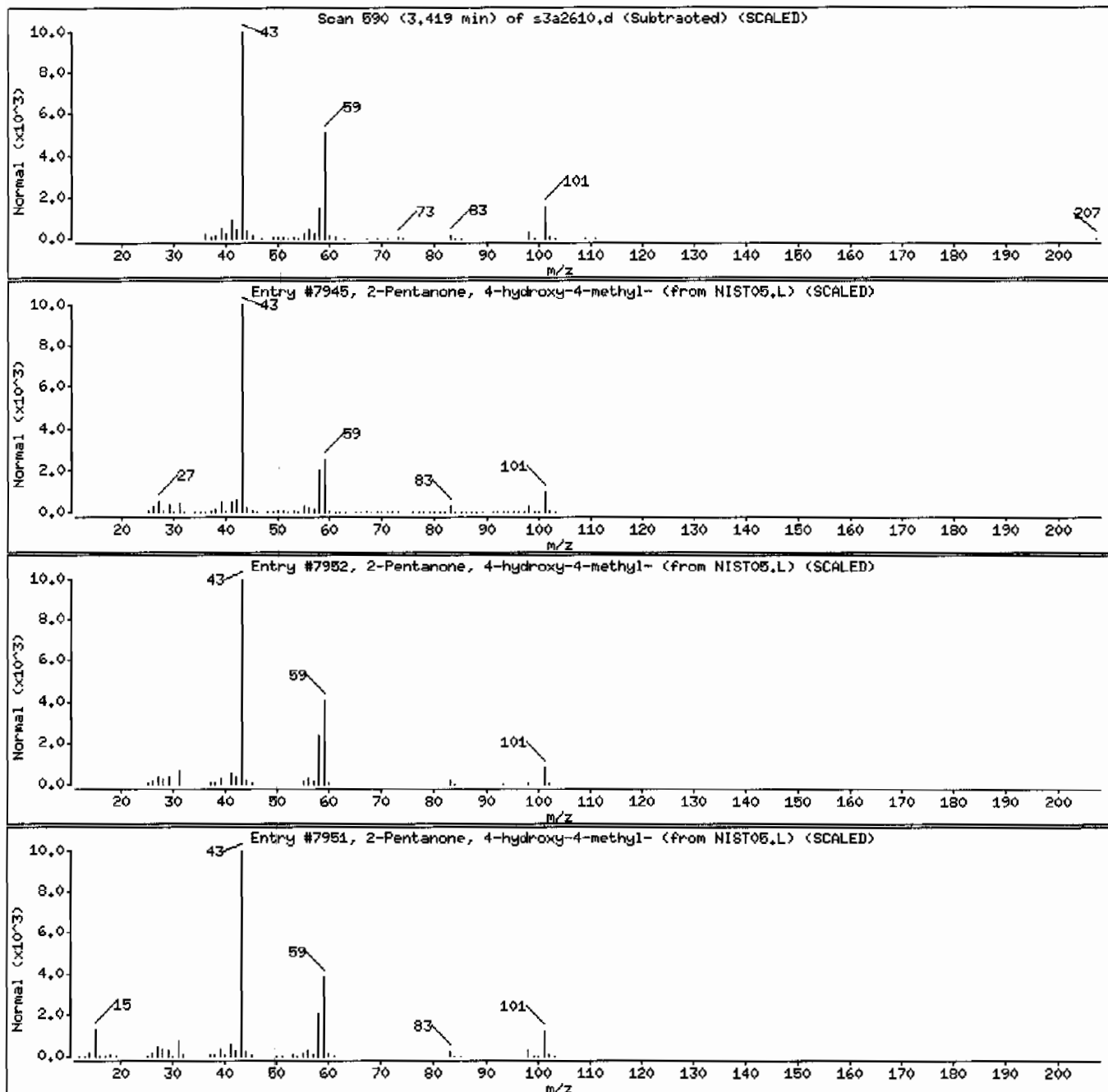
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match    | CAS Number | Library  | Entry | Quality | Formula | Weight |
|----------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown Aldol Condensate         |            |          |       |         |         |        |
| 2-Pentanone, 4-hydroxy-4-methyl- | 123-42-2   | NIST05.L | 7945  | 50      | C6H12O2 | 116    |
| 2-Pentanone, 4-hydroxy-4-methyl- | 123-42-2   | NIST05.L | 7952  | 50      | C6H12O2 | 116    |
| 2-Pentanone, 4-hydroxy-4-methyl- | 123-42-2   | NIST05.L | 7951  | 40      | C6H12O2 | 116    |



Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1324

Matrix: SOIL

Lab Sample ID: 1202023497

Client Sample: QC for batch 944873

Client: LANL010

Project: QC

Client ID: LCS for batch 944873

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 944874

Inst: MSD3.I

Dilution: 1

Run Date: 01/26/2010 13:44

Analyst: JLD1

Inj. Vol: .5 uL

Prep Date: 01/25/2010 21:06

Aliquot: 30 g

Final Volume: 1 mL

Data File: s3a2611.d

Column: J&amp;W DB-5MS

Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine |           | 881    | ug/kg | 66.7    | 333     |
| 108-95-2   | Phenol                        |           | 1220   | ug/kg | 66.7    | 333     |
| 95-57-8    | 2-Chlorophenol                |           | 1320   | ug/kg | 66.7    | 333     |
| 106-46-7   | 1,4-Dichlorobenzene           |           | 1250   | ug/kg | 66.7    | 333     |
| 621-64-7   | N-Nitrosodipropylamine        |           | 1140   | ug/kg | 66.7    | 333     |
| 59-50-7    | 4-Chloro-3-methylphenol       |           | 1300   | ug/kg | 66.7    | 333     |
| 83-32-9    | Acenaphthene                  |           | 1280   | ug/kg | 11.0    | 33.3    |
| 121-14-2   | 2,4-Dinitrotoluene            |           | 1420   | ug/kg | 33.3    | 333     |
| 100-02-7   | 4-Nitrophenol                 |           | 1330   | ug/kg | 110     | 333     |
| 87-86-5    | Pentachlorophenol             |           | 1460   | ug/kg | 83.3    | 333     |
| 129-00-0   | Pyrene                        |           | 1410   | ug/kg | 10.0    | 33.3    |
| 110-86-1   | Pyridine                      |           | 1230   | ug/kg | 66.7    | 333     |
| 62-53-3    | Aniline                       |           | 834    | ug/kg | 100     | 333     |
| 111-44-4   | bis(2-Chloroethyl) ether      |           | 986    | ug/kg | 66.7    | 333     |
| 541-73-1   | 1,3-Dichlorobenzene           |           | 1250   | ug/kg | 66.7    | 333     |
| 100-51-6   | Benzyl alcohol                |           | 1260   | ug/kg | 100     | 333     |
| 95-50-1    | 1,2-Dichlorobenzene           |           | 1280   | ug/kg | 66.7    | 333     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   |           | 987    | ug/kg | 66.7    | 333     |
| 95-48-7    | o-Cresol                      |           | 1280   | ug/kg | 66.7    | 333     |
| 65794-96-9 | m,p-Cresols                   |           | 1400   | ug/kg | 100     | 333     |
| 67-72-1    | Hexachloroethane              |           | 1170   | ug/kg | 66.7    | 333     |
| 98-95-3    | Nitrobenzene                  |           | 1130   | ug/kg | 66.7    | 333     |
| 78-59-1    | Isophorone                    |           | 1160   | ug/kg | 66.7    | 333     |
| 88-75-5    | 2-Nitrophenol                 |           | 1270   | ug/kg | 66.7    | 333     |
| 105-67-9   | 2,4-Dimethylphenol            |           | 1260   | ug/kg | 117     | 333     |
| 111-91-1   | bis(2-Chloroethoxy)methane    |           | 1130   | ug/kg | 66.7    | 333     |
| 120-83-2   | 2,4-Dichlorophenol            |           | 1340   | ug/kg | 66.7    | 333     |
| 65-85-0    | Benzoic acid                  |           | 3210   | ug/kg | 167     | 667     |
| 91-20-3    | Naphthalene                   |           | 1130   | ug/kg | 10.0    | 33.3    |
| 106-47-8   | 4-Chloroaniline               |           | 765    | ug/kg | 66.7    | 333     |
| 87-68-3    | Hexachlorobutadiene           |           | 1370   | ug/kg | 66.7    | 333     |
| 91-57-6    | 2-Methylnaphthalene           |           | 1290   | ug/kg | 6.67    | 33.3    |
| 77-47-4    | Hexachlorocyclopentadiene     |           | 1430   | ug/kg | 66.7    | 333     |
| 88-06-2    | 2,4,6-Trichlorophenol         |           | 1400   | ug/kg | 66.7    | 333     |
| 95-95-4    | 2,4,5-Trichlorophenol         |           | 1450   | ug/kg | 66.7    | 333     |
| 91-58-7    | 2-Chloronaphthalene           |           | 1320   | ug/kg | 11.0    | 33.3    |
| 88-74-4    | 2-Nitroaniline                |           | 1120   | ug/kg | 66.7    | 333     |
|            | <i>o</i> -Nitroaniline        |           |        |       |         |         |
| 99-09-2    | 3-Nitroaniline                |           | 1170   | ug/kg | 66.7    | 333     |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

Page 2 of 2

SDG Number: 10-1324

Matrix: SOIL

Lab Sample ID: 1202023497

Client Sample: QC for batch 944873

Client: LANL010

Project: QC

Client ID: LCS for batch 944873

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 944874

Inst: MSD3.I

Dilution: 1

Run Date: 01/26/2010 13:44

Analyst: JLD1

Inj. Vol: .5 uL

Prep Date: 01/25/2010 21:06

Aliquot: 30 g

Final Volume: 1 mL

Data File: s3a2611.d

Column: J&amp;W DB-5MS

Level: LOW

| CAS No.   | Parmname                     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|------------------------------|-----------|--------|-------|---------|---------|
|           | <i>m-Nitroaniline</i>        |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate            |           | 1380   | ug/kg | 66.7    | 333     |
| 606-20-2  | 2,6-Dinitrotoluene           |           | 1350   | ug/kg | 33.3    | 333     |
| 208-96-8  | Acenaphthylene               |           | 1330   | ug/kg | 10.0    | 33.3    |
| 51-28-5   | 2,4-Dinitrophenol            |           | 1430   | ug/kg | 127     | 667     |
| 132-64-9  | Dibenzofuran                 |           | 1710   | ug/kg | 66.7    | 333     |
| 84-66-2   | Diethylphthalate             |           | 1420   | ug/kg | 66.7    | 333     |
| 86-73-7   | Fluorene                     |           | 1380   | ug/kg | 10.0    | 33.3    |
| 7005-72-3 | 4-Chlorophenylphenylether    |           | 1440   | ug/kg | 66.7    | 333     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol   |           | 1410   | ug/kg | 66.7    | 333     |
| 100-01-6  | 4-Nitroaniline               |           | 1450   | ug/kg | 100     | 333     |
|           | <i>p-Nitroaniline</i>        |           |        |       |         |         |
| 122-39-4  | Diphenylamine                |           | 1360   | ug/kg | 66.7    | 333     |
| 122-66-7  | Azobenzene                   |           | 1130   | ug/kg | 66.7    | 333     |
|           | <i>1,2-Diphenylhydrazine</i> |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether     |           | 1250   | ug/kg | 66.7    | 333     |
| 118-74-1  | Hexachlorobenzene            |           | 1290   | ug/kg | 66.7    | 333     |
| 85-01-8   | Phenanthrene                 |           | 1360   | ug/kg | 10.0    | 33.3    |
| 120-12-7  | Anthracene                   |           | 1380   | ug/kg | 6.67    | 33.3    |
| 84-74-2   | Di-n-butylphthalate          |           | 1540   | ug/kg | 66.7    | 333     |
| 206-44-0  | Fluoranthene                 |           | 1620   | ug/kg | 10.0    | 33.3    |
| 85-68-7   | Butylbenzylphthalate         |           | 1400   | ug/kg | 66.7    | 333     |
| 56-55-3   | Benzo(a)anthracene           |           | 1400   | ug/kg | 10.0    | 33.3    |
| 91-94-1   | 3,3'-Dichlorobenzidine       |           | 1100   | ug/kg | 100     | 333     |
| 218-01-9  | Chrysene                     |           | 1430   | ug/kg | 10.0    | 33.3    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate   |           | 1380   | ug/kg | 66.7    | 333     |
| 117-84-0  | Di-n-octylphthalate          |           | 1600   | ug/kg | 66.7    | 333     |
| 205-99-2  | Benzo(b)fluoranthene         |           | 1550   | ug/kg | 10.0    | 33.3    |
| 207-08-9  | Benzo(k)fluoranthene         |           | 1550   | ug/kg | 10.0    | 33.3    |
| 50-32-8   | Benzo(a)pyrene               |           | 1550   | ug/kg | 10.0    | 33.3    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene       |           | 1440   | ug/kg | 10.0    | 33.3    |
| 53-70-3   | Dibenzo(a,h)anthracene       |           | 1470   | ug/kg | 10.0    | 33.3    |
| 191-24-2  | Benzo(ghi)perylene           |           | 1380   | ug/kg | 10.0    | 33.3    |
| 120-82-1  | 1,2,4-Trichlorobenzene       |           | 1340   | ug/kg | 66.7    | 333     |

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012610a.b/s3a2611.d  
 Lab Smp Id: 1202023497 Client Smp ID: SBLK01LCS  
 Inj Date : 26-JAN-2010 13:44  
 Operator : JLD1 Inst ID: MSD3.i  
 Smp Info : |1202023497|944874|1|SVMF|1|SBLK01LCS  
 Misc Info : |MSD8270\_S|WBN100107-02|  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m  
 Meth Date : 26-Jan-2010 13:48 jen00986 Quant Type: ISTD  
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
 Als bottle: 6 QC Sample: LCS  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1324.sub  
 Target Version: 3.50  
 Processing Host: hpclp1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.00000  | weight of sample          |
| M    | 0.00000   | % moisture                |

Cpnd Variable Local Compound Variable

| Compounds                   | QUANT SIG |        |        |         | RESPONSE | CONCENTRATIONS       |                  |
|-----------------------------|-----------|--------|--------|---------|----------|----------------------|------------------|
|                             | MASS      | RT     | EXP RT | REL RT  |          | ON-COLUMN<br>(ng/ul) | FTNAL<br>(ug/Kg) |
| * 10 1,4-Dichlorobenzene-d4 | 152       | 4.830  | 4.832  | (1.000) | 319102   | 40.0000              |                  |
| * 29 Naphthalene-d8         | 136       | 6.113  | 6.114  | (1.000) | 1317273  | 40.0000              |                  |
| * 46 Acenaphthene-d10       | 164       | 7.989  | 7.990  | (1.000) | 674475   | 40.0000              |                  |
| * 67 Phenanthrene-d10       | 188       | 9.605  | 9.605  | (1.000) | 1115519  | 40.0000              |                  |
| * 91 Chrysene-d12           | 240       | 12.634 | 12.634 | (1.000) | 914362   | 40.0000              |                  |
| * 98 Perylene-d12           | 264       | 14.976 | 14.975 | (1.000) | 572001   | 40.0000              |                  |
| \$ 3 2-Fluorophenol         | 112       | 3.654  | 3.644  | (0.756) | 598620   | 72.0930              | 2400             |
| \$ 5 Phenol-d5              | 99        | 4.434  | 4.430  | (0.918) | 708428   | 67.8854              | 2260             |
| \$ 20 Nitrobenzene-d5       | 82        | 5.370  | 5.372  | (0.878) | 328721   | 33.7824              | 1130             |
| \$ 39 2-Fluorobiphenyl      | 172       | 7.240  | 7.244  | (0.906) | 657487   | 37.7134              | 1260             |
| \$ 60 2,4,6-Tribromophenol  | 329       | 8.844  | 8.842  | (1.107) | 165662   | 85.6783              | 2860             |
| \$ 81 p-Terphenyl-d14       | 244       | 11.313 | 11.316 | (0.895) | 748743   | 47.6416              | 1590             |

| Compounds                       | QUANT SIG |        |        |         |          |           | CONCENTRATIONS |  |
|---------------------------------|-----------|--------|--------|---------|----------|-----------|----------------|--|
|                                 | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN | FTNAL          |  |
|                                 |           |        |        |         |          | (ng/ul)   | (ug/Kg)        |  |
| =====                           | =====     | ==     | =====  | =====   | =====    | =====     | =====          |  |
| 6 Phenol                        | 94        | 4.445  | 4.444  | (0.920) | 402500   | 36.4718   | 1220           |  |
| 8 2-Chlorophenol                | 128       | 4.627  | 4.629  | (0.958) | 330991   | 39.4966   | 1320           |  |
| 11 1,4-Dichlorobenzene          | 146       | 4.845  | 4.846  | (1.003) | 367081   | 37.5229   | 1250           |  |
| 17 N-Nitrosodipropylamine       | 70        | 5.200  | 5.204  | (1.077) | 242830   | 34.2370   | 1140 (Q)       |  |
| 28 1,2,4-Trichlorobenzene       | 180       | 6.042  | 6.044  | (0.988) | 304856   | 40.1909   | 1340           |  |
| 33 4-Chloro-3-methylphenol      | 107       | 6.671  | 6.660  | (1.091) | 302139   | 39.0351   | 1300           |  |
| 47 Acenaphthene                 | 154       | 8.025  | 8.025  | (1.004) | 613848   | 38.4453   | 1280           |  |
| 50 2,4-Dinitrotoluene           | 165       | 8.180  | 8.181  | (1.024) | 230565   | 42.6798   | 1420           |  |
| 52 4-Nitrophenol                | 139       | 8.095  | 8.087  | (1.013) | 123151   | 39.9556   | 1330           |  |
| 65 Pentachlorophenol            | 266       | 9.385  | 9.382  | (0.977) | 122336   | 43.7502   | 1460           |  |
| 79 Pyrene                       | 202       | 11.175 | 11.175 | (0.885) | 1105247  | 42.1946   | 1410           |  |
| 2 Pyridine                      | 79        | 2.724  | 2.695  | (0.564) | 239575   | 36.8920   | 1230           |  |
| 4 Aniline                       | 66        | 4.513  | 4.518  | (0.934) | 121680   | 25.0147   | 834            |  |
| 7 bis(2-Chloroethyl) ether      | 63        | 4.554  | 4.556  | (0.943) | 258200   | 29.5753   | 986            |  |
| 9 1,3-Dichlorobenzene           | 146       | 4.777  | 4.779  | (0.989) | 361915   | 37.5064   | 1250           |  |
| 12 Benzyl alcohol               | 108       | 4.944  | 4.943  | (1.024) | 220070   | 37.7286   | 1260           |  |
| 13 1,2-Dichlorobenzene          | 146       | 4.994  | 4.996  | (1.034) | 351313   | 38.2924   | 1280           |  |
| 14 bis(2-Chloroisopropyl) ether | 45        | 5.059  | 5.063  | (1.047) | 612193   | 29.6173   | 987            |  |
| 15 o-Cresol                     | 107       | 5.029  | 5.025  | (1.041) | 275464   | 38.3820   | 1280           |  |
| 18 m,p-Cresols                  | 107       | 5.176  | 5.181  | (1.072) | 392216   | 42.0073   | 1400           |  |
| 19 Hexachloroethane             | 117       | 5.329  | 5.331  | (1.103) | 147106   | 35.0173   | 1170           |  |
| 21 Nitrobenzene                 | 77        | 5.391  | 5.392  | (0.882) | 348336   | 34.0458   | 1130           |  |
| 22 Isophorone                   | 82        | 5.622  | 5.627  | (0.920) | 630441   | 34.7659   | 1160           |  |
| 23 2-Nitrophenol                | 139       | 5.708  | 5.709  | (0.934) | 179547   | 38.2466   | 1270           |  |
| 24 2,4-Dimethylphenol           | 122       | 5.719  | 5.718  | (0.936) | 306396   | 37.7534   | 1260           |  |
| 25 bis(2-Chloroethoxy) methane  | 93        | 5.822  | 5.826  | (0.952) | 358300   | 34.0325   | 1130           |  |
| 26 2,4-Dichlorophenol           | 162       | 5.948  | 5.950  | (0.973) | 274627   | 40.2110   | 1340           |  |
| 27 Benzoic acid                 | 105       | 5.857  | 5.818  | (0.958) | 550977   | 96.4487   | 3210           |  |
| 30 Naphthalene                  | 128       | 6.136  | 6.138  | (1.004) | 936074   | 33.7895   | 1130           |  |
| 31 4-Chloroaniline              | 127       | 6.177  | 6.176  | (1.011) | 190793   | 22.9631   | 765            |  |
| 32 Hexachlorobutadiene          | 225       | 6.239  | 6.243  | (1.021) | 177589   | 41.0205   | 1370           |  |
| 34 2-Methylnaphthalene          | 142       | 6.861  | 6.862  | (1.122) | 646061   | 38.7879   | 1290           |  |
| 36 Hexachlorocyclopentadiene    | 237       | 7.014  | 7.015  | (0.878) | 165035   | 42.9925   | 1430           |  |
| 37 2,4,6-Trichlorophenol        | 196       | 7.152  | 7.150  | (0.895) | 202594   | 41.9076   | 1400           |  |
| 38 2,4,5-Trichlorophenol        | 196       | 7.196  | 7.189  | (0.901) | 227957   | 43.6443   | 1450           |  |
| 40 2-Chloronaphthalene          | 162       | 7.387  | 7.388  | (0.925) | 630930   | 39.5920   | 1320           |  |
| 42 o-Nitroaniline               | 65        | 7.490  | 7.488  | (0.938) | 211211   | 33.7473   | 1120           |  |
| 41 m-Nitroaniline               | 138       | 7.934  | 7.934  | (0.993) | 128379   | 35.0565   | 1170           |  |
| 43 Dimethylphthalate            | 163       | 7.669  | 7.676  | (0.960) | 755691   | 41.3124   | 1380           |  |
| 44 2,6-Dinitrotoluene           | 165       | 7.746  | 7.746  | (0.969) | 175701   | 40.4200   | 1350           |  |
| 45 Acenaphthylene               | 152       | 7.840  | 7.840  | (0.981) | 996759   | 39.7548   | 1320           |  |
| 48 2,4-Dinitrophenol            | 184       | 8.042  | 8.043  | (1.007) | 83118    | 42.9222   | 1430           |  |
| 49 Dibenzofuran                 | 168       | 8.210  | 8.210  | (1.028) | 1047573  | 51.1560   | 1700           |  |
| 51 Diethylphthalate             | 149       | 8.427  | 8.428  | (1.055) | 774334   | 42.5900   | 1420           |  |
| 53 Fluorene                     | 166       | 8.583  | 8.583  | (1.074) | 718573   | 41.5437   | 1380           |  |
| 54 4-Chlorophenylphenylether    | 204       | 8.565  | 8.566  | (1.072) | 351484   | 43.2176   | 1440           |  |
| 55 2-Methyl-4,6-dinitrophenol   | 198       | 8.624  | 8.624  | (0.898) | 121454   | 42.2699   | 1410           |  |

| Compounds                       | QUANT SIG |        |        |         |          |  | CONCENTRATIONS       |                  |
|---------------------------------|-----------|--------|--------|---------|----------|--|----------------------|------------------|
|                                 | MASS      | RT     | EXP RT | REL RT  | RESPONSE |  | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/Kg) |
| =====                           | =====     | ==     | =====  | =====   | =====    |  | =====                | =====            |
| 56 p-Nitroaniline               | 138       | 8.600  | 8.598  | (1.076) | 159715   |  | 43.6320              | 1450             |
| 133 Diphenylamine               | 169       | 8.694  | 8.695  | (0.905) | 603349   |  | 40.8153              | 1360             |
| 58 1,2-Diphenylhydrazine        | 77        | 8.741  | 8.742  | (0.910) | 739009   |  | 33.9115              | 1130             |
| 61 4-Bromophenylphenylether     | 248       | 9.100  | 9.100  | (0.947) | 178884   |  | 37.6362              | 1250             |
| 63 Hexachlorobenzene            | 284       | 9.173  | 9.174  | (0.955) | 191017   |  | 38.6971              | 1290             |
| 68 Phenanthrene                 | 178       | 9.632  | 9.632  | (1.003) | 997657   |  | 40.6878              | 1360             |
| 69 Anthracene                   | 178       | 9.688  | 9.688  | (1.009) | 1013567  |  | 41.4097              | 1380             |
| 72 Di-n-butylphthalate          | 149       | 10.189 | 10.189 | (1.061) | 1366464  |  | 46.1555              | 1540             |
| 76 Fluoranthene                 | 202       | 10.923 | 10.922 | (1.137) | 1081761  |  | 48.4853              | 1620             |
| 85 Butylbenzylphthalate         | 149       | 11.847 | 11.847 | (0.938) | 550967   |  | 42.0322              | 1400             |
| 89 Benzo(a)anthracene           | 228       | 12.613 | 12.613 | (0.998) | 877542   |  | 41.9153              | 1400             |
| 90 3,3'-Dichlorobenzidine       | 252       | 12.557 | 12.556 | (0.994) | 201482   |  | 32.8623              | 1100             |
| 92 Chrysene                     | 228       | 12.669 | 12.669 | (1.003) | 847315   |  | 43.0256              | 1430             |
| 93 bis(2-Ethylhexyl)phthalate   | 149       | 12.569 | 12.572 | (0.995) | 746105   |  | 41.3569              | 1380             |
| 94 Di-n-octylphthalate          | 149       | 13.564 | 13.564 | (0.906) | 1109377  |  | 47.8934              | 1600             |
| 95 Benzo(b)fluoranthene         | 252       | 14.292 | 14.294 | (0.954) | 622442   |  | 46.3696              | 1540             |
| 96 Benzo(k)fluoranthene         | 252       | 14.342 | 14.344 | (0.958) | 649261   |  | 46.5911              | 1550             |
| 97 Benzo(a)pyrene               | 252       | 14.873 | 14.875 | (0.993) | 542293   |  | 46.3613              | 1540             |
| 99 Indeno(1,2,3-cd)pyrene       | 276       | 16.965 | 16.968 | (1.133) | 413383   |  | 43.3217              | 1440             |
| 100 Dibenzo(a,h)anthracene      | 278       | 17.001 | 17.000 | (1.135) | 344502   |  | 44.2375              | 1470             |
| 101 Benzo(ghi)perylene          | 276       | 17.483 | 17.485 | (1.167) | 323103   |  | 41.2524              | 1380             |
| 1 N-Methyl-N-nitrosomethylamine | 74        | 2.677  | 2.651  | (0.554) | 153524   |  | 26.4200              | 881              |

#### QC Flag Legend

Q - Qualifier signal failed the ratio test.



Data File: /chem/HSD3.i/s012610a.b/s3a2611.d

Date : 26-JAN-2010 13:44

Client ID: SBLKOLCS

Sample Info: 11202023497194487411SVNF11SBLKOLCS

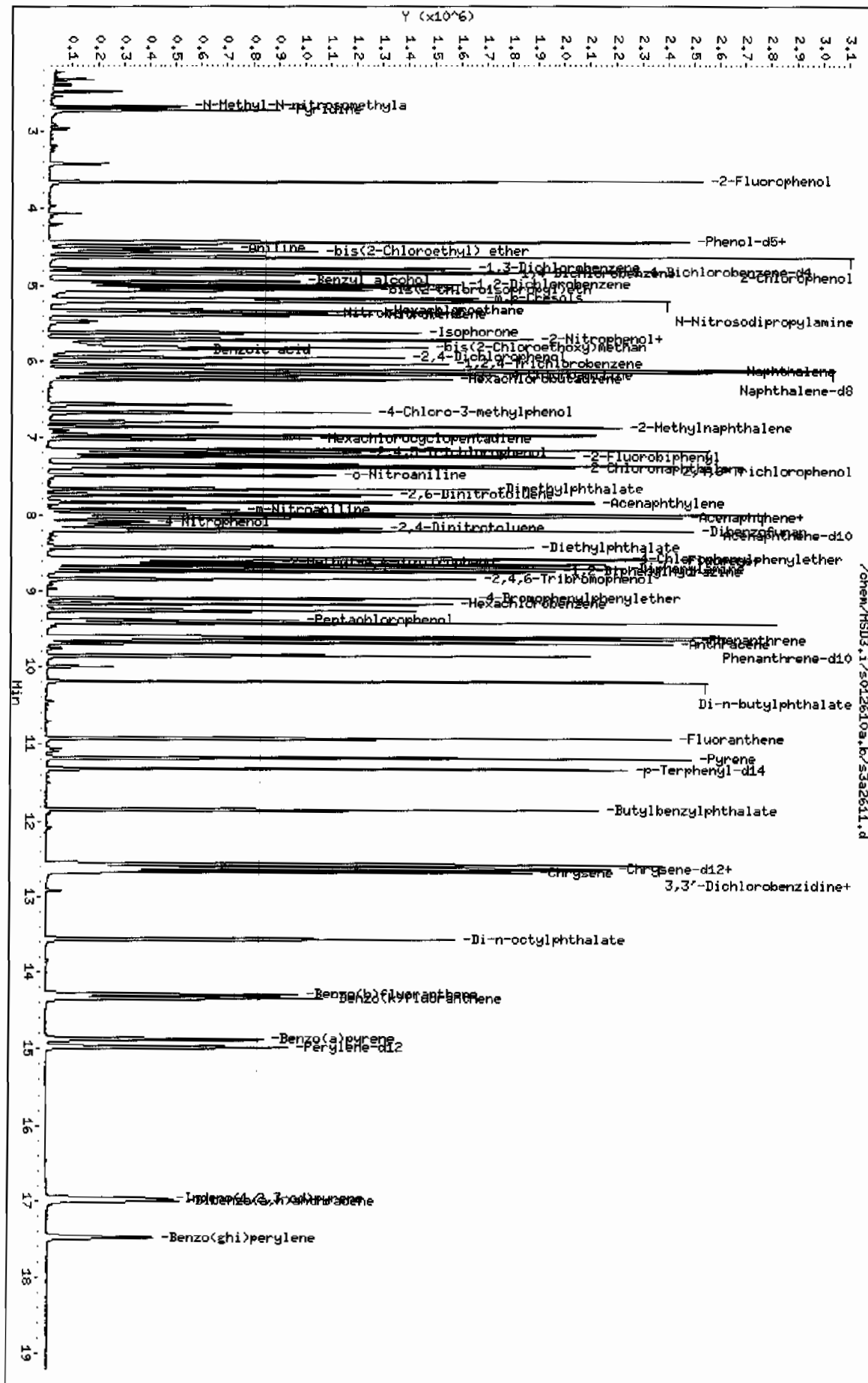
Volume Injected (uL): 0.5

Column phase: J&W DB-5MS

Instrument: HSD3.i

Operator: JLD

Column diameter: 0.20



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 1202023498  
Client Sample: QC for batch 944873  
Client ID: RE15-10-8410MS  
Batch ID: 944874  
Run Date: 01/27/2010 15:01  
Prep Date: 01/25/2010 21:06  
Data File: s3a2715.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.05 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 24.9  
Project: QC  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine |           | 945    | ug/kg | 88.6    | 443     |
| 108-95-2   | Phenol                        |           | 1340   | ug/kg | 88.6    | 443     |
| 95-57-8    | 2-Chlorophenol                |           | 1500   | ug/kg | 88.6    | 443     |
| 106-46-7   | 1,4-Dichlorobenzene           |           | 1400   | ug/kg | 88.6    | 443     |
| 621-64-7   | N-Nitrosodipropylamine        |           | 1320   | ug/kg | 88.6    | 443     |
| 59-50-7    | 4-Chloro-3-methylphenol       |           | 1590   | ug/kg | 88.6    | 443     |
| 83-32-9    | Acenaphthene                  |           | 1450   | ug/kg | 14.6    | 44.3    |
| 121-14-2   | 2,4-Dinitrotoluene            |           | 1560   | ug/kg | 44.3    | 443     |
| 100-02-7   | 4-Nitrophenol                 |           | 1550   | ug/kg | 146     | 443     |
| 87-86-5    | Pentachlorophenol             |           | 1760   | ug/kg | 111     | 443     |
| 129-00-0   | Pyrene                        |           | 1890   | ug/kg | 13.3    | 44.3    |
| 110-86-1   | Pyridine                      |           | 1100   | ug/kg | 88.6    | 443     |
| 62-53-3    | Aniline                       | J         | 411    | ug/kg | 133     | 443     |
| 111-44-4   | bis(2-Chloroethyl) ether      |           | 1100   | ug/kg | 88.6    | 443     |
| 541-73-1   | 1,3-Dichlorobenzene           |           | 1400   | ug/kg | 88.6    | 443     |
| 100-51-6   | Benzyl alcohol                |           | 1660   | ug/kg | 133     | 443     |
| 95-50-1    | 1,2-Dichlorobenzene           |           | 1440   | ug/kg | 88.6    | 443     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   |           | 1110   | ug/kg | 88.6    | 443     |
| 95-48-7    | o-Cresol                      |           | 1390   | ug/kg | 88.6    | 443     |
| 65794-96-9 | m,p-Cresols                   |           | 1580   | ug/kg | 133     | 443     |
| 67-72-1    | Hexachloroethane              |           | 1240   | ug/kg | 88.6    | 443     |
| 98-95-3    | Nitrobenzene                  |           | 1300   | ug/kg | 88.6    | 443     |
| 78-59-1    | Isophorone                    |           | 1370   | ug/kg | 88.6    | 443     |
| 88-75-5    | 2-Nitrophenol                 |           | 1470   | ug/kg | 88.6    | 443     |
| 105-67-9   | 2,4-Dimethylphenol            |           | 1480   | ug/kg | 155     | 443     |
| 111-91-1   | bis(2-Chloroethoxy)methane    |           | 1330   | ug/kg | 88.6    | 443     |
| 120-83-2   | 2,4-Dichlorophenol            |           | 1580   | ug/kg | 88.6    | 443     |
| 65-85-0    | Benzoic acid                  |           | 3860   | ug/kg | 222     | 886     |
| 91-20-3    | Naphthalene                   |           | 1300   | ug/kg | 13.3    | 44.3    |
| 106-47-8   | 4-Chloroaniline               | J         | 337    | ug/kg | 88.6    | 443     |
| 87-68-3    | Hexachlorobutadiene           |           | 1620   | ug/kg | 88.6    | 443     |
| 91-57-6    | 2-Methylnaphthalene           |           | 1520   | ug/kg | 8.86    | 44.3    |
| 77-47-4    | Hexachlorocyclopentadiene     |           | 971    | ug/kg | 88.6    | 443     |
| 88-06-2    | 2,4,6-Trichlorophenol         |           | 1660   | ug/kg | 88.6    | 443     |
| 95-95-4    | 2,4,5-Trichlorophenol         |           | 1660   | ug/kg | 88.6    | 443     |
| 91-58-7    | 2-Chloronaphthalene           |           | 1490   | ug/kg | 14.6    | 44.3    |
| 88-74-4    | 2-Nitroaniline                |           | 1210   | ug/kg | 88.6    | 443     |
| 99-09-2    | <i>o</i> -Nitroaniline        |           |        |       |         |         |
|            | 3-Nitroaniline                |           | 878    | ug/kg | 88.6    | 443     |

Semi-Volatile  
Certificate of Analysis  
Sample Summary

|                                    |                                  |                      |
|------------------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324                | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 1202023498          | Date Received: 01/20/2010 08:45  | % Moisture: 24.9     |
| Client Sample: QC for batch 944873 | Client: LANL010                  | Project: QC          |
| Client ID: RE15-10-8410MS          | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Batch ID: 944874                   | Inst: MSI03.I                    | Dilution: 1          |
| Run Date: 01/27/2010 15:01         | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Prep Date: 01/25/2010 21:06        | Aliquot: 30.05 g                 | Final Volume: 1 mL   |
| Data File: s3a2715.d               | Column: J&W DB-5MS               | Level: LOW           |

| CAS No.   | Parmname                     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|------------------------------|-----------|--------|-------|---------|---------|
|           | <i>m</i> -Nitroaniline       |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate            |           | 1550   | ug/kg | 88.6    | 443     |
| 606-20-2  | 2,6-Dinitrotoluene           |           | 1480   | ug/kg | 44.3    | 443     |
| 208-96-8  | Acenaphthylene               |           | 1510   | ug/kg | 13.3    | 44.3    |
| 51-28-5   | 2,4-Dinitrophenol            |           | 1340   | ug/kg | 168     | 886     |
| 132-64-9  | Dibenzofuran                 |           | 1940   | ug/kg | 88.6    | 443     |
| 84-66-2   | Diethylphthalate             |           | 1610   | ug/kg | 88.6    | 443     |
| 86-73-7   | Fluorene                     |           | 1660   | ug/kg | 13.3    | 44.3    |
| 7005-72-3 | 4-Chlorophenylphenylether    |           | 1750   | ug/kg | 88.6    | 443     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol   |           | 1400   | ug/kg | 88.6    | 443     |
| 100-01-6  | 4-Nitroaniline               |           | 1030   | ug/kg | 133     | 443     |
|           | <i>p</i> -Nitroaniline       |           |        |       |         |         |
| 122-39-4  | Diphenylamine                |           | 1530   | ug/kg | 88.6    | 443     |
| 122-66-7  | Azobenzene                   |           | 1270   | ug/kg | 88.6    | 443     |
|           | <i>1,2-Diphenylhydrazine</i> |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether     |           | 1490   | ug/kg | 88.6    | 443     |
| 118-74-1  | Hexachlorobenzene            |           | 1490   | ug/kg | 88.6    | 443     |
| 85-01-8   | Phenanthrene                 |           | 1520   | ug/kg | 13.3    | 44.3    |
| 120-12-7  | Anthracene                   |           | 1520   | ug/kg | 8.86    | 44.3    |
| 84-74-2   | Di-n-butylphthalate          |           | 1600   | ug/kg | 88.6    | 443     |
| 206-44-0  | Fluoranthene                 |           | 1490   | ug/kg | 13.3    | 44.3    |
| 85-68-7   | Butylbenzylphthalate         |           | 1850   | ug/kg | 88.6    | 443     |
| 56-55-3   | Benzo(a)anthracene           |           | 1510   | ug/kg | 13.3    | 44.3    |
| 91-94-1   | 3,3'-Dichlorobenzidine       | U         | 443    | ug/kg | 133     | 443     |
| 218-01-9  | Chrysene                     |           | 1530   | ug/kg | 13.3    | 44.3    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate   |           | 1870   | ug/kg | 88.6    | 443     |
| 117-84-0  | Di-n-octylphthalate          |           | 2400   | ug/kg | 88.6    | 443     |
| 205-99-2  | Benzo(b)fluoranthene         |           | 1780   | ug/kg | 13.3    | 44.3    |
| 207-08-9  | Benzo(k)fluoranthene         |           | 1700   | ug/kg | 13.3    | 44.3    |
| 50-32-8   | Benzo(a)pyrene               |           | 1690   | ug/kg | 13.3    | 44.3    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene       |           | 1420   | ug/kg | 13.3    | 44.3    |
| 53-70-3   | Dibenzo(a,h)anthracene       |           | 1480   | ug/kg | 13.3    | 44.3    |
| 191-24-2  | Benzo(ghi)perylene           |           | 1320   | ug/kg | 13.3    | 44.3    |
| 120-82-1  | 1,2,4-Trichlorobenzene       |           | 1560   | ug/kg | 88.6    | 443     |

Report Date: 27-Jan-2010 15:55

## GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2715.d

Lab Smp Id: 1202023498

Client Smp ID: RE15-10-8410MS

Inj Date : 27-JAN-2010 15:01

Operator : JLD1

Inst ID: MSD3.i

Smp Info : |1202023498|944874|1|SVMF|1|MS

Misc Info : |MSD8270\_S|WBN100107-02|

Comment : Column: J&amp;W DB-5MS, 25 m x 0.20 mm x 0.33 micron film

Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m

Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD

Cal Date : 21-JAN-2010 21:36

Cal File: s3a2130.d

Als bottle: 15

QC Sample: MS

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1324.sub

Target Version: 3.50

Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.05000  | weight of sample          |
| M    | 24.92040  | % moisture                |

Cpnd Variable

Local Compound Variable

| Compounds                   | QUANT SIG |        |        |         | RESPONSE | CONCENTRATIONS       |                  |
|-----------------------------|-----------|--------|--------|---------|----------|----------------------|------------------|
|                             | MASS      | RT     | EXP RT | REL RT  |          | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/Kg) |
| * 10 1,4-Dichlorobenzene-d4 | 152       | 4.816  | 4.817  | (1.000) | 273335   | 40.0000              |                  |
| * 29 Naphthalene-d8         | 136       | 6.099  | 6.100  | (1.000) | 1133125  | 40.0000              |                  |
| * 46 Acenaphthene-d10       | 164       | 7.975  | 7.973  | (1.000) | 612121   | 40.0000              |                  |
| * 67 Phenanthrene-d10       | 188       | 9.592  | 9.588  | (1.000) | 1088772  | 40.0000              |                  |
| * 91 Chrysene-d12           | 240       | 12.616 | 12.610 | (1.000) | 581717   | 40.0000              |                  |
| * 98 Perylene-d12           | 264       | 14.949 | 14.945 | (1.000) | 289599   | 40.0000              |                  |
| \$ 3 2-Fluorophenol         | 112       | 3.642  | 3.633  | (0.756) | 419078   | 58.9211              | 2610             |
| \$ 5 Phenol-d5              | 99        | 4.422  | 4.418  | (0.918) | 499724   | 55.9043              | 2480             |
| \$ 20 Nitrobenzene-d5       | 82        | 5.356  | 5.357  | (0.878) | 240263   | 28.7044              | 1270             |
| \$ 39 2-Fluorobiphenyl      | 172       | 7.228  | 7.227  | (0.906) | 495055   | 31.2889              | 1390             |
| \$ 60 2,4,6-Tribromophenol  | 329       | 8.829  | 8.825  | (1.107) | 146805   | 83.6600              | 3710             |
| \$ 81 p-Terphenyl-d14       | 244       | 11.298 | 11.297 | (0.895) | 502884   | 50.2953              | 2230             |

| Compounds                      | QUANT STG | CONCENTRATIONS |        |         |        |          |           |         |
|--------------------------------|-----------|----------------|--------|---------|--------|----------|-----------|---------|
|                                |           | MASS           | RT     | EXP RT  | REL RT | RESPONSE | ON-COLUMN | FINAL   |
|                                |           |                |        |         |        |          | (ng/ul)   | (ug/Kg) |
| =====                          | =====     | ==             | =====  | =====   | =====  | =====    | =====     |         |
| 6 Phenol                       | 94        | 4.437          | 4.430  | (0.921) | 284953 | 30.1439  | 1340      |         |
| 8 2-Chlorophenol               | 128       | 4.616          | 4.615  | (0.959) | 242706 | 33.8110  | 1500      |         |
| 11 1,4-Dichlorobenzene         | 146       | 4.833          | 4.832  | (1.004) | 264223 | 31.5311  | 1400      |         |
| 17 N-Nitrosodipropylamine      | 70        | 5.186          | 5.187  | (1.077) | 180535 | 29.7159  | 1320(Q)   |         |
| 28 1,2,4-Trichlorobenzene      | 180       | 6.029          | 6.029  | (0.988) | 229888 | 35.2328  | 1560      |         |
| 33 4-Chloro-3-methylphenol     | 107       | 6.658          | 6.643  | (1.092) | 238598 | 35.8355  | 1590      |         |
| 47 Acenaphthene                | 154       | 8.011          | 8.008  | (1.004) | 473454 | 32.6730  | 1450      |         |
| 50 2,4-Dinitrotoluene          | 165       | 8.167          | 8.164  | (1.024) | 172115 | 35.1056  | 1560      |         |
| 52 4-Nitrophenol               | 139       | 8.084          | 8.070  | (1.014) | 97912  | 35.0029  | 1550      |         |
| 65 Pentachlorophenol           | 266       | 9.371          | 9.365  | (0.977) | 108372 | 39.7085  | 1760      |         |
| 79 Pyrene                      | 202       | 11.159         | 11.156 | (0.884) | 709507 | 42.5756  | 1890      |         |
| 2 Pyridine                     | 79        | 2.707          | 2.680  | (0.562) | 137694 | 24.7537  | 1100      |         |
| 4 Aniline                      | 66        | 4.502          | 4.503  | (0.935) | 38663  | 9.27909  | 411 (aQR) |         |
| 7 bis(2-Chloroethyl) ether     | 63        | 4.540          | 4.541  | (0.943) | 184941 | 24.7309  | 1100      |         |
| 9 1,3-Dichlorobenzene          | 146       | 4.763          | 4.764  | (0.989) | 260491 | 31.5156  | 1400      |         |
| 12 Benzyl alcohol              | 108       | 4.930          | 4.926  | (1.024) | 187354 | 37.4979  | 1660      |         |
| 13 1,2-Dichlorobenzene         | 146       | 4.980          | 4.982  | (1.034) | 255387 | 32.4976  | 1440      |         |
| 14 bis(2-Chloroisopropyl)ether | 45        | 5.048          | 5.049  | (1.048) | 441536 | 24.9378  | 1100      |         |
| 15 o-Cresol                    | 107       | 5.021          | 5.011  | (1.043) | 193191 | 31.4256  | 1390      |         |
| 18 m,p-Cresols                 | 107       | 5.165          | 5.164  | (1.073) | 285699 | 35.7226  | 1580      |         |
| 19 Hexachloroethane            | 117       | 5.315          | 5.316  | (1.104) | 100786 | 28.0083  | 1240      |         |
| 21 Nitrobenzene                | 77        | 5.377          | 5.378  | (0.882) | 259075 | 29.4367  | 1300      |         |
| 22 Isophorone                  | 82        | 5.609          | 5.610  | (0.920) | 482570 | 30.9362  | 1370      |         |
| 23 2-Nitrophenol               | 139       | 5.694          | 5.695  | (0.934) | 133574 | 33.0776  | 1470      |         |
| 24 2,4-Dimethylphenol          | 122       | 5.706          | 5.704  | (0.935) | 233374 | 33.4290  | 1480      |         |
| 25 bis(2-Chloroethoxy)methane  | 93        | 5.808          | 5.809  | (0.952) | 271194 | 29.9450  | 1330      |         |
| 26 2,4-Dichlorophenol          | 162       | 5.938          | 5.933  | (0.973) | 208778 | 35.5373  | 1580      |         |
| 27 Benzoic acid                | 105       | 5.847          | 5.800  | (0.959) | 428261 | 87.1504  | 3860      |         |
| 30 Naphthalene                 | 128       | 6.123          | 6.120  | (1.004) | 701412 | 29.4336  | 1300      |         |
| 31 4-Chloroaniline             | 127       | 6.167          | 6.162  | (1.011) | 52243  | 7.60659  | 337 (aR)  |         |
| 32 Hexachlorobutadiene         | 225       | 6.226          | 6.226  | (1.021) | 136307 | 36.6016  | 1620      |         |
| 34 2-Methylnaphthalene         | 142       | 6.846          | 6.845  | (1.122) | 489995 | 34.1989  | 1520      |         |
| 36 Hexachlorocyclopentadiene   | 237       | 6.999          | 6.998  | (0.878) | 76295  | 21.8999  | 971       |         |
| 37 2,4,6-Trichlorophenol       | 196       | 7.140          | 7.136  | (0.895) | 164461 | 37.4850  | 1660      |         |
| 38 2,4,5-Trichlorophenol       | 196       | 7.184          | 7.171  | (0.901) | 177133 | 37.3682  | 1660      |         |
| 40 2-Chloronaphthalene         | 162       | 7.372          | 7.371  | (0.924) | 487537 | 33.7103  | 1490      |         |
| 42 o-Nitroaniline              | 65        | 7.478          | 7.474  | (0.938) | 155696 | 27.4112  | 1210      |         |
| 41 m-Nitroaniline              | 138       | 7.920          | 7.917  | (0.993) | 58726  | 19.8068  | 878       |         |
| 43 Dimethylphthalate           | 163       | 7.652          | 7.656  | (0.959) | 580846 | 34.9885  | 1550      |         |
| 44 2,6-Dinitrotoluene          | 165       | 7.731          | 7.729  | (0.969) | 132026 | 33.4665  | 1480      |         |
| 45 Acenaphthylene              | 152       | 7.822          | 7.823  | (0.981) | 776005 | 34.1030  | 1510      |         |
| 48 2,4-Dinitrophenol           | 184       | 8.028          | 8.026  | (1.007) | 53029  | 30.1737  | 1340(Q)   |         |
| 49 Dibenzofuran                | 168       | 8.196          | 8.193  | (1.028) | 811547 | 43.6671  | 1940      |         |
| 51 Diethylphthalate            | 149       | 8.411          | 8.411  | (1.055) | 600675 | 36.4039  | 1610      |         |
| 53 Fluorene                    | 166       | 8.567          | 8.563  | (1.074) | 588718 | 37.5034  | 1660      |         |
| 54 4-Chlorophenylphenylether   | 204       | 8.552          | 8.549  | (1.072) | 292245 | 39.5941  | 1750      |         |
| 55 2-Methyl-4,6-dinitrophenol  | 198       | 8.608          | 8.605  | (0.897) | 88668  | 31.6174  | 1400      |         |

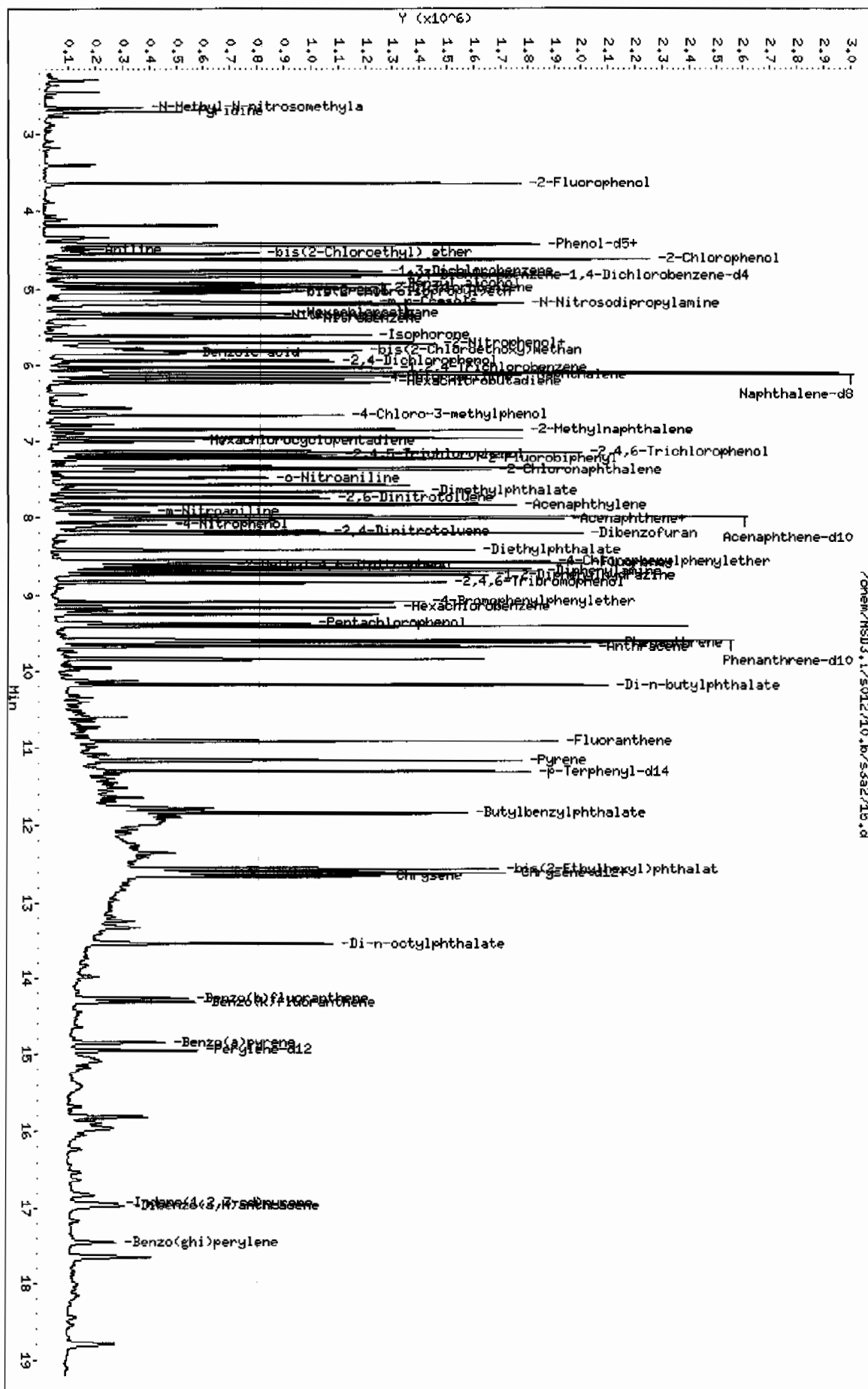
| Compounds                       | QUANT SIG |        |        |         |          | CONCENTRATIONS       |                  |
|---------------------------------|-----------|--------|--------|---------|----------|----------------------|------------------|
|                                 | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/Kg) |
| =====                           | =====     | ==     | =====  | =====   | =====    | =====                | =====            |
| 56 p-Nitroaniline               | 138       | 8.582  | 8.578  | (1.076) | 67599    | 23.1325              | 1020             |
| 133 Diphenylamine               | 169       | 8.679  | 8.678  | (0.905) | 499329   | 34.6083              | 1530             |
| 58 1,2-Diphenylhydrazine        | 77        | 8.726  | 8.725  | (0.910) | 608413   | 28.6046              | 1270             |
| 61 4-Bromophenylphenylether     | 248       | 9.085  | 9.083  | (0.947) | 155762   | 33.5766              | 1490             |
| 63 Hexachlorobenzene            | 284       | 9.159  | 9.157  | (0.955) | 162378   | 33.7033              | 1490             |
| 68 Phenanthrene                 | 178       | 9.619  | 9.615  | (1.003) | 821993   | 34.3471              | 1520             |
| 69 Anthracene                   | 178       | 9.672  | 9.671  | (1.008) | 821909   | 34.4043              | 1520             |
| 72 Di-n-butylphthalate          | 149       | 10.176 | 10.173 | (1.061) | 1043997  | 36.1297              | 1600             |
| 76 Fluoranthene                 | 202       | 10.908 | 10.906 | (1.137) | 730223   | 33.5331              | 1490             |
| 85 Butylbenzylphthalate         | 149       | 11.833 | 11.828 | (0.938) | 348134   | 41.7455              | 1850             |
| 89 Benzo(a)anthracene           | 228       | 12.599 | 12.592 | (0.999) | 453515   | 34.0488              | 1510             |
| 92 Chrysene                     | 228       | 12.649 | 12.646 | (1.003) | 433179   | 34.5745              | 1530             |
| 93 bis(2-Ethylhexyl)phthalate   | 149       | 12.554 | 12.548 | (0.995) | 484844   | 42.2431              | 1870             |
| 94 Di-n-octylphthalate          | 149       | 13.542 | 13.538 | (0.906) | 635329   | 54.1746              | 2400             |
| 95 Benzo(b)fluoranthene         | 252       | 14.272 | 14.266 | (0.955) | 273569   | 40.2533              | 1780             |
| 96 Benzo(k)fluoranthene         | 252       | 14.319 | 14.316 | (0.958) | 270700   | 38.3682              | 1700             |
| 97 Benzo(a)pyrene               | 252       | 14.849 | 14.845 | (0.993) | 225807   | 38.1293              | 1690             |
| 99 Indeno(1,2,3-cd)pyrene       | 276       | 16.938 | 16.934 | (1.133) | 155313   | 32.1485              | 1420             |
| 100 Dibenzo(a,h)anthracene      | 278       | 16.973 | 16.966 | (1.135) | 131353   | 33.3149              | 1480             |
| 101 Benzo(ghi)perylene          | 276       | 17.452 | 17.446 | (1.167) | 118281   | 29.8279              | 1320             |
| 1 N-Methyl-N-nitrosomethylamine | 74        | 2.657  | 2.639  | (0.552) | 106121   | 21.3203              | 945              |

#### QC Flag Legend

- a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD3.i/s012710.b/s3a2715.d  
 Date: 27-JAN-2010 15:01  
 Client ID: REIS-10-8410HS  
 Sample Info: 11202023498194437411SUMF111HS  
 Volume Injected (uL): 0.5  
 Column phase: JMI DB-SMS

Instrument: MSD3.1  
 Operator: JLD  
 Column diameter: 0.20



Semi-Volatile  
Certificate of Analysis  
Sample Summary

Page 1 of 2

|                                    |                                  |                      |
|------------------------------------|----------------------------------|----------------------|
| SDG Number: 10-1324                | Date Collected: 01/14/2010 12:00 | Matrix: R            |
| Lab Sample ID: 1202023499          | Date Received: 01/20/2010 08:45  | % Moisture: 24.9     |
| Client Sample: QC for batch 944873 | Client: LANL010                  | Project: QC          |
| Client ID: RE15-10-8410MSD         | Method: SW846 8270C              | SOP Ref: GL-OA-E-009 |
| Batch ID: 944874                   | Inst: MSD3.I                     | Dilution: 1          |
| Run Date: 01/27/2010 15:26         | Analyst: JLD1                    | Inj. Vol: .5 uL      |
| Prep Date: 01/25/2010 21:06        | Aliquot: 30.02 g                 | Final Volume: 1 mL   |
| Data File: s3a2716.d               | Column: J&W DB-5MS               | Level: LOW           |

| CAS No.    | Parmname                      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|------------|-------------------------------|-----------|--------|-------|---------|---------|
| 62-75-9    | N-Methyl-N-nitrosomethylamine |           | 986    | ug/kg | 88.7    | 444     |
| 108-95-2   | Phenol                        |           | 1420   | ug/kg | 88.7    | 444     |
| 95-57-8    | 2-Chlorophenol                |           | 1600   | ug/kg | 88.7    | 444     |
| 106-46-7   | 1,4-Dichlorobenzene           |           | 1460   | ug/kg | 88.7    | 444     |
| 621-64-7   | N-Nitrosodipropylamine        |           | 1390   | ug/kg | 88.7    | 444     |
| 59-50-7    | 4-Chloro-3-methylphenol       |           | 1710   | ug/kg | 88.7    | 444     |
| 83-32-9    | Acenaphthene                  |           | 1520   | ug/kg | 14.6    | 44.4    |
| 121-14-2   | 2,4-Dinitrotoluene            |           | 1640   | ug/kg | 44.4    | 444     |
| 100-02-7   | 4-Nitrophenol                 |           | 1650   | ug/kg | 146     | 444     |
| 87-86-5    | Pentachlorophenol             |           | 1790   | ug/kg | 111     | 444     |
| 129-00-0   | Pyrene                        |           | 1940   | ug/kg | 13.3    | 44.4    |
| 110-86-1   | Pyridine                      |           | 1150   | ug/kg | 88.7    | 444     |
| 62-53-3    | Aniline                       | J         | 191    | ug/kg | 133     | 444     |
| 111-44-4   | bis(2-Chloroethyl) ether      |           | 1150   | ug/kg | 88.7    | 444     |
| 541-73-1   | 1,3-Dichlorobenzene           |           | 1450   | ug/kg | 88.7    | 444     |
| 100-51-6   | Benzyl alcohol                |           | 1770   | ug/kg | 133     | 444     |
| 95-50-1    | 1,2-Dichlorobenzene           |           | 1500   | ug/kg | 88.7    | 444     |
| 108-60-1   | bis(2-Chloroisopropyl)ether   |           | 1170   | ug/kg | 88.7    | 444     |
| 95-48-7    | o-Cresol                      |           | 1490   | ug/kg | 88.7    | 444     |
| 65794-96-9 | m,p-Cresols                   |           | 1690   | ug/kg | 133     | 444     |
| 67-72-1    | Hexachloroethane              |           | 1230   | ug/kg | 88.7    | 444     |
| 98-95-3    | Nitrobenzene                  |           | 1340   | ug/kg | 88.7    | 444     |
| 78-59-1    | Isophorone                    |           | 1430   | ug/kg | 88.7    | 444     |
| 88-75-5    | 2-Nitrophenol                 |           | 1510   | ug/kg | 88.7    | 444     |
| 105-67-9   | 2,4-Dimethylphenol            |           | 1570   | ug/kg | 155     | 444     |
| 111-91-1   | bis(2-Chloroethoxy)methane    |           | 1380   | ug/kg | 88.7    | 444     |
| 120-83-2   | 2,4-Dichlorophenol            |           | 1670   | ug/kg | 88.7    | 444     |
| 65-85-0    | Benzoic acid                  |           | 4190   | ug/kg | 222     | 887     |
| 91-20-3    | Naphthalene                   |           | 1360   | ug/kg | 13.3    | 44.4    |
| 106-47-8   | 4-Chloroaniline               | J         | 288    | ug/kg | 88.7    | 444     |
| 87-68-3    | Hexachlorobutadiene           |           | 1670   | ug/kg | 88.7    | 444     |
| 91-57-6    | 2-Methylnaphthalene           |           | 1600   | ug/kg | 8.87    | 44.4    |
| 77-47-4    | Hexachlorocyclopentadiene     |           | 809    | ug/kg | 88.7    | 444     |
| 88-06-2    | 2,4,6-Trichlorophenol         |           | 1760   | ug/kg | 88.7    | 444     |
| 95-95-4    | 2,4,5-Trichlorophenol         |           | 1750   | ug/kg | 88.7    | 444     |
| 91-58-7    | 2-Chloronaphthalene           |           | 1570   | ug/kg | 14.6    | 44.4    |
| 88-74-4    | 2-Nitroaniline                |           | 1300   | ug/kg | 88.7    | 444     |
|            | <i>o</i> -Nitroaniline        |           |        |       |         |         |
| 99-09-2    | 3-Nitroaniline                |           | 670    | ug/kg | 88.7    | 444     |



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

Page 2 of 2

SDG Number: 10-1324  
Lab Sample ID: 1202023499  
Client Sample: QC for batch 944873  
Client ID: RE15-10-8410MSD  
Batch ID: 944874  
Run Date: 01/27/2010 15:26  
Prep Date: 01/25/2010 21:06  
Data File: s3a2716.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.02 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 24.9  
Project: QC  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.   | Parmname                     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|-----------|------------------------------|-----------|--------|-------|---------|---------|
|           | <i>m</i> -Nitroaniline       |           |        |       |         |         |
| 131-11-3  | Dimethylphthalate            |           | 1650   | ug/kg | 88.7    | 444     |
| 606-20-2  | 2,6-Dinitrotoluene           |           | 1560   | ug/kg | 44.4    | 444     |
| 208-96-8  | Acenaphthylene               |           | 1600   | ug/kg | 13.3    | 44.4    |
| 51-28-5   | 2,4-Dinitrophenol            |           | 1200   | ug/kg | 169     | 887     |
| 132-64-9  | Dibenzofuran                 |           | 2050   | ug/kg | 88.7    | 444     |
| 84-66-2   | Diethylphthalate             |           | 1730   | ug/kg | 88.7    | 444     |
| 86-73-7   | Fluorene                     |           | 1660   | ug/kg | 13.3    | 44.4    |
| 7005-72-3 | 4-Chlorophenylphenylether    |           | 1780   | ug/kg | 88.7    | 444     |
| 534-52-1  | 2-Methyl-4,6-dinitrophenol   |           | 1300   | ug/kg | 88.7    | 444     |
| 100-01-6  | 4-Nitroaniline               |           | 783    | ug/kg | 133     | 444     |
|           | <i>p</i> -Nitroaniline       |           |        |       |         |         |
| 122-39-4  | Diphenylamine                |           | 1590   | ug/kg | 88.7    | 444     |
| 122-66-7  | Azobenzene                   |           | 1330   | ug/kg | 88.7    | 444     |
|           | <i>1,2-Diphenylhydrazine</i> |           |        |       |         |         |
| 101-55-3  | 4-Bromophenylphenylether     |           | 1520   | ug/kg | 88.7    | 444     |
| 118-74-1  | Hexachlorobenzene            |           | 1530   | ug/kg | 88.7    | 444     |
| 85-01-8   | Phenanthrene                 |           | 1600   | ug/kg | 13.3    | 44.4    |
| 120-12-7  | Anthracene                   |           | 1610   | ug/kg | 8.87    | 44.4    |
| 84-74-2   | Di-n-butylphthalate          |           | 1780   | ug/kg | 88.7    | 444     |
| 206-44-0  | Fluoranthene                 |           | 1750   | ug/kg | 13.3    | 44.4    |
| 85-68-7   | Butylbenzylphthalate         |           | 1890   | ug/kg | 88.7    | 444     |
| 56-55-3   | Benzo(a)anthracene           |           | 1590   | ug/kg | 13.3    | 44.4    |
| 91-94-1   | 3,3'-Dichlorobenzidine       | U         | 444    | ug/kg | 133     | 444     |
| 218-01-9  | Chrysene                     |           | 1610   | ug/kg | 13.3    | 44.4    |
| 117-81-7  | bis(2-Ethylhexyl)phthalate   |           | 1910   | ug/kg | 88.7    | 444     |
| 117-84-0  | Di-n-octylphthalate          |           | 2390   | ug/kg | 88.7    | 444     |
| 205-99-2  | Benzo(b)fluoranthene         |           | 1830   | ug/kg | 13.3    | 44.4    |
| 207-08-9  | Benzo(k)fluoranthene         |           | 1780   | ug/kg | 13.3    | 44.4    |
| 50-32-8   | Benzo(a)pyrene               |           | 1770   | ug/kg | 13.3    | 44.4    |
| 193-39-5  | Indeno(1,2,3-cd)pyrene       |           | 1690   | ug/kg | 13.3    | 44.4    |
| 53-70-3   | Dibenzo(a,h)anthracene       |           | 1740   | ug/kg | 13.3    | 44.4    |
| 191-24-2  | Benzo(ghi)perylene           |           | 1620   | ug/kg | 13.3    | 44.4    |
| 120-82-1  | 1,2,4-Trichlorobenzene       |           | 1620   | ug/kg | 88.7    | 444     |

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2716.d  
 Lab Smp Id: 1202023499 Client Smp ID: RE15-10-8410MSD  
 Inj Date : 27-JAN-2010 15:26  
 Operator : JLD1 Inst ID: MSD3.i  
 Smp Info : |1202023499|944874|1|SVMF|1|MSD  
 Misc Info : |MSD8270\_S|WBN100107-02|  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m  
 Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD  
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
 Als bottle: 16 QC Sample: MSD  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1324.sub  
 Target Version: 3.50  
 Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.02000  | weight of sample          |
| M    | 24.92040  | % moisture                |

Cpnd Variable Local Compound Variable

| Compounds                   | QUANT SIG |        |        |         | RESPONSE | CONCENTRATIONS       |                  |
|-----------------------------|-----------|--------|--------|---------|----------|----------------------|------------------|
|                             | MASS      | RT     | EXP RT | REL RT  |          | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/Kg) |
| * 10 1,4-Dichlorobenzene-d4 | 152       | 4.816  | 4.817  | (1.000) | 219997   | 40.0000              |                  |
| * 29 Naphthalene-d8         | 136       | 6.100  | 6.100  | (1.000) | 927251   | 40.0000              |                  |
| * 46 Acenaphthene-d10       | 164       | 7.973  | 7.973  | (1.000) | 503952   | 40.0000              |                  |
| * 67 Phenanthrene-d10       | 188       | 9.590  | 9.588  | (1.000) | 852116   | 40.0000              |                  |
| * 91 Chrysene-d12           | 240       | 12.616 | 12.610 | (1.000) | 526439   | 40.0000              |                  |
| * 98 Perylene-d12           | 264       | 14.953 | 14.945 | (1.000) | 277466   | 40.0000              |                  |
| \$ 3 2-Fluorophenol         | 112       | 3.639  | 3.633  | (0.756) | 358335   | 62.5956              | 2780             |
| \$ 5 Phenol-d5              | 99        | 4.425  | 4.418  | (0.919) | 430657   | 59.8584              | 2660             |
| \$ 20 Nitrobenzene-d5       | 82        | 5.356  | 5.357  | (0.878) | 205143   | 29.9501              | 1330             |
| \$ 39 2-Fluorobiphenyl      | 172       | 7.229  | 7.227  | (0.907) | 434995   | 33.3941              | 1480             |
| \$ 60 2,4,6-Tribromophenol  | 329       | 8.827  | 8.825  | (1.107) | 117601   | 81.4022              | 3610             |
| \$ 81 p-Terphenyl-d14       | 244       | 11.299 | 11.297 | (0.896) | 467215   | 51.6345              | 2290             |

| Compounds                      | QUANT SIG |        |        |         |          |           | CONCENTRATIONS |  |
|--------------------------------|-----------|--------|--------|---------|----------|-----------|----------------|--|
|                                | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN | FINAL          |  |
|                                | =====     | ==     | =====  | =====   | =====    | (ng/ul)   | (ug/Kg)        |  |
| 6 Phenol                       | 94        | 4.437  | 4.430  | (0.921) | 243779   | 32.0406   | 1420           |  |
| 8 2-Chlorophenol               | 128       | 4.616  | 4.615  | (0.959) | 208722   | 36.1264   | 1600           |  |
| 11 1,4-Dichlorobenzene         | 146       | 4.833  | 4.832  | (1.004) | 221704   | 32.8716   | 1460           |  |
| 17 N-Nitrosodipropylamine      | 70        | 5.186  | 5.187  | (1.077) | 152924   | 31.2739   | 1390 (Q)       |  |
| 28 1,2,4-Trichlorobenzene      | 180       | 6.029  | 6.029  | (0.988) | 194614   | 36.4490   | 1620           |  |
| 33 4-Chloro-3-methylphenol     | 107       | 6.661  | 6.643  | (1.092) | 209614   | 38.4723   | 1710           |  |
| 47 Acenaphthene                | 154       | 8.008  | 8.008  | (1.004) | 408630   | 34.2523   | 1520           |  |
| 50 2,4-Dinitrotoluene          | 165       | 8.164  | 8.164  | (1.024) | 148804   | 36.8655   | 1640           |  |
| 52 4-Nitrophenol               | 139       | 8.088  | 8.070  | (1.014) | 85748    | 37.2340   | 1650           |  |
| 65 Pentachlorophenol           | 266       | 9.372  | 9.365  | (0.977) | 85947    | 40.2379   | 1780           |  |
| 79 Pyrene                      | 202       | 11.160 | 11.156 | (0.885) | 659624   | 43.7385   | 1940           |  |
| 2 Pyridine                     | 79        | 2.701  | 2.680  | (0.561) | 116546   | 26.0316   | 1150           |  |
| 4 Aniline                      | 66        | 4.502  | 4.503  | (0.935) | 14471    | 4.31506   | 191 (aQR)      |  |
| 7 bis(2-Chloroethyl) ether     | 63        | 4.540  | 4.541  | (0.943) | 155349   | 25.8104   | 1140           |  |
| 9 1,3-Dichlorobenzene          | 146       | 4.763  | 4.764  | (0.989) | 218060   | 32.7784   | 1450           |  |
| 12 Benzyl alcohol              | 108       | 4.930  | 4.926  | (1.024) | 160332   | 39.8697   | 1770           |  |
| 13 1,2-Dichlorobenzene         | 146       | 4.980  | 4.982  | (1.034) | 214382   | 33.8937   | 1500           |  |
| 14 bis(2-Chloroisopropyl)ether | 45        | 5.048  | 5.049  | (1.048) | 375668   | 26.3617   | 1170           |  |
| 15 o-Cresol                    | 107       | 5.021  | 5.011  | (1.043) | 165695   | 33.4877   | 1480           |  |
| 18 m,p-Cresols                 | 107       | 5.165  | 5.164  | (1.073) | 245657   | 38.1629   | 1690           |  |
| 19 Hexachloroethane            | 117       | 5.315  | 5.316  | (1.104) | 80563    | 27.8164   | 1230           |  |
| 21 Nitrobenzene                | 77        | 5.377  | 5.378  | (0.882) | 217502   | 30.2000   | 1340           |  |
| 22 Isophorone                  | 82        | 5.609  | 5.610  | (0.920) | 412204   | 32.2924   | 1430           |  |
| 23 2-Nitrophenol               | 139       | 5.694  | 5.695  | (0.934) | 112619   | 34.0804   | 1510           |  |
| 24 2,4-Dimethylphenol          | 122       | 5.706  | 5.704  | (0.935) | 202072   | 35.3719   | 1570           |  |
| 25 bis(2-Chloroethoxy)methane  | 93        | 5.809  | 5.809  | (0.952) | 229924   | 31.0248   | 1380           |  |
| 26 2,4-Dichlorophenol          | 162       | 5.938  | 5.933  | (0.973) | 180786   | 37.6049   | 1670           |  |
| 27 Benzoic acid                | 105       | 5.844  | 5.800  | (0.958) | 380068   | 94.5154   | 4190           |  |
| 30 Naphthalene                 | 128       | 6.123  | 6.120  | (1.004) | 596123   | 30.5694   | 1360           |  |
| 31 4-Chloroaniline             | 127       | 6.170  | 6.162  | (1.012) | 36053    | 6.48307   | 288 (aR)       |  |
| 32 Hexachlorobutadiene         | 225       | 6.226  | 6.226  | (1.021) | 115037   | 37.7486   | 1670           |  |
| 34 2-Methylnaphthalene         | 142       | 6.846  | 6.845  | (1.122) | 423303   | 36.1038   | 1600           |  |
| 36 Hexachlorocyclopentadiene   | 237       | 6.999  | 6.998  | (0.878) | 52290    | 18.2311   | 809            |  |
| 37 2,4,6-Trichlorophenol       | 196       | 7.140  | 7.136  | (0.896) | 143129   | 39.6251   | 1760           |  |
| 38 2,4,5-Trichlorophenol       | 196       | 7.184  | 7.171  | (0.901) | 154062   | 39.4772   | 1750           |  |
| 40 2-Chloronaphthalene         | 162       | 7.373  | 7.371  | (0.925) | 421721   | 35.4184   | 1570           |  |
| 42 o-Nitroaniline              | 65        | 7.479  | 7.474  | (0.938) | 136696   | 29.2317   | 1300           |  |
| 41 m-Nitroaniline              | 138       | 7.920  | 7.917  | (0.993) | 33690    | 15.1080   | 670 (R)        |  |
| 43 Dimethylphthalate           | 163       | 7.652  | 7.656  | (0.960) | 507287   | 37.1164   | 1650           |  |
| 44 2,6-Dinitrotoluene          | 165       | 7.732  | 7.729  | (0.970) | 114352   | 35.2081   | 1560           |  |
| 45 Acenaphthylene              | 152       | 7.823  | 7.823  | (0.981) | 675332   | 36.0490   | 1600           |  |
| 48 2,4-Dinitrophenol           | 184       | 8.029  | 8.026  | (1.007) | 39230    | 27.1133   | 1200 (Q)       |  |
| 49 Dibenzofuran                | 168       | 8.194  | 8.193  | (1.028) | 707592   | 46.2457   | 2050           |  |
| 51 Diethylphthalate            | 149       | 8.409  | 8.411  | (1.055) | 528514   | 38.9056   | 1730           |  |
| 53 Fluorene                    | 166       | 8.568  | 8.563  | (1.075) | 484823   | 37.5141   | 1660           |  |
| 54 4-Chlorophenylphenylether   | 204       | 8.550  | 8.549  | (1.072) | 243193   | 40.0205   | 1780           |  |
| 55 2-Methyl-4,6-dinitrophenol  | 198       | 8.606  | 8.605  | (0.897) | 64316    | 29.3033   | 1300           |  |

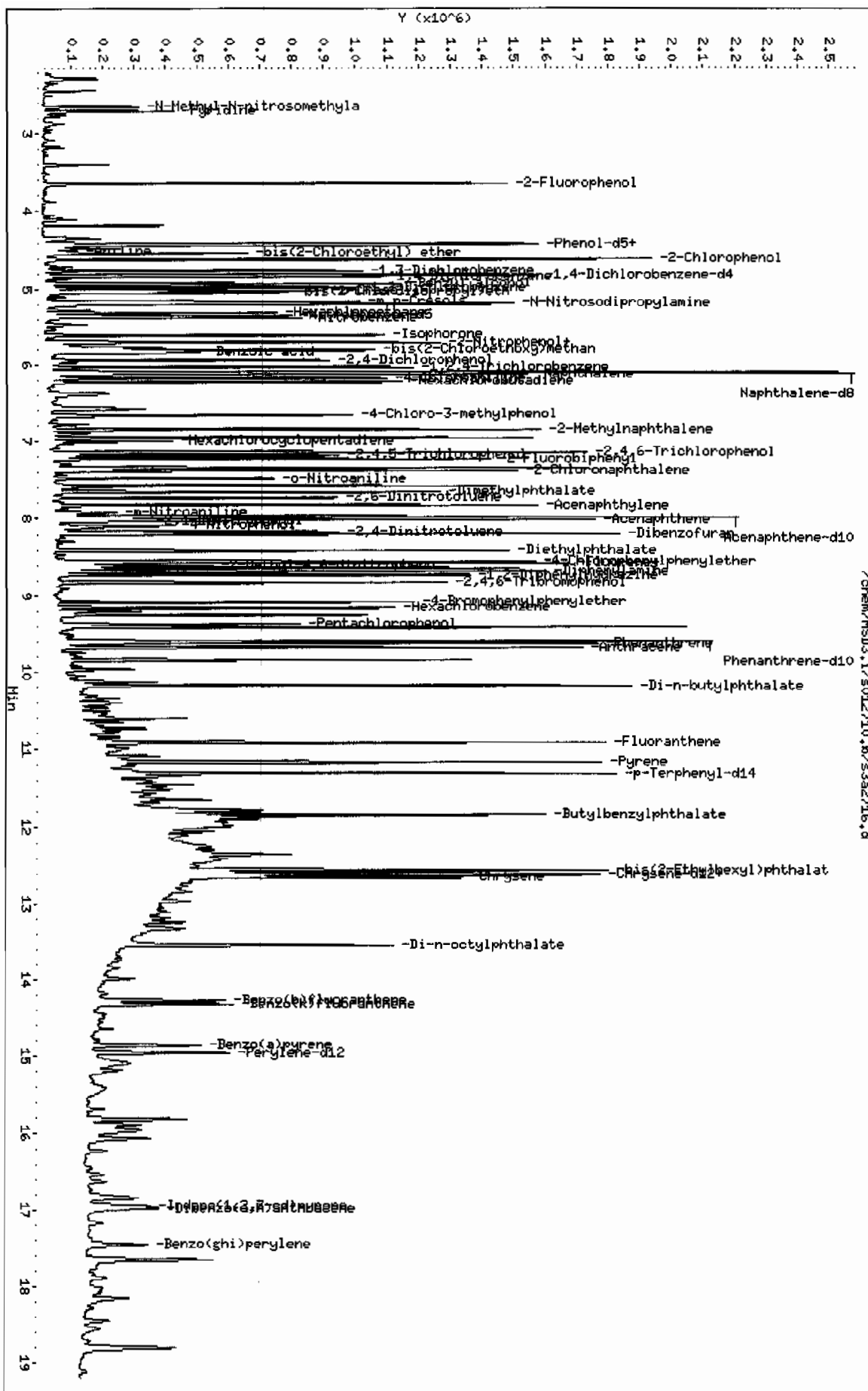
| Compounds                       | QUANT SIG | CONCENTRATIONS |        |         |        |          |           |         |
|---------------------------------|-----------|----------------|--------|---------|--------|----------|-----------|---------|
|                                 |           | MASS           | RT     | EXP RT  | REL RT | RESPONSE | ON-COLUMN | FINAL   |
|                                 |           |                |        |         |        |          | (ng/ul)   | (ug/Kg) |
| =====                           | =====     | ==             | =====  | =====   | =====  | =====    | =====     |         |
| 56 p-Nitroaniline               | 138       | 8.582          | 8.578  | (1.076) | 38625  | 17.6509  | 783       |         |
| 133 Diphenylamine               | 169       | 8.680          | 8.678  | (0.905) | 404540 | 35.8256  | 1590      |         |
| 58 1,2-Diphenylhydrazine        | 77        | 8.727          | 8.725  | (0.910) | 498179 | 29.9268  | 1330      |         |
| 61 4-Bromophenylphenylether     | 248       | 9.083          | 9.083  | (0.947) | 124256 | 34.2240  | 1520      |         |
| 63 Hexachlorobenzene            | 284       | 9.157          | 9.157  | (0.955) | 129839 | 34.4341  | 1530      |         |
| 68 Phenanthrene                 | 178       | 9.617          | 9.615  | (1.003) | 676182 | 36.1014  | 1600      |         |
| 69 Anthracene                   | 178       | 9.673          | 9.671  | (1.009) | 676386 | 36.1761  | 1600      |         |
| 72 Di-n-butylphthalate          | 149       | 10.177         | 10.173 | (1.061) | 906316 | 40.0759  | 1780      |         |
| 76 Fluoranthene                 | 202       | 10.909         | 10.906 | (1.138) | 672587 | 39.4644  | 1750      |         |
| 85 Butylbenzylphthalate         | 149       | 11.834         | 11.828 | (0.938) | 321274 | 42.5699  | 1890      |         |
| 89 Benzo(a)anthracene           | 228       | 12.601         | 12.592 | (0.999) | 433192 | 35.9381  | 1590      |         |
| 92 Chrysene                     | 228       | 12.651         | 12.646 | (1.003) | 411525 | 36.2952  | 1610      |         |
| 93 bis(2-Ethylhexyl)phthalate   | 149       | 12.556         | 12.548 | (0.995) | 447937 | 43.1256  | 1910      |         |
| 94 Di-n-octylphthalate          | 149       | 13.545         | 13.538 | (0.906) | 604862 | 53.8320  | 2390      |         |
| 95 Benzo(b)fluoranthene         | 252       | 14.275         | 14.266 | (0.955) | 268029 | 41.1627  | 1830      |         |
| 96 Benzo(k)fluoranthene         | 252       | 14.323         | 14.316 | (0.958) | 271115 | 40.1073  | 1780      |         |
| 97 Benzo(a)pyrene               | 252       | 14.855         | 14.845 | (0.993) | 225917 | 39.8160  | 1770      |         |
| 99 Indeno(1,2,3-cd)pyrene       | 276       | 16.946         | 16.934 | (1.133) | 176157 | 38.0574  | 1690      |         |
| 100 Dibenzo(a,h)anthracene      | 278       | 16.979         | 16.966 | (1.135) | 148494 | 39.3093  | 1740      |         |
| 101 Benzo(ghi)perylene          | 276       | 17.461         | 17.446 | (1.168) | 138527 | 36.4611  | 1620      |         |
| 1 N-Methyl-N-nitrosomethylamine | 74        | 2.645          | 2.639  | (0.549) | 88991  | 22.2134  | 986       |         |

#### QC Flag Legend

- a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- R - Spike/Surrogate failed recovery limits.

Data File: /chem/HSD3.i/s012710.b/s3a2716.d  
 Date: 27-JAN-2010 15:26  
 Client ID: RE15-10-8410MSD  
 Sample Info: 1202023499194874113SWH11MSD  
 Volume Injected (uL): 0.5  
 Column Phase: JSM DB-5MS

Instrument: HSD3.i  
 Operator: JLD  
 Column diameter: 0.20



# Miscellaneous Data

# Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 944873      Verified by: \_\_\_\_\_  
 Analyst: Alberto Velasco  
 Method: SW846 3550B      Lab SOP: GL-OA-E-010 REV# 18  
 Instrument: Semi-Volatiles Manual

| Sample ID                  | Run Date             | Aliquot (g) | Prepped Aliquot (mL) | Prepped Factor (mL/g) |
|----------------------------|----------------------|-------------|----------------------|-----------------------|
| 1202023496 MB              | 25-JAN-2010 21:06:16 | 30          | 1                    | 0.03333               |
| 1202023497 LCS             | 25-JAN-2010 21:06:16 | 30          | 1                    | 0.03333               |
| 245114002                  | 25-JAN-2010 21:06:16 | 30.09       | 1                    | 0.03323               |
| 1202023498 MS (245114002)  | 25-JAN-2010 21:06:16 | 30.05       | 1                    | 0.03328               |
| 1202023499 MSD (245114002) | 25-JAN-2010 21:06:16 | 30.02       | 1                    | 0.03331               |
| 245114003                  | 25-JAN-2010 21:06:16 | 30.14       | 1                    | 0.03318               |
| 245114004                  | 25-JAN-2010 21:06:16 | 30.03       | 1                    | 0.0333                |
| 245114005                  | 25-JAN-2010 21:06:16 | 30.12       | 1                    | 0.0332                |
| 245114006                  | 25-JAN-2010 21:06:16 | 30.04       | 1                    | 0.03329               |
| 245114007                  | 25-JAN-2010 21:06:16 | 30.05       | 1                    | 0.03328               |
| 245114008                  | 25-JAN-2010 21:06:16 | 30.1        | 1                    | 0.03322               |
| 245114009                  | 25-JAN-2010 21:06:16 | 30.14       | 1                    | 0.03318               |
| 245114010                  | 25-JAN-2010 21:06:16 | 30.02       | 1                    | 0.03331               |
| 245114011                  | 25-JAN-2010 21:06:16 | 30.17       | 1                    | 0.03315               |
| 245114012                  | 25-JAN-2010 21:06:16 | 30.06       | 1                    | 0.03327               |
| 245114013                  | 25-JAN-2010 21:06:16 | 30.14       | 1                    | 0.03318               |
| 245114014                  | 25-JAN-2010 21:06:16 | 30.03       | 1                    | 0.0333                |
| 245114015                  | 25-JAN-2010 21:06:16 | 30.18       | 1                    | 0.03313               |

| Type  | Sample Id  | Description                 | Serial Number | Spike Amt | Units | Comments:             |
|-------|------------|-----------------------------|---------------|-----------|-------|-----------------------|
| LCS   | 1202023497 | BNA LCS w/o Benzidine 50ppm | UE091229-12B  | 1         | mL    | Verified By: AJS      |
| LCS   | 1202023497 | BENZIDINE LCS               | UE091229-21   | 1         | mL    | Final Solvent: CH2Cl2 |
| MS    | 1202023498 | BNA LCS w/o Benzidine 50ppm | UE091229-12B  | 1         | mL    |                       |
| MS    | 1202023498 | BENZIDINE LCS               | UE091229-21   | 1         | mL    |                       |
| MSD   | 1202023499 | BNA LCS w/o Benzidine 50ppm | UE091229-12B  | 1         | mL    |                       |
| MSD   | 1202023499 | BENZIDINE LCS               | UE091229-21   | 1         | mL    |                       |
| SURR  | All        | BNA for all Surrogate       | UE091229-10   | 1         | mL    |                       |
| REGNT | All        | Acetone                     | 1259670       | 150       | mL    |                       |
| REGNT | All        | Methylene Chloride          | 1259674-D     | 150       | mL    |                       |
| SOURC | All        | SODIUM SULFATE              | 1256907       | 30        | g     |                       |

## GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD3

DATE: 01/20/2010

METHOD: See raw data

OPERATOR: JLD1

REVIEWED BY:

DATE:

HARDWARE CONFIGURATION &amp; METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 246976-D

Multiplier Voltage: 1035 Emv Extr. Injection Volume: 0.5, 1.0 ul

DFTPP Solution ID: WBN100107-01 Internal Std ID: WBN100107-02

## CALIBRATION &amp; QC INFORMATION:

Initial Calibration Dates: See Calibration History and Standard Logbook.

Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 23 Sequence Number: /chem/MSD3.i/s012010a.b

| Data File     | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch   | SDG      | Dilution | Client   | Comments                            |
|---------------|-------------------|---------|---------------------|---------|----------|----------|----------|-------------------------------------|
| s3a2013-D.d   | WBN100107-01      | JLD1    | 20-JAN-2010 17:17   | 150NG   | s012010a | 1.0      | DFTPP    | USE; 82700 MEGA/APICAL/ICV          |
| s3a2013.d     | WBN100107-01      | JLD1    | 20-JAN-2010 17:17   | 150NG   | s012010a | 1.0      | DFTPP    | USE; 82700 MEGA/APICAL/ICV          |
| s3a2014.d     | INSTRUMENTBLANK   | JLD1    | 20-JAN-2010 17:33   |         | s012010a | 1.0      | IB       |                                     |
| s3a2015.d     | WBN100112-08      | JLD1    | 20-JAN-2010 17:59   | 101PPM  | s012010a | 1.0      | MEGAICAL | USE; LEV 1                          |
| s3a2016-MQC.d | WBN100112-07      | JLD1    | 20-JAN-2010 18:29   | 110PPM  | s012010a | 1.0      | MEGAICAL | 82700 PASS MQC FOR C 41             |
| s3a2016.d     | WBN100112-07      | JLD1    | 20-JAN-2010 18:29   | 110PPM  | s012010a | 1.0      | MEGAICAL | USE; LEV 2                          |
| s3a2017.d     | WBN100112-06      | JLD1    | 20-JAN-2010 18:58   | 120PPM  | s012010a | 1.0      | MEGAICAL | USE; LEV 3                          |
| s3a2018.d     | WBN100112-05      | JLD1    | 20-JAN-2010 19:28   | 140PPM  | s012010a | 1.0      | MEGAICAL | USE; LEV 4                          |
| s3a2019.d     | WBN100112-04      | JLD1    | 20-JAN-2010 19:58   | 150PPM  | s012010a | 1.0      | MEGAICAL | USE; LEV 5                          |
| s3a2020.d     | WBN100112-03      | JLD1    | 20-JAN-2010 20:27   | 180PPM  | s012010a | 1.0      | MEGAICAL | USE; LEV 6                          |
| s3a2021.d     | WBN100112-02      | JLD1    | 20-JAN-2010 20:57   | 1100PPM | s012010a | 1.0      | MEGAICAL | USE; LEV 7                          |
| s3a2022.d     | WBN100112-01      | JLD1    | 20-JAN-2010 21:26   | 120PPM  | s012010a | 1.0      | MEGAICAL | USE; LEV 8 (ICAL FAILS 203/179/216) |
| s3a2023.d     | WBN100103-01      | JLD1    | 20-JAN-2010 21:56   | 110PPM  | s012010a | 1.0      | APICAL   | USE; LEV 2                          |
| s3a2024.d     | WBN100103-02      | JLD1    | 20-JAN-2010 22:22   | 120PPM  | s012010a | 1.0      | APICAL   | USE; LEV 3                          |
| s3a2025.d     | WBN100103-03.1    | JLD1    | 20-JAN-2010 22:48   | 140PPM  | s012010a | 1.0      | APICAL   | USE; LEV 4                          |
| s3a2026.d     | WBN100103-04      | JLD1    | 20-JAN-2010 23:15   | 150PPM  | s012010a | 1.0      | APICAL   | USE; LEV 5                          |
| s3a2027.d     | WBN100103-05      | JLD1    | 20-JAN-2010 23:41   | 180PPM  | s012010a | 1.0      | APICAL   | USE; LEV 6                          |
| s3a2028.d     | WBN100103-06      | JLD1    | 21-JAN-2010 00:07   | 1100PPM | s012010a | 1.0      | APICAL   | USE; LEV 7                          |
| s3a2029.d     | WBN100103-07      | JLD1    | 21-JAN-2010 00:33   | 120PPM  | s012010a | 1.0      | APICAL   | USE; LEV 8                          |



|             |                |      |                   |       |          |   |             |                             |  |
|-------------|----------------|------|-------------------|-------|----------|---|-------------|-----------------------------|--|
| s3a2030-J.d | WEN100106-09.3 | JLD1 | 21-JAN-2010 00:59 | 40PPM | s012010a | : | 1.0 MEGAICV | USE; 8270D FAILS C 184 >60% |  |
| s3a2030.d   | WEN100106-09.3 | JLD1 | 21-JAN-2010 00:59 | 40PPM | s012010a | : | 1.0 MEGAICV | USE; 8270C FAILS C 184      |  |
| s3a2031-J.d | WEN100103-08.1 | JLD1 | 21-JAN-2010 01:29 | 40PPM | s012010a | : | 1.0 APICV   | USE; 8270D FAILS C 119 >60% |  |
| s3a2031.d   | WEN100103-08.1 | JLD1 | 21-JAN-2010 01:29 | 40PPM | s012010a |   | 1.0 APICV   | USE; 8270C FAILS C 119 >60% |  |
| s3a2032.d   | WEN100107-01   | JLD1 | 21-JAN-2010 01:57 | 50NG  | s012010a | : | 1.0 DFTPP   | DOSE; TUNE FAILS            |  |

Instrument Batch: /chem/MSD3.i/s012010a.b

Page: 1

## GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD3

DATE: 01/26/2010 METHOD: See raw data OPERATOR: JLD1 REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 246976-D  
Multiplier Voltage: 1035 Emv Extr. Injection Volume: 0.5, 1.0 ul  
DFTPP Solution ID: WBN100107-01 Internal Std ID: WBN100107-02  
CALIBRATION & QC INFORMATION:  
Initial Calibration Dates: See Calibration History and Standard Logbook.  
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 23 Sequence Number: /chem/MSD3.i/s012610a.b

| Data File | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch   | SDG        | Dilution | Client    | Comments                      |
|-----------|-------------------|---------|---------------------|---------|------------|----------|-----------|-------------------------------|
| s3a2606.d | WBN100107-01      | JLD1    | 26-JAN-2010 11:36   | 150NG   | s012610    | 1.0      | DFTPP     | USE                           |
| s3a2607.d | WBN100121-17.2    | JLD1    | 26-JAN-2010 11:48   | 140 PPM | s012610    | 1.0      | MEGACVS   | USE; (319045)                 |
| s3a2608.d | WBN100120-08.3    | JLD1    | 26-JAN-2010 12:19   | 140 PPM | s012610    | 1.0      | APCVS     | USE                           |
| s3a2609.d | WBN100103-26.3    | JLD1    | 26-JAN-2010 12:48   | 140 PPM | s012610    | 1.0      | PSTCVS    | USE                           |
| s3a2610.d | 1202023496        | JLD1    | 26-JAN-2010 13:18   | 944874  | 10-1324    | 1.0      | SBLK01    | USE                           |
| s3a2611.d | 1202023497        | JLD1    | 26-JAN-2010 13:44   | 944874  | 10-1324    | 1.0      | SBLK01LCS | USE                           |
| s3a2612.d | 1202022469        | JLD1    | 26-JAN-2010 14:10   | 944455  | 10-1301    | 1.0      | SBLK01LCS | USE; RR OF S3A2507; ISTD PASS |
| s3a2613.d | 1245099005        | JLD1    | 26-JAN-2010 14:37   | 944455  | 10-1301    | 1.0      | LANL      | DUSE; RR OF S3A2514; ISTD LOW |
| s3a2614.d | 245099006         | JLD1    | 26-JAN-2010 15:03   | 944455  | 10-1301    | 1.0      | LANL      | USE; RR OF S3A2515; ISTD PASS |
| s3a2615.d | WBN100121-05.2    | JLD1    | 26-JAN-2010 15:30   | 140 PPM | s012610a   | 1.0      | BJOCVS    | USE                           |
| s3a2616.d | 1202024272        | JLD1    | 26-JAN-2010 16:04   | 945165  | IDOC-BJCOS | 1.0      | SBLK01    | DUSE                          |
| s3a2617.d | 1202024265        | JLD1    | 26-JAN-2010 16:33   | 945165  | IDOC-BJCOS | 1.0      | SBLK01LCS | DUSE                          |
| s3a2618.d | 1202024266        | JLD1    | 26-JAN-2010 17:03   | 945165  | IDOC-BJCOS | 1.0      | SBLK02LCS | DUSE                          |
| s3a2619.d | 1202024267        | JLD1    | 26-JAN-2010 17:32   | 945165  | IDOC-BJCOS | 1.0      | SBLK03LCS | DUSE                          |
| s3a2620.d | 1202024268        | JLD1    | 26-JAN-2010 17:58   | 945165  | IDOC-BJCOS | 1.0      | SBLK04LCS | DUSE                          |
| s3a2621.d | 1202024269        | JLD1    | 26-JAN-2010 18:24   | 945165  | IDOC-BJCOS | 1.0      | SBLK05LCS | DUSE                          |
| s3a2622.d | 1245446001        | JLD1    | 26-JAN-2010 18:50   | 945165  | IDOC-BJCOS | 1.0      | QCQA      | DUSE                          |
| s3a2623.d | 1202024202        | JLD1    | 26-JAN-2010 19:16   | 945122  | IDOC-BJCOS | 1.0      | SBLK01    | DUSE                          |
| s3a2624.d | 1202024203        | JLD1    | 26-JAN-2010 19:42   | 945122  | IDOC-BJCOS | 1.0      | SBLK01LCS | DUSE                          |

|           |            |      |                   |        |            |               |                                |
|-----------|------------|------|-------------------|--------|------------|---------------|--------------------------------|
| s3a2625.d | 1202024204 | JLD1 | 26-JAN-2010 20:08 | 945122 | IDOC-BJCOL | 1.0 SBLK02LCS | DUSE                           |
| s3a2626.d | 1202024205 | JLD1 | 26-JAN-2010 20:34 | 945122 | IDOC-BJCOL | 1.0 SBLK03LCS | DUSE                           |
| s3a2627.d | 1202024206 | JLD1 | 26-JAN-2010 21:00 | 945122 | IDOC-BJCOL | 1.0 SBLK04LCS | DUSE                           |
| s3a2628.d | 1202024207 | JLD1 | 26-JAN-2010 21:27 | 945122 | IDOC-BJCOL | 1.0 SBLK05LCS | DUSE                           |
| s3a2629.d | 245445001  | JLD1 | 26-JAN-2010 21:53 | 945122 | IDOC-BJCOL | 1.0 QCQA      | DUSE                           |
| s3a2630.d | 245099007  | JLD1 | 26-JAN-2010 22:19 | 944455 | 10-1301    | 1.0 LANL      | USE; RR OF S3A2516; ISTD PASS  |
| s3a2631.d | 245099008  | JLD1 | 26-JAN-2010 22:45 | 944455 | 10-1301    | 1.0 LANL      | DUSE; RR OF S3A2517; ISTD LOW  |
| s3a2632.d | 245099009  | JLD1 | 26-JAN-2010 23:11 | 944455 | 10-1301    | 1.0 LANL      | DUSE; RR OF S3A2518; ISTD PASS |
| s3a2633.d | 245099010  | JLD1 | 26-JAN-2010 23:36 | 944455 | 10-1301    | 1.0 LANL      | DUSE; RR OF S3A2519; ISTD PASS |
| s3a2634.d | 245099011  | JLD1 | 27-JAN-2010 00:02 | 944455 | 10-1301    | 1.0 LANL      | DUSE; OUT OF TUNE              |
| s3a2635.d | 245099012  | JLD1 | 27-JAN-2010 00:28 | 944455 | 10-1301    | 1.0 LANL      | DUSE; OUT OF TUNE              |
| s3a2636.d | 245099013  | JLD1 | 27-JAN-2010 00:54 | 944455 | 10-1301    | 1.0 LANL      | DUSE; OUT OF TUNE              |
| s3a2637.d | 245099014  | JLD1 | 27-JAN-2010 01:20 | 944455 | 10-1301    | 1.0 LANL      | DUSE; OUT OF TUNE              |
| s3a2638.d | 245099015  | JLD1 | 27-JAN-2010 01:45 | 944455 | 10-1301    | 1.0 LANL      | DUSE; OUT OF TUNE              |

## GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD3

DATE: 01/27/2010 METHOD: See raw data OPERATOR: JLD1 REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 246976-D  
Multiplier Voltage: 1035 Emv Extr. Injection Volume: 0.5, 1.0 ul  
DFTPP Solution ID: WBN100107-01 Internal Std ID: WBN100107-02  
CALIBRATION & QC INFORMATION:  
Initial Calibration Dates: See Calibration History and Standard Logbook.  
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 23 Sequence Number: /chem/MSD3.i/s012710.b

| Data File  | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch   | SDG     | Dilution | Client    | Comments                       |
|------------|-------------------|---------|---------------------|---------|---------|----------|-----------|--------------------------------|
| Is3a2701.d | WBN100107-01      | JLD1    | 27-JAN-2010 08:57   | 150NG   | 1012710 | 1.0      | DFTPP     | USE                            |
| Is3a2702.d | WBN100121-17.2    | JLD1    | 27-JAN-2010 09:09   | 140 PPM | 1012710 | 1.0      | MEGACVS   | USE (267689)                   |
| Is3a2703.d | WBN100121-05.2    | JLD1    | 27-JAN-2010 09:42   | 140 PPM | 1012710 | 1.0      | BUCOCVS   | DUSE; NOT NEEDED               |
| Is3a2704.d | WBN100120-08.4    | JLD1    | 27-JAN-2010 10:11   | 140 PPM | 1012710 | 1.0      | APCVS     | USE                            |
| Is3a2705.d | WBN100103-26.4    | JLD1    | 27-JAN-2010 10:37   | 140 PPM | 1012710 | 1.0      | PESTCVS   | USE                            |
| Is3a2706.d | 1202024181        | JLD1    | 27-JAN-2010 11:07   | 1945113 | 1245416 | 1.0      | SBK01     | USE                            |
| Is3a2707.d | 1202024182        | JLD1    | 27-JAN-2010 11:33   | 1945113 | 1245416 | 1.0      | SBK01LCS  | USE                            |
| Is3a2708.d | 1202024183        | JLD1    | 27-JAN-2010 11:59   | 1945113 | 1245416 | 1.0      | SBK01LCSD | USE                            |
| Is3a2709.d | 245099011         | JLD1    | 27-JAN-2010 12:25   | 1944455 | 10-1301 | 1.0      | LANL      | DUSE; RR OF S3A2520; ISTD LOW  |
| Is3a2710.d | 245099012         | JLD1    | 27-JAN-2010 12:51   | 1944455 | 10-1301 | 1.0      | LANL      | DUSE; RR OF S3A2521; ISTD LOW  |
| Is3a2711.d | 245099013         | JLD1    | 27-JAN-2010 13:17   | 1944455 | 10-1301 | 1.0      | LANL      | DUSE; RR OF S3A2522; ISTD PASS |
| Is3a2712.d | 245099014         | JLD1    | 27-JAN-2010 13:43   | 1944455 | 10-1301 | 1.0      | LANL      | DUSE; RR OF S3A2523; ISTD PASS |
| Is3a2713.d | 245099015         | JLD1    | 27-JAN-2010 14:09   | 1944455 | 10-1301 | 1.0      | LANL      | DUSE; RR OF S3A2524; ISTD PASS |
| Is3a2714.d | 245114002         | JLD1    | 27-JAN-2010 14:35   | 1944874 | 10-1324 | 1.0      | LANL      | USE                            |
| Is3a2715.d | 1202023498        | JLD1    | 27-JAN-2010 15:01   | 1944874 | 10-1324 | 1.0      | MS        | USE                            |
| Is3a2716.d | 1202023499        | JLD1    | 27-JAN-2010 15:26   | 1944874 | 10-1324 | 1.0      | MSD       | DUSE; ISTD LOW                 |
| Is3a2717.d | 245114003         | JLD1    | 27-JAN-2010 15:52   | 1944874 | 10-1324 | 1.0      | LANL      | USE                            |
| Is3a2718.d | 245114004         | JLD1    | 27-JAN-2010 16:18   | 1944874 | 10-1324 | 1.0      | LANL      | USE                            |
| Is3a2719.d | 245114005         | JLD1    | 27-JAN-2010 16:44   | 1944874 | 10-1324 | 1.0      | LANL      | USE                            |

|           |           |      |                   |        |         |          |                                  |
|-----------|-----------|------|-------------------|--------|---------|----------|----------------------------------|
| s3a2720.d | 245416001 | JLD1 | 27-JAN-2010 17:09 | 945113 | 245416  | 1.0 MCLI | DUSE; ISTD LOW S3A2832 PASS ISTD |
| s3a2721.d | 245416002 | JLD1 | 27-JAN-2010 17:35 | 945113 | 245416  | 1.0 MCLI | DUSE; ISTD LOW S3A2833 PASS ISTD |
| s3a2722.d | 245416003 | JLD1 | 27-JAN-2010 18:01 | 945113 | 245416  | 1.0 MCLI | DUSE; ISTD LOW S3A2834 PASS ISTD |
| s3a2723.d | 245114006 | JLD1 | 27-JAN-2010 18:27 | 944874 | 10-1324 | 1.0 LANL | DUSE; ISTD LOW; SEE RR S3A2835   |
| s3a2724.d | 245114007 | JLD1 | 27-JAN-2010 18:53 | 944874 | 10-1324 | 1.0 LANL | DUSE                             |
| s3a2725.d | 245114008 | JLD1 | 27-JAN-2010 19:19 | 944874 | 10-1324 | 1.0 LANL | DUSE; ISTD LOW; SEE RR S3A2836   |
| s3a2726.d | 245114009 | JLD1 | 27-JAN-2010 19:44 | 944874 | 10-1324 | 1.0 LANL | DUSE; ISTD LOW; SEE RR S3A2837   |
| s3a2727.d | 245114010 | JLD1 | 27-JAN-2010 20:10 | 944874 | 10-1324 | 1.0 LANL | DUSE; ISTD LOW; SEE RR S3A2914   |
| s3a2728.d | 245416001 | JLD1 | 27-JAN-2010 20:36 | 945113 | 245416  | 1.0 MCLI | DUSE; ISTD LOW/SURR HIGH         |
| s3a2729.d | 245416002 | JLD1 | 27-JAN-2010 21:02 | 945113 | 245416  | 1.0 MCLI | DUSE; OUT OF TUNE                |
| s3a2730.d | 245416003 | JLD1 | 27-JAN-2010 21:27 | 945113 | 245416  | 1.0 MCLI | DUSE; OUT OF TUNE                |

## GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD3

DATE: 01/28/2010 METHOD: See raw data OPERATOR: JLD1 REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 246976-D  
Multiplier Voltage: 1035 Emv Extr. Injection Volume: 0.5, 1.0 ul  
DFTPP Solution ID: WBN100107-01 Internal Std ID: WBN100107-02  
CALIBRATION & QC INFORMATION:  
Initial Calibration Dates: See Calibration History and Standard Logbook.  
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 23 Sequence Number: /chem/MSD3.i/s012810a.b

| Data File | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch   | SDG      | Dilution | Client    | Comments   |
|-----------|-------------------|---------|---------------------|---------|----------|----------|-----------|--|
| s3a2819.d | WBN100107-01      | JLD1    | 28-JAN-2010 18:28   | 150N    | s012810  | 1.0      | DFTPP     | USE  |
| s3a2820.d | WBN100121-13.5    | JLD1    | 28-JAN-2010 18:40   | 140 PPM | s012810  | 1.0      | MEGACVS   | USE  |
| s3a2821.d | WBN100121-13.5    | JLD1    | 28-JAN-2010 19:05   | 140 PPM | s012810  | 1.0      | MEGACVS   | USE (564026)   |
| s3a2822.d | WBN100121-05.1    | JLD1    | 28-JAN-2010 19:31   | 140 PPM | s012810a | 1.0      | BJCOCVS   | USE  |
| s3a2823.d | WBN100120-08.4    | JLD1    | 28-JAN-2010 20:00   | 140 PPM | s012810a | 1.0      | APCVS     | USE  |
| s3a2824.d | WBN100120-08.4    | JLD1    | 28-JAN-2010 20:23   | 140 PPM | s012810a | 1.0      | APCVS     | USE  |
| s3a2825.d | WBN100103-26.3    | JLD1    | 28-JAN-2010 20:48   | 140 PPM | s012810a | 1.0      | PESTCVS   | USE  |
| s3a2826.d | 1202026287        | JLD1    | 28-JAN-2010 21:13   | 946033  | 245527   | 1.0      | SBLK01LCS | USE; NO C 179 IN MEGACVS                                 |
| s3a2827.d | 245527023         | JLD1    | 28-JAN-2010 21:42   | 946033  | 245527   | 1.0      | BY12      | USE; NO C 179 IN MEGACVS                                 |
| s3a2828.d | 245527031         | JLD1    | 28-JAN-2010 22:11   | 946033  | 245527   | 1.0      | BY12      | USE; NO C 179 IN MEGACVS                                 |
| s3a2829.d | 1202026288        | JLD1    | 28-JAN-2010 22:40   | 946033  | 245527   | 1.0      | MS        | USE; NO C 179 IN MEGACVS                                 |
| s3a2830.d | 1202026289        | JLD1    | 28-JAN-2010 23:09   | 946033  | 245527   | 1.0      | MSD       | USE; NO C 179 IN MEGACVS **FILE S3A2831 DOES NOT EXIST** |
| s3a2832.d | 245416001         | JLD1    | 28-JAN-2010 23:39   | 945113  | 245416   | 1.0      | MCLI      | USE; RR OF S3A2720                                       |
| s3a2833.d | 245416002         | JLD1    | 29-JAN-2010 00:04   | 945113  | 245416   | 1.0      | MCLI      | USE; RR OF S3A2720                                       |
| s3a2834.d | 245416003         | JLD1    | 29-JAN-2010 00:29   | 945113  | 245416   | 1.0      | MCLI      | USE; RR OF S3A2720                                       |
| s3a2835.d | 245114006         | JLD1    | 29-JAN-2010 00:54   | 944874  | 10-1324  | 1.0      | LANL      | USE; RR OF S3A2723                                       |
| s3a2836.d | 245114008         | JLD1    | 29-JAN-2010 01:19   | 944874  | 10-1324  | 1.0      | LANL      | USE; RR OF S3A2725                                       |
| s3a2837.d | 245114009         | JLD1    | 29-JAN-2010 01:44   | 944874  | 10-1324  | 1.0      | LANL      | USE; RR OF S3A2726                                       |
| s3a2838.d | 245114010         | JLD1    | 29-JAN-2010 02:09   | 944874  | 10-1324  | 1.0      | LANL      | USE; RR OF S3A2727; SURR HIGH; SEE S3A2914               |

|           |               |      |                   |        |          |          |                                       |  |
|-----------|---------------|------|-------------------|--------|----------|----------|---------------------------------------|--|
| s3a2839.d | 245114011     | JLD1 | 29-JAN-2010 02:34 | 944874 | 10-1324  | 1.0 LANL | DUSE; SURR HIGH; NO HITS; SEE S3A2915 |  |
| s3a2840.d | 245114012     | JLD1 | 29-JAN-2010 02:59 | 944874 | 10-1324  | 1.0 LANL | USE                                   |  |
| s3a2841.d | 245114013     | JLD1 | 29-JAN-2010 03:24 | 944874 | 10-1324  | 1.0 LANL | USE                                   |  |
| s3a2842.d | 245114014     | JLD1 | 29-JAN-2010 03:49 | 944874 | 10-1324  | 1.0 LANL | USE                                   |  |
| s3a2843.d | 245114015     | JLD1 | 29-JAN-2010 04:14 | 944874 | 10-1324  | 1.0 LANL | USE                                   |  |
| s3a2844.d | Thioacetamide | JLD1 | 29-JAN-2010 04:38 | BUJO   | s012810a | 1.0 BUJO | TEST SAMPLE                           |  |

## GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD3

DATE: 01/29/2010 METHOD: See raw data OPERATOR: JLD1 REVIEWED BY: \_\_\_\_\_  
HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 246976-D  
Multiplier Voltage: 1035 Emv Extr. Injection Volume: 0.5, 1.0 ul  
DFTPP Solution ID: WBN100107-01 Internal Std ID: WBN100107-02  
CALIBRATION & QC INFORMATION:  
Initial Calibration Dates: See Calibration History and Standard Logbook.  
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 23 Sequence Number: /chem/MSD3.i/s012910a.b

| Data File | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch  | SDG      | Dilution | Client   | Comments                         |
|-----------|-------------------|---------|---------------------|--------|----------|----------|----------|----------------------------------|
| s3a2907.d | WBN100107-01      | JLD1    | 29-JAN-2010 14:07   | 50NG   | s012910  | 1.0      | DFTPP    | USE; BJCO ICAL                   |
| s3a2908.d | WBN100121-17.2    | JLD1    | 29-JAN-2010 14:20   | 40 PPM | s012910  | 1.0      | MEGACVS  | pass 571899                      |
| s3a2909.d | WBN100121-05.1    | JLD1    | 29-JAN-2010 14:53   | 40 PPM | s012910a | 1.0      | BJCOCVS  | DOSE                             |
| s3a2910.d | WBN100120-08.3    | JLD1    | 29-JAN-2010 15:22   | 40 PPM | s012910a | 1.0      | APCVS    | USE                              |
| s3a2911.d | WBN100121-05.3    | JLD1    | 29-JAN-2010 15:47   | 40 PPM | s012910a | 1.0      | BJCOCVS  | DOSE                             |
| s3a2912.d | WBN100103-26.3    | JLD1    | 29-JAN-2010 16:20   | 40 PPM | s012910a | 1.0      | PESTCVS  | USE                              |
| s3a2913.d | INSTRUMENTBLANK   | JLD1    | 29-JAN-2010 16:46   |        | s012910a | 1.0      | IB       |                                  |
| s3a2914.d | 245114010         | JLD1    | 29-JAN-2010 17:11   | 944874 | 10-1324  | 1.0      | LANL     | DOSE; fail istd-confirms s3a2914 |
| s3a2915.d | 245114011         | JLD1    | 29-JAN-2010 17:36   | 944874 | 10-1324  | 1.0      | LANL     | USE; pass surr-rr of s3a2839     |
| s3a2916.d | Thioacetamide     | JLD1    | 29-JAN-2010 18:01   | BJCO   | s012910a | 40.0     | BJCO     | TEST                             |
| s3a2917.d | Thioacetamide     | JLD1    | 29-JAN-2010 18:26   | BJCO   | s012910a | 100.0    | BJCO     | TEST                             |
| s3a2918.d | INSTRUMENTBLANK   | JLD1    | 29-JAN-2010 18:51   |        | s012910a | 1.0      | IB       |                                  |
| s3a2919.d | WBN100121-07      | JLD1    | 29-JAN-2010 19:16   | 10PPM  | s012910a | 1.0      | BJCOICAL | USE; LEV 2                       |
| s3a2920.d | WBN100121-06      | JLD1    | 29-JAN-2010 19:46   | 20PPM  | s012910a | 1.0      | BJCOICAL | USE; LEV 3                       |
| s3a2921.d | WBN100121-05.1    | JLD1    | 29-JAN-2010 20:16   | 40PPM  | s012910a | 1.0      | BJCOICAL | USE; LEV 4                       |
| s3a2922.d | WBN100121-04      | JLD1    | 29-JAN-2010 20:46   | 50PPM  | s012910a | 1.0      | BJCOICAL | USE; LEV 5                       |
| s3a2923.d | WBN100121-03      | JLD1    | 29-JAN-2010 21:16   | 80PPM  | s012910a | 1.0      | BJCOICAL | USE; LEV 6                       |
| s3a2924.d | WBN100121-02      | JLD1    | 29-JAN-2010 21:46   | 100PPM | s012910a | 1.0      | BJCOICAL | USE; LEV 7                       |
| s3a2925.d | WBN100121-01      | JLD1    | 29-JAN-2010 22:17   | 120PPM | s012910a | 1.0      | BJCOICAL | USE; LEV 8                       |



|           |                |      |                   |        |          |  |               |                                |  |
|-----------|----------------|------|-------------------|--------|----------|--|---------------|--------------------------------|--|
| s3a2926.d | WBN100121-05.1 | JLD1 | 29-JAN-2010 22:47 | 40 PPM | s012910a |  | 1.0 BJOCV5    | USE; pass                      |  |
| s3a2927.d | 1202026286     | JLD1 | 29-JAN-2010 23:17 | 946033 | 245527   |  | 1.0 SBLK01    | USE                            |  |
| s3a2928.d | 1202026287     | JLD1 | 29-JAN-2010 23:47 | 946033 | 245527   |  | 2.0 SBLK02LCS | DUSE; not needed               |  |
| s3a2929.d | 1202026287     | JLD1 | 30-JAN-2010 00:17 | 946033 | 245527   |  | 1.0 SBLK01LCS | USE                            |  |
| s3a2930.d | 245527023      | JLD1 | 30-JAN-2010 00:47 | 946033 | 245527   |  | 1.0 BX12      | DUSE; ISTD LOW; SEE S3A3109    |  |
| s3a2931.d | 245527031      | JLD1 | 30-JAN-2010 01:17 | 946033 | 245527   |  | 1.0 BX13      | USE                            |  |
| s3a2932.d | 1202026288     | JLD1 | 30-JAN-2010 01:47 | 946033 | 245527   |  | 1.0 MS        | USE                            |  |
| s3a2933.d | 1202026289     | JLD1 | 30-JAN-2010 02:17 | 946033 | 245527   |  | 1.0 MSD       | DUSE; out of tune; SEE S3A3111 |  |

**DATA EXCEPTION REPORT**

**Mo. Day Yr.**  
02-FEB-10

**Division:**  
Industrial

**Quality Criteria:**  
Specifications

**Type:**  
Process

**Instrument Type:**  
SEM/VOA GC/MS

**Test / Method:**  
SW846 8270C

**Matrix Type:**  
Solid

**Client Code:**  
LANL

**Batch ID:**  
944874

**Sample Numbers:**  
See Below

**Potentially affected work order(s)(SDG):**245114(10-1324)

**Application Issues:**

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed Recovery for MSD/PSD

**Specification and Requirements**  
**Exception Description:**

1. The MS(1202023498) and MSD(1202023499) recovered multiple spike analytes outside of the established acceptance limits. Please see the QC Summary for specific failures.
2. Multiple MS(1202023498)/MSD(1202023499) RPD values were outside of the established acceptance limits. Please see the QC Summary for specific failures.

**DER Disposition:**

1. Since the MS and MSD displayed similar spike recoveries, the failures were attributed to matrix interference and the data results have been reported.
2. The RPD failures were attributed to matrix interference and the data results have been reported.

**Originator's Name:**

Jennifer Dunagan Jones 02-FEB-10

**Data Validator/Group Leader:**

Barbara Bailey 02-FEB-10

Report Date: 30-Jan-2010 14:47

## GEL Laboratories LLC

Data file : /chem/MSD3.i/s012910a.b/s3a2914.d

Lab Smp Id: 245114010

Client Smp ID: RE15-10-8423

Inj Date : 29-JAN-2010 17:11

Operator : JLD1

Inst ID: MSD3.i

Smp Info : |245114010|944874|1|SVMF|1|LANL

Misc Info : |MSD8270\_S|WBN100107-02|

Comment : Column: J&amp;W DB-5MS, 25 m x 0.20 mm x 0.33 micron film

Method : /chem/MSD3.i/s012910a.b/MSD3-8270R-AQA-012110.m

Meth Date : 30-Jan-2010 14:32 jen00986 Quant Type: ISTD

Cal Date : 21-JAN-2010 21:36

Cal File: s3a2130.d

Als bottle: 7

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1324.sub

Target Version: 3.50

Processing Host: hpc1pl

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.02000  | weight of sample          |
| M    | 9.36140   | % moisture                |

Cpnd Variable

Local Compound Variable

| Compounds                   | QUANT SIG |        |        |         | RESPONSE | CONCENTRATIONS |         |
|-----------------------------|-----------|--------|--------|---------|----------|----------------|---------|
|                             | MASS      | RT     | EXP RT | REL RT  |          | ON-COLUMN      | FINAL   |
|                             |           |        |        |         |          | (ng/ul)        | (ug/Kg) |
| * 10 1,4-Dichlorobenzene-d4 | 152       | 4.647  | 4.648  | (1.000) | 595348   | 40.0000        |         |
| * 29 Naphthalene-d8         | 136       | 5.919  | 5.923  | (1.000) | 2220990  | 40.0000        |         |
| * 46 Acenaphthene-d10       | 164       | 7.789  | 7.792  | (1.000) | 1205768  | 40.0000        |         |
| * 67 Phenanthrene-d10       | 188       | 9.400  | 9.403  | (1.000) | 1855374  | 40.0000        |         |
| * 91 Chrysene-d12           | 240       | 12.372 | 12.377 | (1.000) | 865670   | 40.0000        |         |
| * 98 Perylene-d12           | 264       | 14.611 | 14.616 | (1.000) | 374384   | 40.0000        |         |
| \$ 3 2-Fluorophenol         | 112       | 3.491  | 3.481  | (0.751) | 1063558  | 68.6534        | 2520    |
| \$ 5 Phenol-d5              | 99        | 4.260  | 4.261  | (0.917) | 1269626  | 65.2101        | 2400    |
| \$ 20 Nitrobenzene-d5       | 82        | 5.182  | 5.186  | (0.875) | 592077   | 36.0886        | 1330    |
| \$ 39 2-Fluorobiphenyl      | 172       | 7.048  | 7.051  | (0.905) | 1146400  | 36.7830        | 1350    |
| \$ 60 2,4,6-Tribromophenol  | 329       | 8.640  | 8.642  | (1.109) | 223201   | 64.5723        | 2370    |
| \$ 81 p-Terphenyl-d14       | 244       | 11.115 | 11.113 | (0.898) | 850152   | 57.1368        | 2100    |

| Compounds               | QUANT SIG |        |        |         |          |           | CONCENTRATIONS |  |
|-------------------------|-----------|--------|--------|---------|----------|-----------|----------------|--|
|                         | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN | FINAL          |  |
|                         | =====     | ==     | =====  | =====   | =====    | (ng/ul)   | (ug/Kg)        |  |
| 79 Pyrene               | 202       | 10.964 | 10.966 | (0.886) | 27093    | 1.09250   | 40.2           |  |
| 68 Phenanthrene         | 178       | 9.424  | 9.430  | (1.002) | 16466    | 0.40375   | 14.8(a)        |  |
| 72 Di-n-butylphthalate  | 149       | 9.996  | 10.000 | (1.063) | 279755   | 5.68131   | 209(a)         |  |
| 76 Fluoranthene         | 202       | 10.713 | 10.716 | (1.140) | 15434    | 0.41591   | 15.3(a)        |  |
| 89 Benzo(a)anthracene   | 228       | 12.357 | 12.357 | (0.999) | 9445     | 0.47651   | 17.5(a)        |  |
| 92 Chrysene             | 228       | 12.404 | 12.410 | (1.003) | 6750     | 0.36204   | 13.3(a)        |  |
| 95 Benzo(b)fluoranthene | 252       | 13.957 | 13.961 | (0.955) | 3892     | 0.44298   | 16.3(a)        |  |
| 97 Benzo(a)pyrene       | 252       | 14.513 | 14.516 | (0.993) | 2814     | 0.36756   | 13.5(a)        |  |

#### QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

## ION RATIO REPORT

## SV REPORT

Data file: s3a2914.d

Report Date: 01/30/2010 14:36

Lab. ID: 245114010

SampleType: SAMPLE

Injection Date: 29-JAN-2010 17:11

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245114010|944874|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012910a.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1324

Sample Matrix: SOIL

| MASS                      | RESPONSE | RT             | EXPECT RT | TARGET RANGE | RATIO | QUAL |
|---------------------------|----------|----------------|-----------|--------------|-------|------|
| =====                     |          |                |           |              |       |      |
| 4 Aniline                 |          | CAS#: 62-53-3  |           |              |       |      |
| 66                        | 73490    | 4.26           | 4.34      | 80-120       | 100   | (T)  |
| 93                        | 36329    | 4.31           | 4.34      | 197-257      | 49    | (Q)  |
| -----                     |          |                |           |              |       |      |
| 17 N-Nitrosodipropylamine |          | CAS#: 621-64-7 |           |              |       |      |
| 70                        | 89689    | 5.18           | 5.02      | 80-120       | 100   | (T)  |
| 42                        | 58792    | 5.18           | 5.02      | 49-109       | 66    | (T)  |
| -----                     |          |                |           |              |       |      |
| 40 2-Chloronaphthalene    |          | CAS#: 91-58-7  |           |              |       |      |
| 162                       | 54703    | 7.39           | 7.19      | 80-120       | 100   | (T)  |
| 164                       | 3268     | 7.39           | 7.19      | 2- 62        | 6     | (T)  |
| 127                       | 4363     | 7.39           | 7.19      | 10- 70       | 8     | (QT) |
| -----                     |          |                |           |              |       |      |
| 42 o-Nitroaniline         |          | CAS#: 88-74-4  |           |              |       |      |
| 65                        | 87799    | 7.39           | 7.30      | 80-120       | 100   | (T)  |
| 92                        | 85469    | 7.39           | 7.30      | 31- 91       | 97    | (QT) |
| 138                       | 14118    | 7.39           | 7.30      | 67-127       | 16    | (QT) |
| -----                     |          |                |           |              |       |      |
| 41 m-Nitroaniline         |          | CAS#: 99-09-2  |           |              |       |      |
| 138                       | 208      | 7.78           | 7.74      | 80-120       | 100   | ( )  |
| 92                        | 6849     | 7.79           | 7.74      | 81-141       | 3280  | (Q)  |
| 108                       | 28600    | 7.79           | 7.74      | 0- 40        | 13696 | (Q)  |
| -----                     |          |                |           |              |       |      |
| 44 2,6-Dinitrotoluene     |          | CAS#: 606-20-2 |           |              |       |      |
| 165                       | 157241   | 7.79           | 7.99      | 80-120       | 100   | (T)  |
| 63                        | 2211     | 7.79           | 7.99      | 26- 86       | 1     | (QT) |
| -----                     |          |                |           |              |       |      |

| MASS  | RESPONSE               | RT    | EXPECT RT      | TARGET RANGE | RATIO | QUAL |
|-------|------------------------|-------|----------------|--------------|-------|------|
| <hr/> |                        |       |                |              |       |      |
| 50    | 2,4-Dinitrotoluene     |       | CAS#: 121-14-2 |              |       |      |
| 165   | 157241                 | 7.79  | 7.99           | 80-120       | 100   | (T)  |
| 89    | 2696                   | 7.79  | 7.99           | 46-106       | 2     | (QT) |
| 63    | 2211                   | 7.79  | 7.99           | 26- 86       | 1     | (QT) |
| <hr/> |                        |       |                |              |       |      |
| 56    | p-Nitroaniline         |       | CAS#: 100-01-6 |              |       |      |
| 138   | 177                    | 8.38  | 8.40           | 80-120       | 100   | ( )  |
| 108   | 2449                   | 8.38  | 8.40           | 46-106       | 1376  | (Q)  |
| 92    | 601                    | 8.38  | 8.40           | 18- 78       | 338   | (Q)  |
| <hr/> |                        |       |                |              |       |      |
| 68    | Phenanthrene           |       | CAS#: 85-01-8  |              |       |      |
| 178   | 16466                  | 9.42  | 9.43           | 80-120       | 100   | ( )  |
| 179   | 2324                   | 9.42  | 9.43           | 0- 45        | 14    | ( )  |
| 176   | 3208                   | 9.42  | 9.43           | 0- 49        | 19    | ( )  |
| <hr/> |                        |       |                |              |       |      |
| 69    | Anthracene             |       | CAS#: 120-12-7 |              |       |      |
| 178   | 16466                  | 9.42  | 9.49           | 80-120       | 100   | (T)  |
| 179   | 2324                   | 9.42  | 9.49           | 0- 45        | 14    | (T)  |
| 176   | 3208                   | 9.42  | 9.49           | 0- 48        | 19    | (T)  |
| <hr/> |                        |       |                |              |       |      |
| 72    | Di-n-butylphthalate    |       | CAS#: 84-74-2  |              |       |      |
| 149   | 279755                 | 10.00 | 10.00          | 80-120       | 100   | ( )  |
| 150   | 26406                  | 10.00 | 10.00          | 0- 39        | 9     | ( )  |
| 104   | 16365                  | 10.00 | 10.00          | 0- 36        | 6     | ( )  |
| <hr/> |                        |       |                |              |       |      |
| 76    | Fluoranthene           |       | CAS#: 206-44-0 |              |       |      |
| 202   | 15434                  | 10.71 | 10.72          | 80-120       | 100   | ( )  |
| 203   | 2754                   | 10.71 | 10.72          | 0- 47        | 18    | ( )  |
| 101   | 2298                   | 10.71 | 10.72          | 0- 44        | 15    | ( )  |
| <hr/> |                        |       |                |              |       |      |
| 79    | Pyrene                 |       | CAS#: 129-00-0 |              |       |      |
| 202   | 27093                  | 10.96 | 10.97          | 80-120       | 100   | ( )  |
| 200   | 5511                   | 10.96 | 10.97          | 0- 51        | 20    | ( )  |
| 101   | 4703                   | 10.96 | 10.97          | 0- 46        | 17    | ( )  |
| <hr/> |                        |       |                |              |       |      |
| 89    | Benzo(a)anthracene     |       | CAS#: 56-55-3  |              |       |      |
| 228   | 9445                   | 12.36 | 12.36          | 80-120       | 100   | ( )  |
| 226   | 1917                   | 12.36 | 12.36          | 0- 56        | 20    | ( )  |
| 229   | 3080                   | 12.36 | 12.36          | 0- 50        | 33    | ( )  |
| <hr/> |                        |       |                |              |       |      |
| 90    | 3,3'-Dichlorobenzidine |       | CAS#: 91-94-1  |              |       |      |
| 252   | 242                    | 12.37 | 12.31          | 80-120       | 100   | (T)  |
| 254   | 10539                  | 12.39 | 12.31          | 34- 94       | 4341  | (QT) |
| 126   | 2409                   | 12.37 | 12.31          | 0- 46        | 992   | (QT) |
| <hr/> |                        |       |                |              |       |      |
| 92    | Chrysene               |       | CAS#: 218-01-9 |              |       |      |
| 228   | 6750                   | 12.40 | 12.41          | 80-120       | 100   | ( )  |
| 229   | 1033                   | 12.40 | 12.41          | 0- 49        | 15    | ( )  |
| 226   | 1617                   | 12.40 | 12.41          | 0- 59        | 24    | ( )  |
| <hr/> |                        |       |                |              |       |      |

| MASS                    | RESPONSE | RT    | EXPECT RT | TARGET RANGE   | RATIO | QUAL |
|-------------------------|----------|-------|-----------|----------------|-------|------|
| =====                   |          |       |           |                |       |      |
| 95 Benzo(b)fluoranthene |          |       |           | CAS#: 205-99-2 |       |      |
| 252                     | 3892     | 13.96 | 13.96     | 80-120         | 100   | ( )  |
| 253                     | 1061     | 13.96 | 13.96     | 0- 51          | 27    | ( )  |
| 125                     | 609      | 13.95 | 13.96     | 0- 44          | 16    | ( )  |

|                         |      |       |       |                |     |     |
|-------------------------|------|-------|-------|----------------|-----|-----|
| -----                   |      |       |       |                |     |     |
| 96 Benzo(k)fluoranthene |      |       |       | CAS#: 207-08-9 |     |     |
| 252                     | 3892 | 13.96 | 14.01 | 80-120         | 100 | ( ) |
| 253                     | 1061 | 13.96 | 14.01 | 0- 52          | 27  | ( ) |
| 125                     | 609  | 13.95 | 14.01 | 0- 44          | 16  | ( ) |

|                   |      |       |       |               |     |     |
|-------------------|------|-------|-------|---------------|-----|-----|
| -----             |      |       |       |               |     |     |
| 97 Benzo(a)pyrene |      |       |       | CAS#: 50-32-8 |     |     |
| 252               | 2814 | 14.51 | 14.52 | 80-120        | 100 | ( ) |
| 253               | 472  | 14.51 | 14.52 | 0- 52         | 17  | ( ) |
| 125               | 183  | 14.51 | 14.52 | 0- 47         | 7   | ( ) |

-----

Q qualifier indicates ion failed ratio requirement  
T qualifier indicates RT outside 0.06 minute window of expected RT

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012910a.b/s3a2914.d  
Lab Smp Id: 245114010 Client Smp ID: RE15-10-8423  
Inj Date : 29-JAN-2010 17:11  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |245114010|944874|1|SVMF|1|LANL  
Misc Info : |MSD8270 S|WBN100107-02|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s012910a.b/MSD3-8270R-AQA-012110.m  
Meth Date : 30-Jan-2010 14:32 jen00986 Quant Type: ISTD  
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d  
Als bottle: 7  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1324.sub  
Target Version: 3.50  
Processing Host: hpclp1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

| Name | Value     | Description               |
|------|-----------|---------------------------|
| DF   | 1.00000   | Dilution Factor           |
| Uf   | 500.00000 | ng unit correction factor |
| Vt   | 1.00000   | volume of final ext       |
| Vi   | 0.50000   | volume injected           |
| Ws   | 30.02000  | weight of sample          |
| M    | 9.36140   | % moisture                |

Cpnd Variable

Local Compound Variable

| ISTD                        | RT     | AREA    | AMOUNT |
|-----------------------------|--------|---------|--------|
| =====                       | =====  | =====   | =====  |
| * 10 1,4-Dichlorobenzene-d4 | 4.647  | 3842719 | 40.000 |
| * 67 Phenanthrene-d10       | 9.400  | 4675431 | 40.000 |
| * 91 Chrysene-d12           | 12.372 | 3279873 | 40.000 |
| * 98 Perylene-d12           | 14.611 | 1147130 | 40.000 |

| CONCENTRATIONS |       |               |              |       | QUANT   |           |        |
|----------------|-------|---------------|--------------|-------|---------|-----------|--------|
| RT             | AREA  | ON-COL(ng/ul) | FINAL(ug/Kg) | QUAL  | LIBRARY | LIB ENTRY | CPND # |
| =====          | ===== | =====         | =====        | ===== | =====   | =====     | =====  |

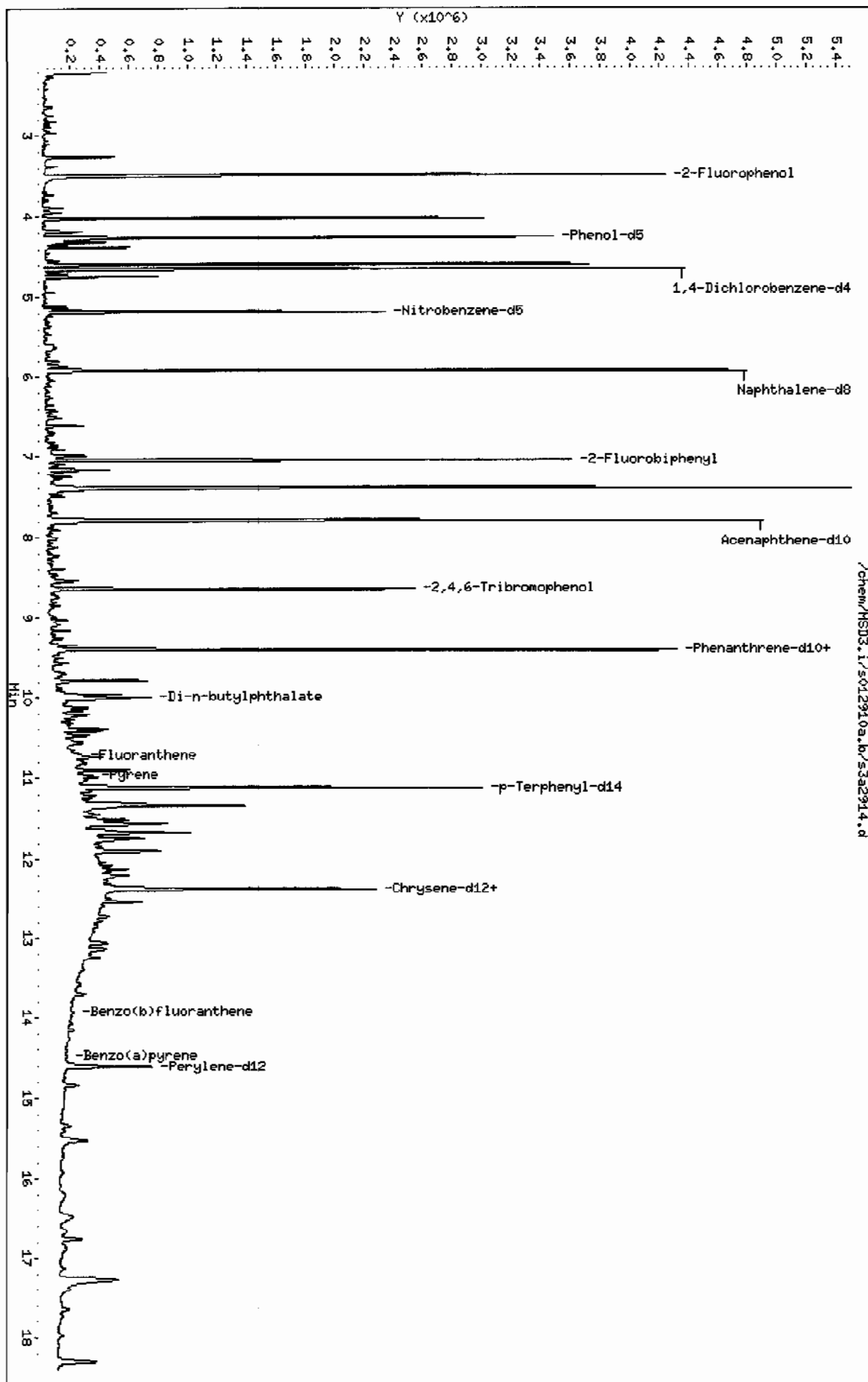


| RT                                       | CONCENTRATIONS |               |              | QUAL             | QUANT    |           | CPND # |
|--|----------------|---------------|--------------|------------------|----------|-----------|--------|
|  | AREA           | ON-COL(ng/ul) | FINAL(ug/Kg) |                  | LIBRARY  | LIB ENTRY |        |
| Unknown                                  |                |               |              | CAS #:           |          |           |        |
| 2.036                                    | 10398605       | 108.242152    | 3980         | 0                |          | 0         | 10     |
| Unknown                                  |                |               |              | CAS #:           |          |           |        |
| 2.200                                    | 677873         | 7.05618285    | 259          | 0                |          | 0         | 10     |
| Unknown Aldol Condensate                 |                |               |              | CAS #:           |          |           |        |
| 3.259                                    | 571312         | 5.94695798    | 218          | 0                |          | 0         | 10     |
| 1R-.alpha.-Pinene                        |                |               |              | CAS #: 7785-70-8 |          |           |        |
| 4.022                                    | 2735737        | 28.4770978    | 1050         | 98               | NIST05.L | 15188     | 10     |
| Unknown                                  |                |               |              | CAS #:           |          |           |        |
| 4.313                                    | 504623         | 5.25276949    | 193          | 0                |          | 0         | 10     |
| .beta.-Pinene                            |                |               |              | CAS #: 127-91-3  |          |           |        |
| 4.380                                    | 540849         | 5.62986027    | 207          | 97               | NIST05.L | 15171     | 10     |
| Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy |                |               |              | CAS #: 498-15-7  |          |           |        |
| 4.592                                    | 3361795        | 34.9939139    | 1290         | 97               | NIST05.L | 15369     | 10     |
| Limonene                                 |                |               |              | CAS #: 138-86-3  |          |           |        |
| 4.736                                    | 664079         | 6.91259783    | 254          | 95               | NIST05.L | 15154     | 10     |
| 5,9,13-Pentadecatrien-2-one, 6,10,14-tri |                |               |              | CAS #: 1117-52-8 |          |           |        |
| 9.783                                    | 657719         | 5.62702287    | 207          | 91               | NIST05.L | 100205    | 67     |
| Unknown                                  |                |               |              | CAS #:           |          |           |        |
| 10.899                                   | 459666         | 5.60590487    | 206          | 0                |          | 0         | 91     |
| Unknown                                  |                |               |              | CAS #:           |          |           |        |
| 11.310                                   | 496223         | 6.05173371    | 222          | 0                |          | 0         | 91     |
| Unknown                                  |                |               |              | CAS #:           |          |           |        |
| 11.334                                   | 1853605        | 22.6058165    | 831          | 0                |          | 0         | 91     |
| Unknown                                  |                |               |              | CAS #:           |          |           |        |
| 11.552                                   | 782993         | 9.54905959    | 351          | 0                |          | 0         | 91     |
| Unknown                                  |                |               |              | CAS #:           |          |           |        |
| 11.564                                   | 514718         | 6.27728537    | 231          | 0                |          | 0         | 91     |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 |                |               |              | CAS #: 1235-74-1 |          |           |        |
| 11.668                                   | 1015111        | 12.3798822    | 455          | 99               | NIST05.L | 133618    | 91     |

| RT                                       | CONCENTRATIONS |                |               | QUAL | QUANT               |           | CPND # |
|--|----------------|----------------|---------------|------|---------------------|-----------|--------|
|  | AREA           | ON-COL (ng/ul) | FINAL (ug/Kg) |      | LIBRARY             | LIB ENTRY |        |
| Unknown                                  |                |                |               |      | CAS #:              |           |        |
| 11.733                                   | 877900         | 10.7065139     | 393           | 0    |                     | 0         | 91     |
| Unknown                                  |                |                |               |      | CAS #:              |           |        |
| 11.892                                   | 928744         | 11.3265794     | 416           | 0    |                     | 0         | 91     |
| 1-Docosene                               |                |                |               |      | CAS #: 1599-67-3    |           |        |
| 12.197                                   | 665374         | 8.11463469     | 298           | 95   | NIST05.L            | 129889    | 91     |
| 1,2-Benzisothiazole, 3-(hexahydro-1H-aze |                |                |               |      | CAS #: 309735-29-3  |           |        |
| 12.647                                   | 508482         | 6.20123451     | 228           | 90   | NIST05.L            | 101019    | 91     |
| Unknown                                  |                |                |               |      | CAS #:              |           |        |
| 12.721                                   | 810590         | 9.88562365     | 363           | 0    |                     | 0         | 91     |
| Unknown                                  |                |                |               |      | CAS #:              |           |        |
| 12.777                                   | 612371         | 7.46822587     | 274           | 0    |                     | 0         | 91     |
| Unknown                                  |                |                |               |      | CAS #:              |           |        |
| 12.839                                   | 634213         | 7.73460535     | 284           | 0    |                     | 0         | 91     |
| Unknown                                  |                |                |               |      | CAS #:              |           |        |
| 12.919                                   | 651477         | 7.94515424     | 292           | 0    |                     | 0         | 91     |
| Alloaromadendrene oxide-(1)              |                |                |               |      | CAS #: 1000156-12-8 |           |        |
| 13.064                                   | 783903         | 9.56016040     | 351           | 87   | NIST05.L            | 71377     | 91     |
| 1-Acetoxynonadecane                      |                |                |               |      | CAS #: 1577-43-1    |           |        |
| 13.135                                   | 635749         | 7.75333606     | 285           | 91   | NIST05.L            | 140306    | 91     |
| Unknown                                  |                |                |               |      | CAS #:              |           |        |
| 15.524                                   | 575428         | 20.0649625     | 737           | 0    |                     | 0         | 98     |
| Unknown                                  |                |                |               |      | CAS #:              |           |        |
| 16.479                                   | 441308         | 15.3882342     | 566           | 0    |                     | 0         | 98     |
| .gamma.-Sitosterol                       |                |                |               |      | CAS #: 83-47-6      |           |        |
| 17.269                                   | 1719819        | 59.9694408     | 2200          | 96   | NIST05.L            | 174402    | 98     |
| Stigmast-4-en-3-one                      |                |                |               |      | CAS #: 1058-61-3    |           |        |
| 18.295                                   | 755932         | 26.3590496     | 969           | 89   | NIST05.L            | 173936    | 98     |

Data File: /chem/HSD3.i/s012910a,b/s3a2914.d  
 Date: 29-JAN-2010 17:11  
 Client ID: REIS-10-8423  
 Sample Info: 12451401019487411SVHF11LNL  
 Volume Injected (uL): 0.5  
 Column Phase: J&W DB-5MS

Instrument: HSD3.i  
 Operator: JLD  
 Column diameter: 0.20



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944874111SVMF111LANL

Volume Injected (uL): 0.5

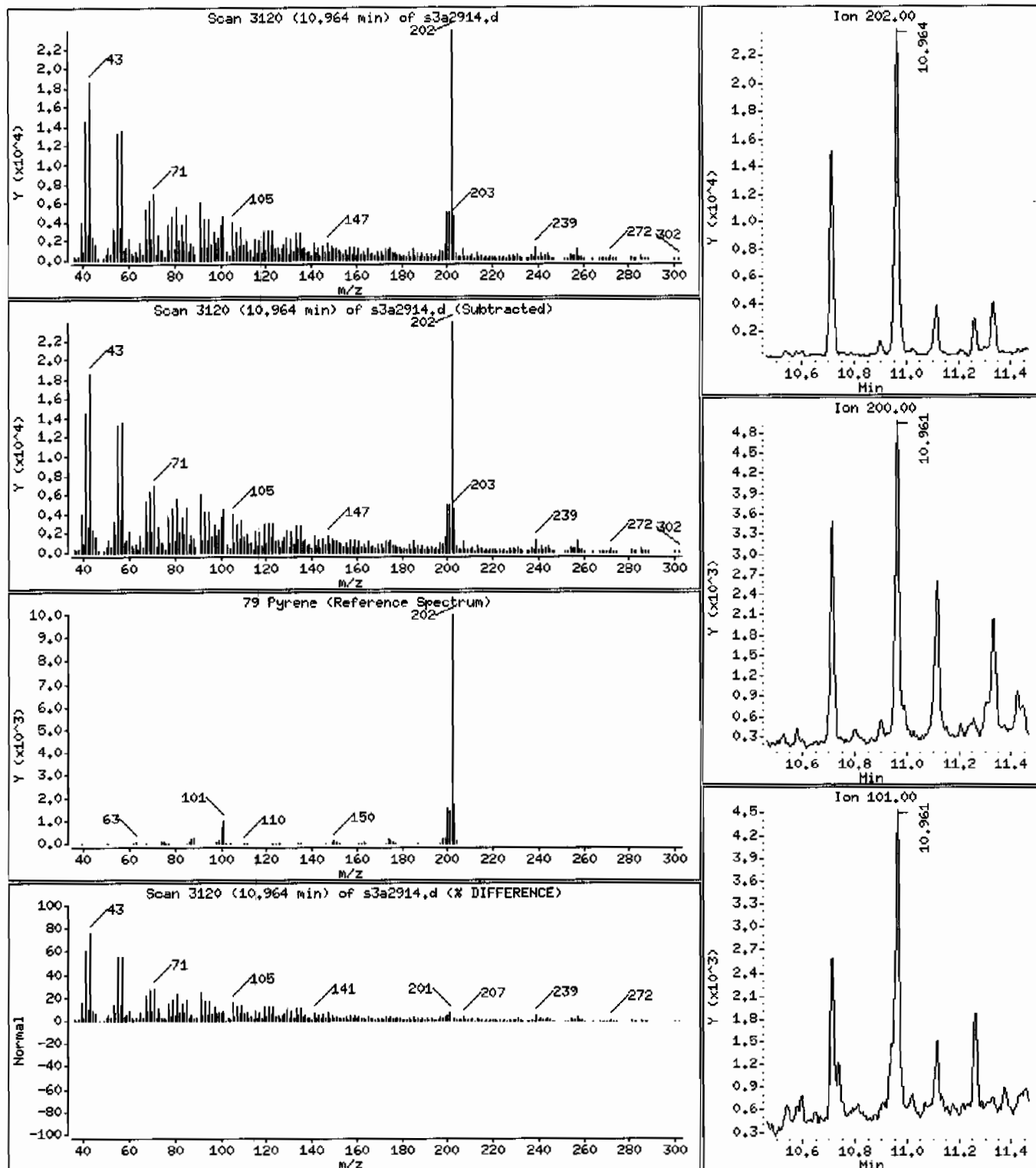
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 40.2 ug/Kg



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411|SVMF11|LANL

Volume Injected (uL): 0.5

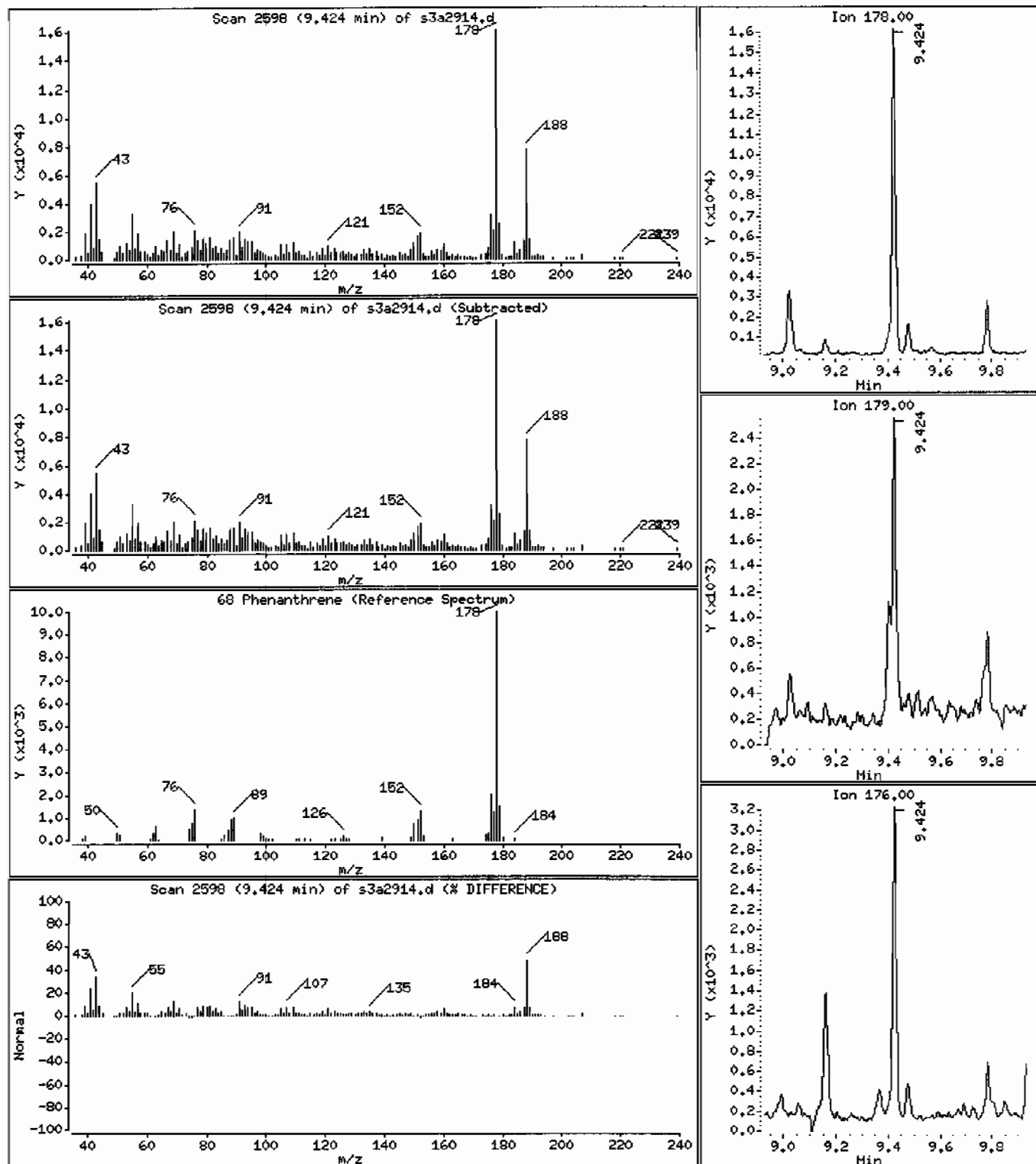
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 14.8 ug/Kg



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVHF11ILANL

Volume Injected (uL): 0.5

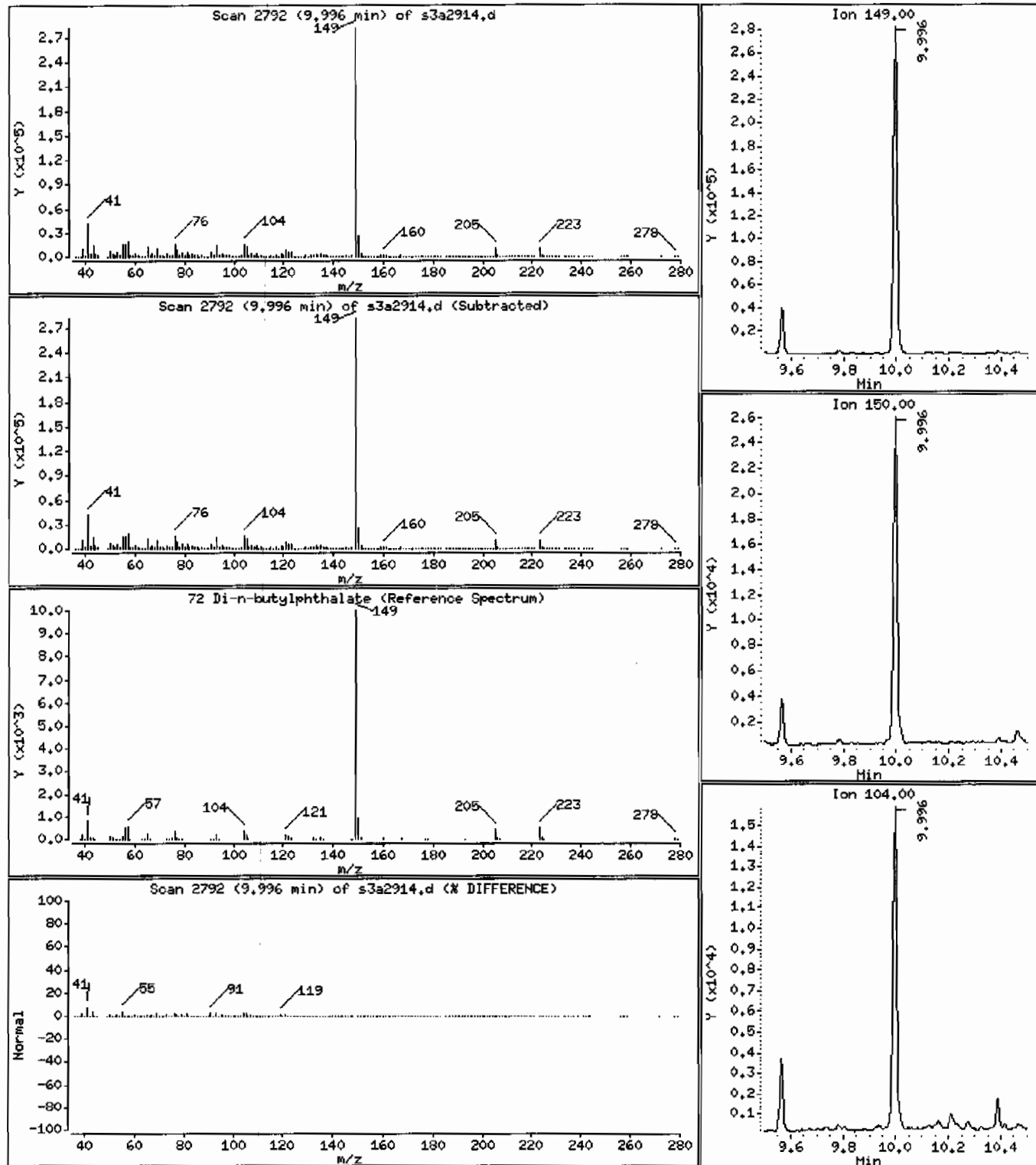
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

72 Di-n-butylphthalate

Concentration: 209 ug/Kg



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411(SVHF11)LANL

Volume Injected (uL): 0.5

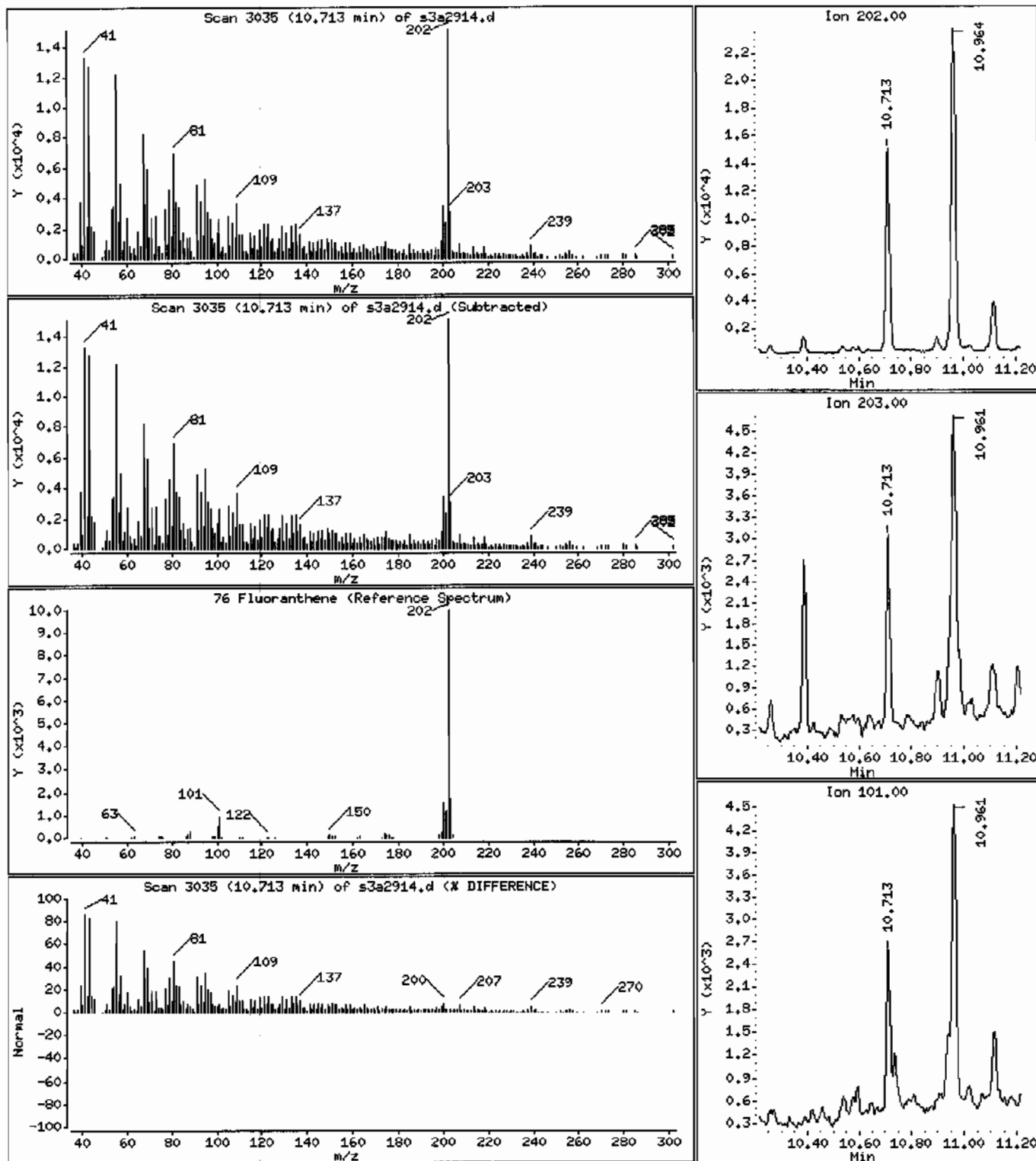
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 15.3 ug/Kg



Date : 29-JAN-2010 17:11

Client ID: RE16-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVMF111LANL

Volume Injected (UL): 0.5

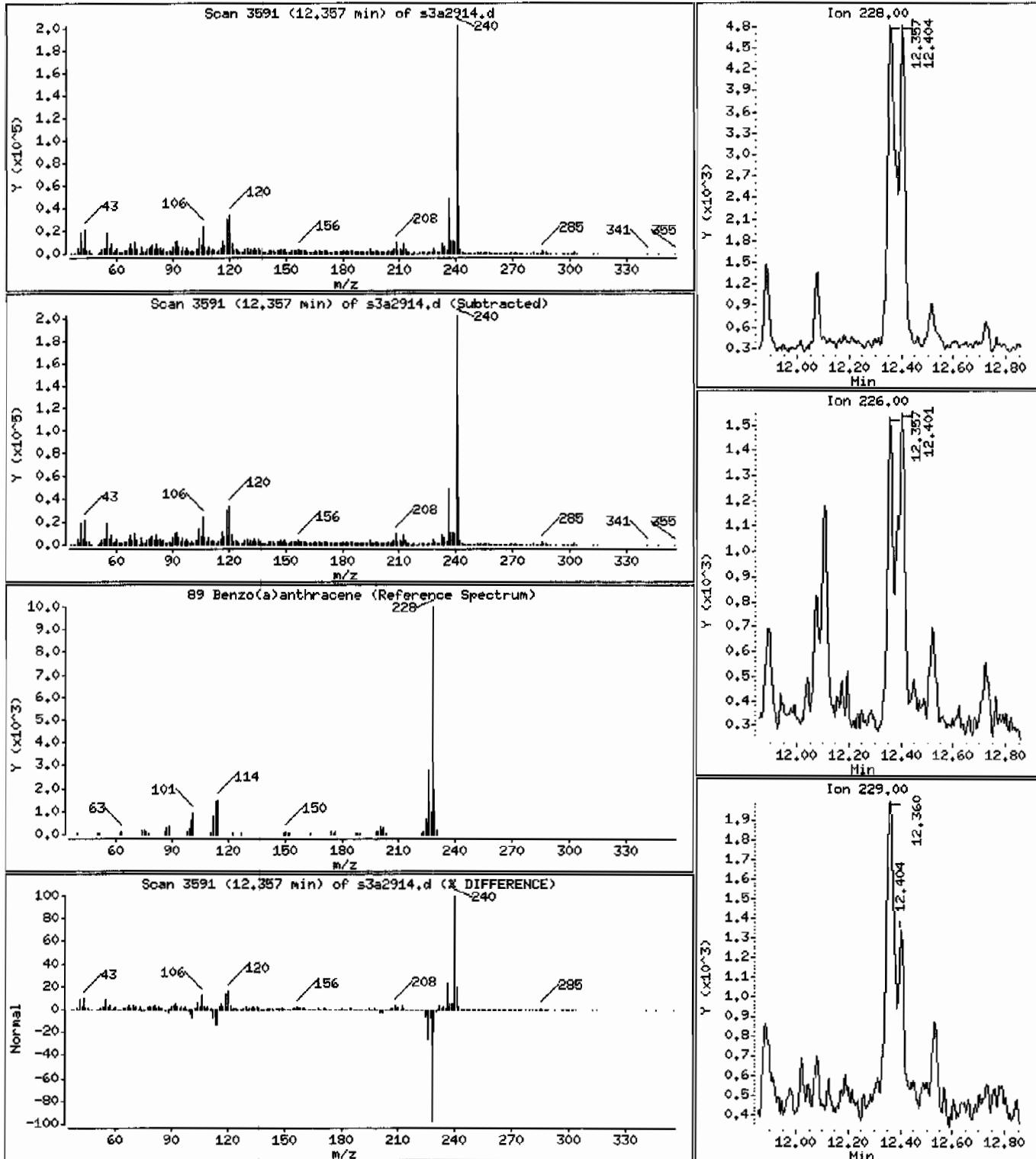
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 17.5 ug/Kg





Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVHF11LANL

Volume Injected (uL): 0.5

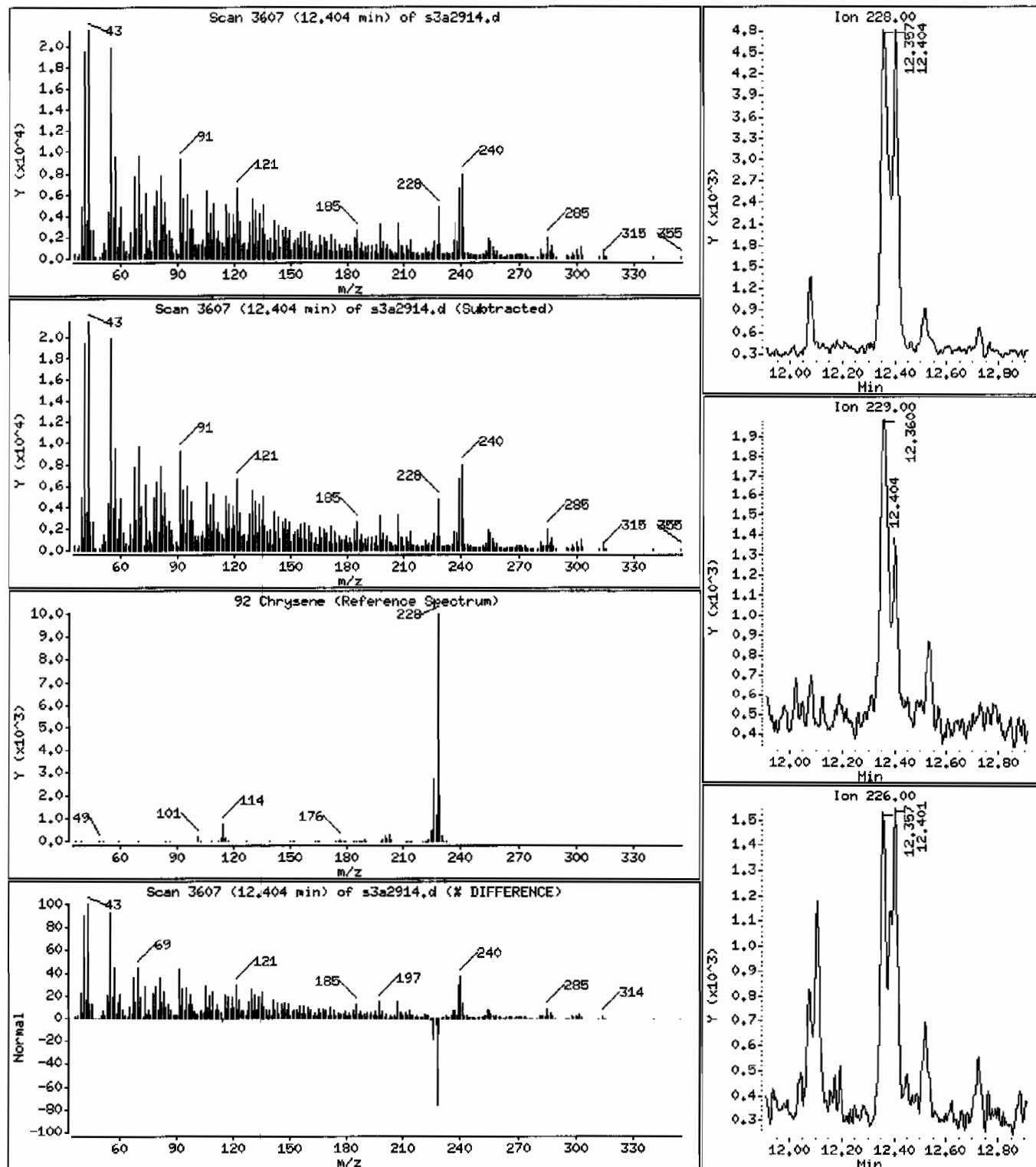
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 13.3 ug/Kg



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVHF111LANL

Volume Injected (uL): 0.5

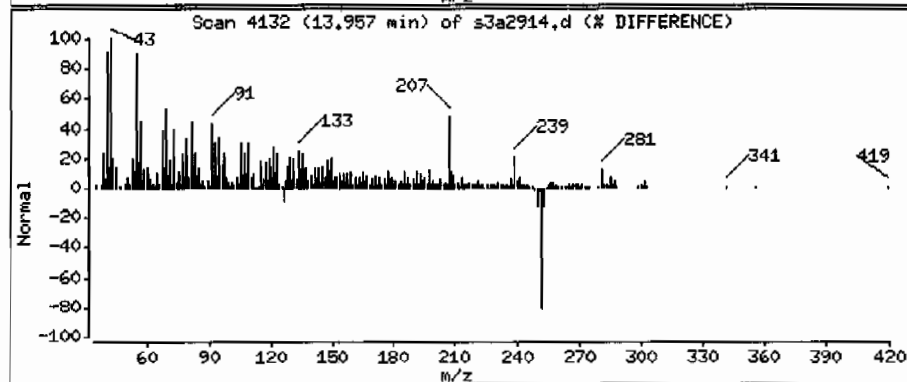
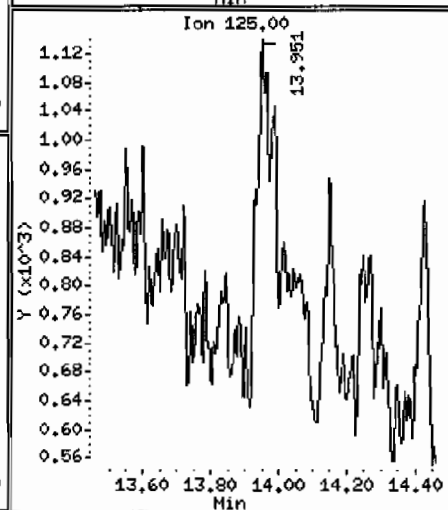
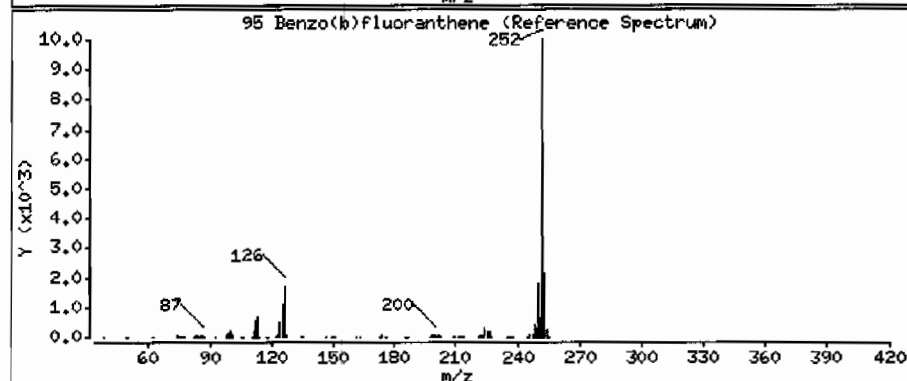
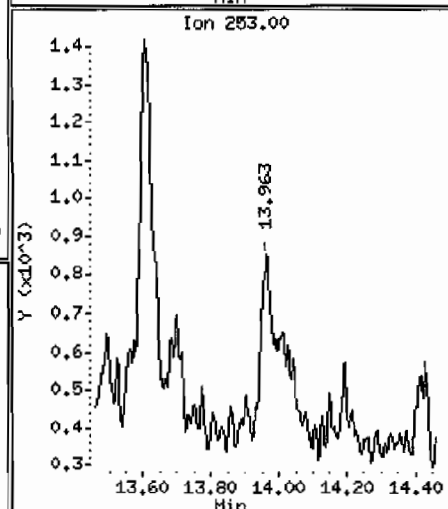
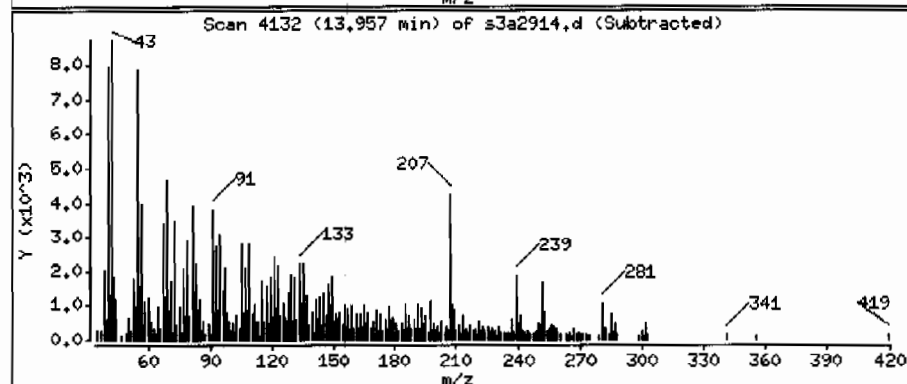
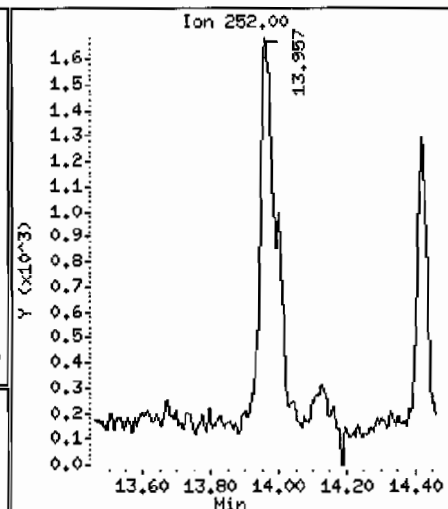
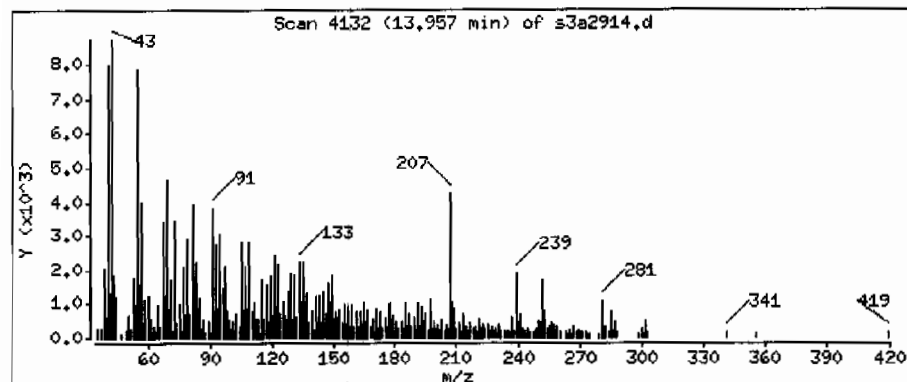
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 16.3 ug/Kg



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVHF111LANL

Volume Injected (uL): 0.5

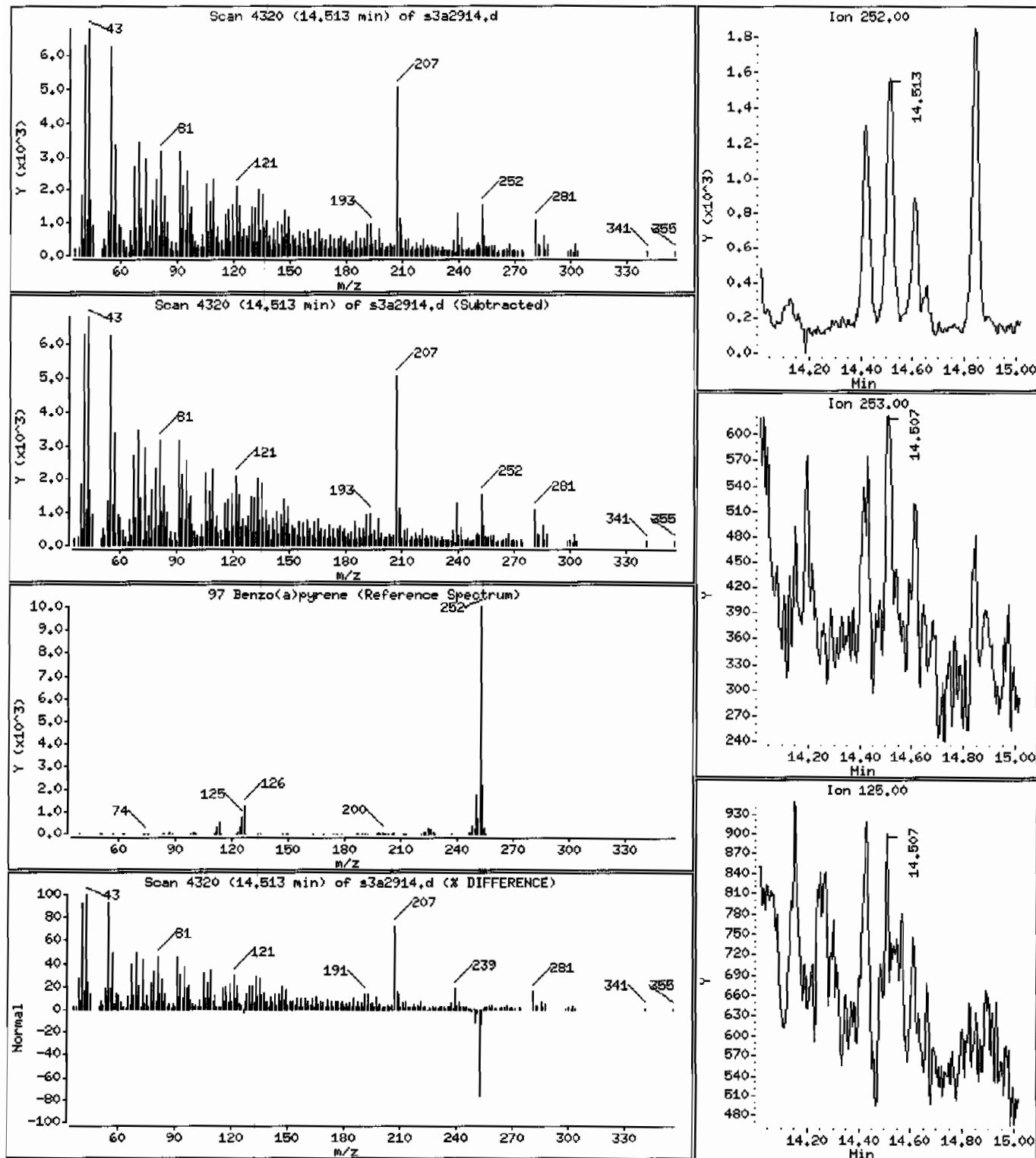
Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 13.5 ug/Kg



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411ISVMF111LANL

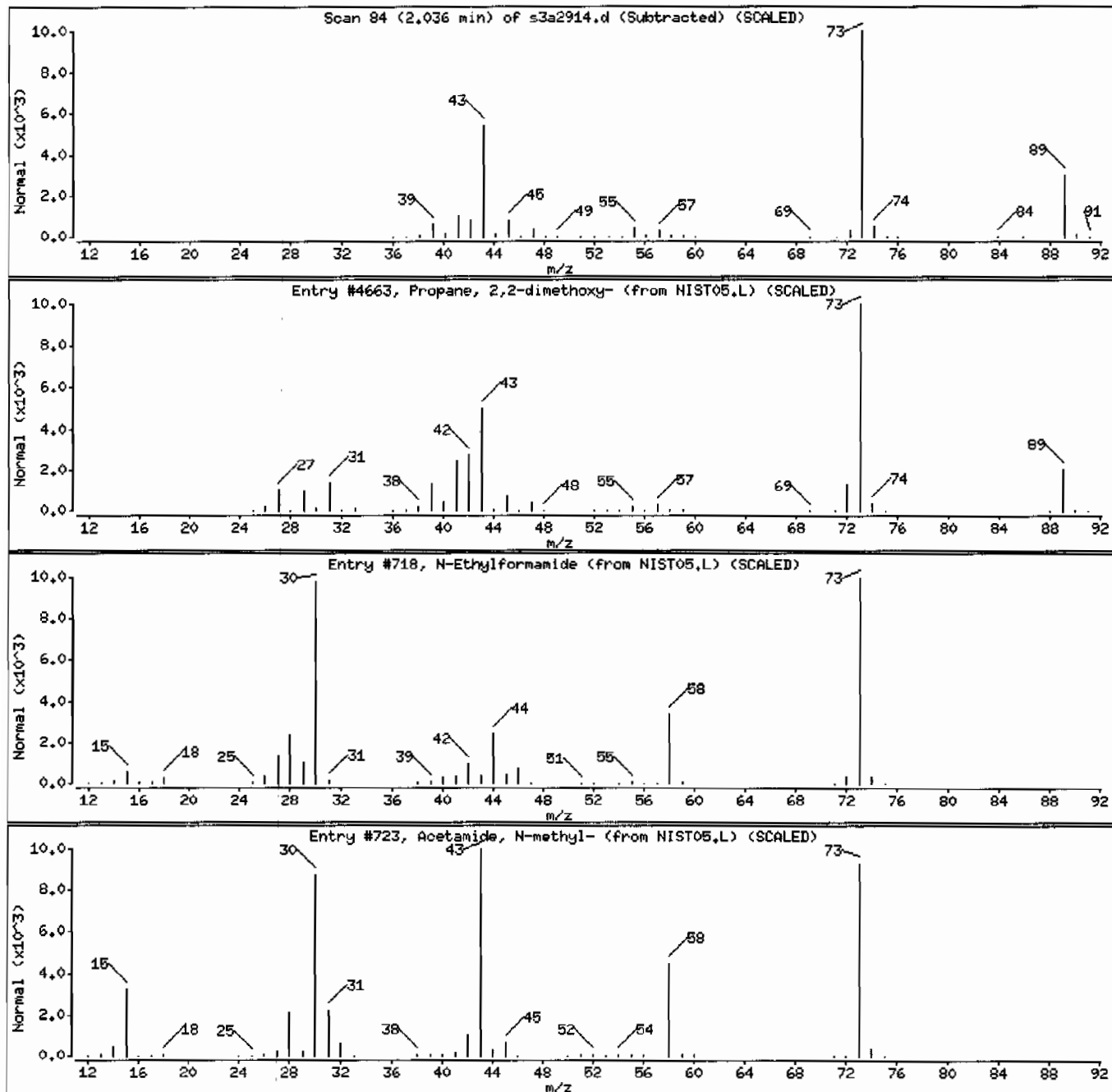
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown                       |            |          |       |         |         |        |
| Propane, 2,2-dimethoxy-       | 77-76-9    | NIST05.L | 4663  | 64      | C5H12O2 | 104    |
| N-Ethylformamide              | 627-45-2   | NIST05.L | 718   | 9       | C3H7NO  | 73     |
| Acetamide, N-methyl-          | 79-16-3    | NIST05.L | 723   | 9       | C3H7NO  | 73     |



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944874111SVMF111LANL

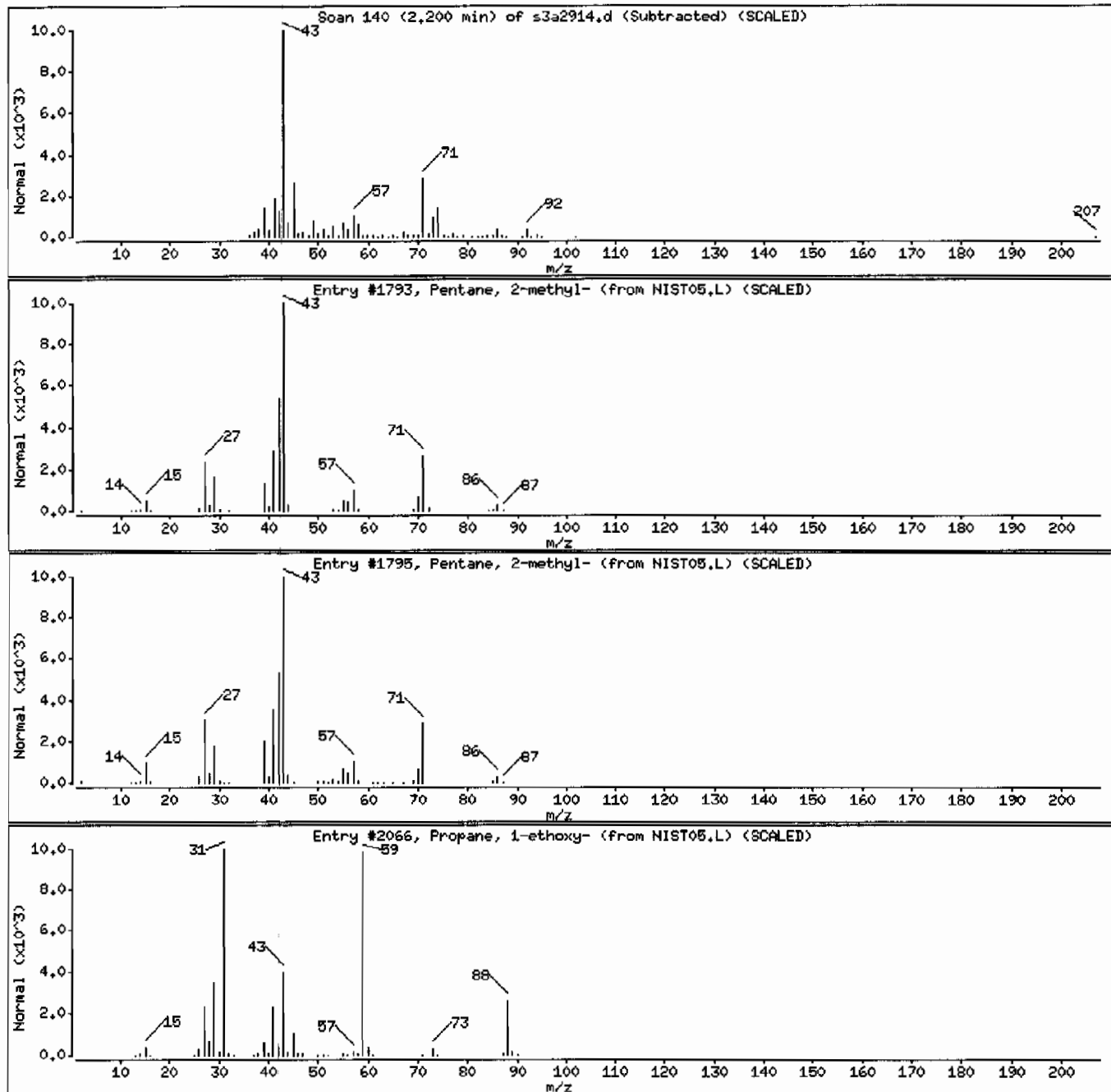
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown                       |            |          |       |         |         |        |
| Pentane, 2-methyl-            | 107-83-5   | NIST05.L | 1793  | 22      | C6H14   | 86     |
| Pentane, 2-methyl-            | 107-83-5   | NIST05.L | 1795  | 22      | C6H14   | 86     |
| Propane, 1-ethoxy-            | 628-32-0   | NIST05.L | 2066  | 11      | C5H12O  | 88     |



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: HSD3.i

Sample Info: 1245114010194487411SVHF111LANL

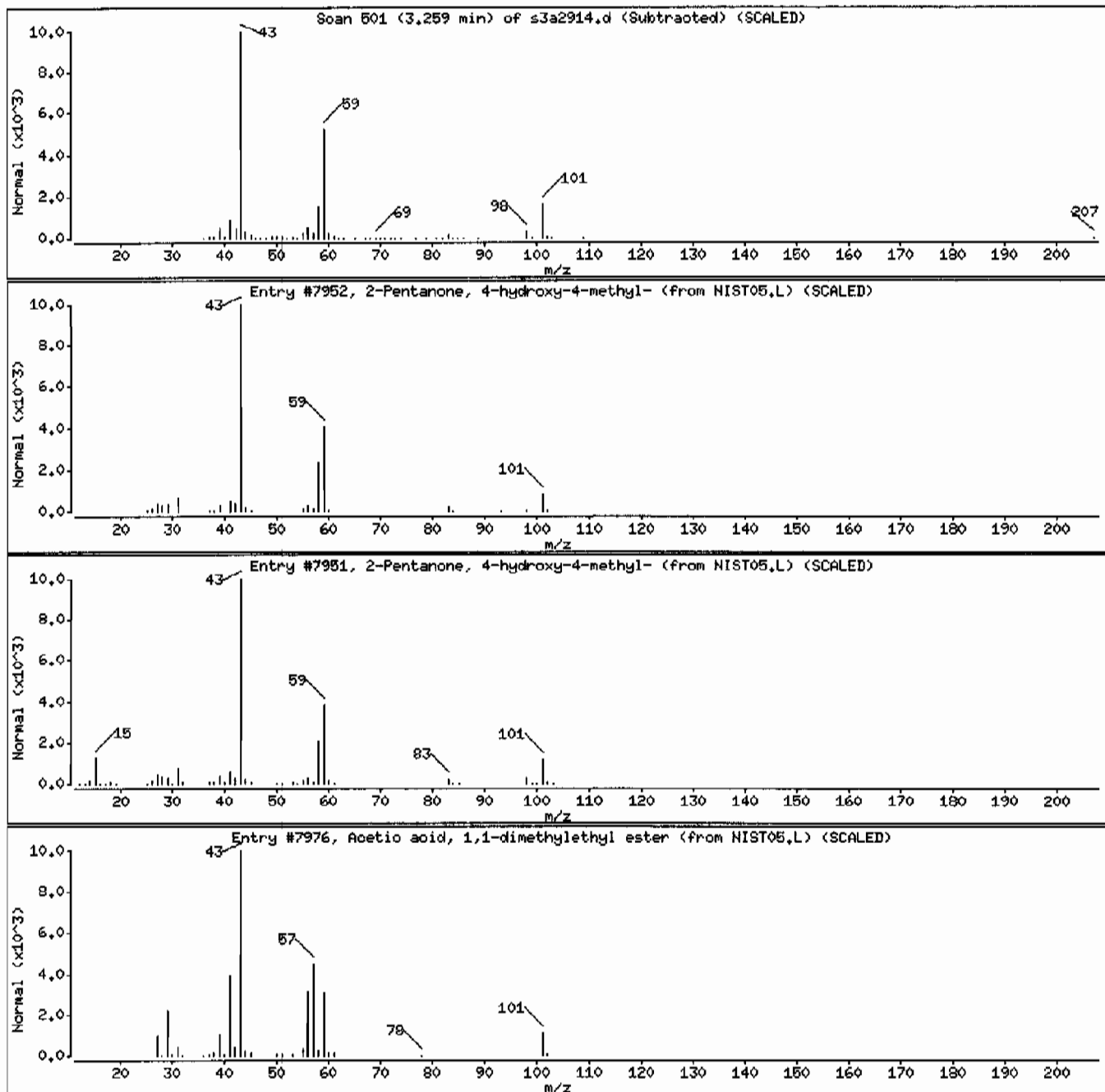
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match        | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--------------------------------------|------------|----------|-------|---------|---------|--------|
| Unknown Aldol Condensate             |            |          |       |         |         |        |
| 2-Pentanone, 4-hydroxy-4-methyl-     | 123-42-2   | NIST05.L | 7952  | 50      | C6H12O2 | 116    |
| 2-Pentanone, 4-hydroxy-4-methyl-     | 123-42-2   | NIST05.L | 7951  | 45      | C6H12O2 | 116    |
| Acetic acid, 1,1-dimethylethyl ester | 540-88-5   | NIST05.L | 7976  | 38      | C6H12O2 | 116    |



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411|SVHF11|LANL

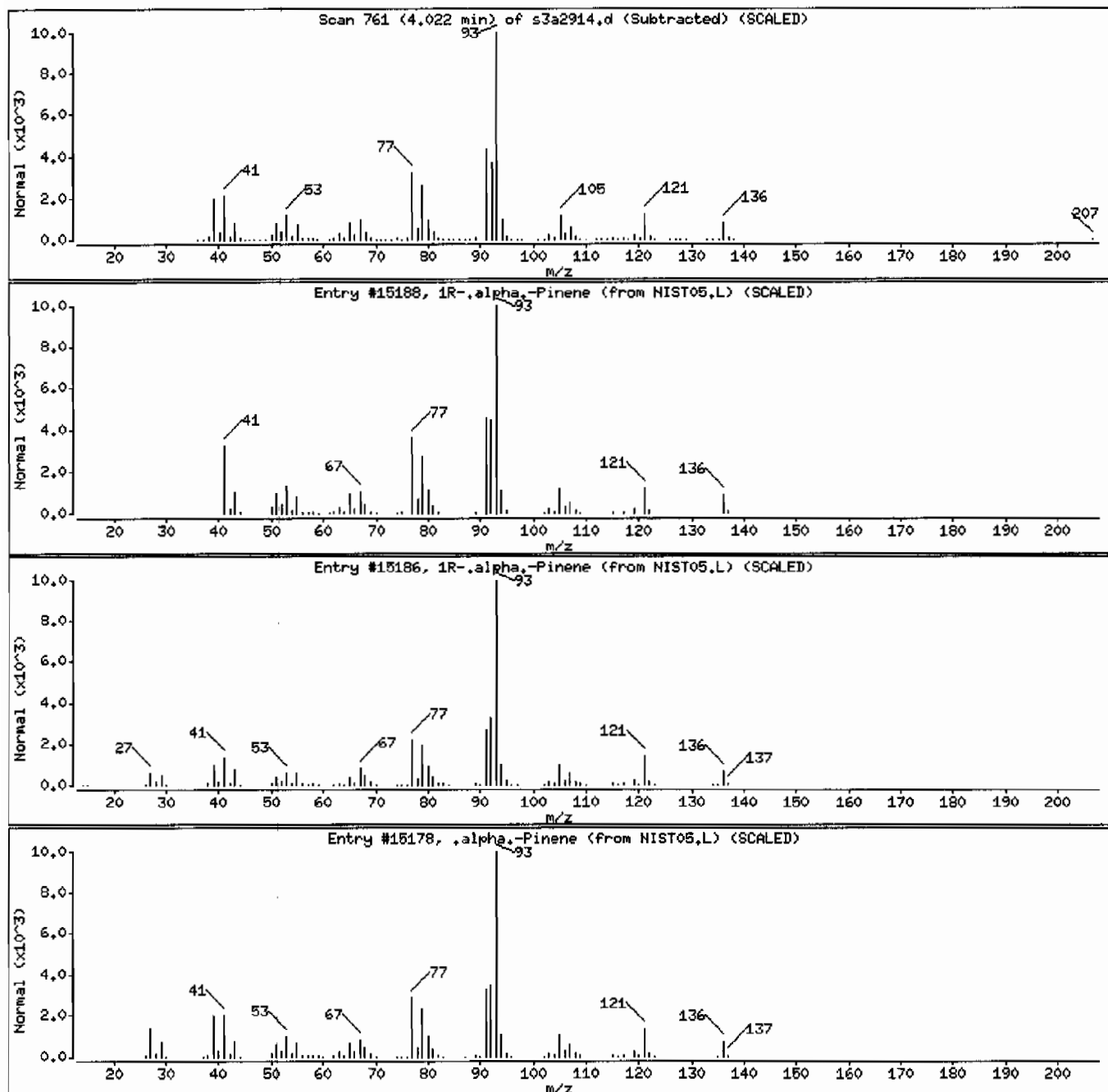
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| 1R-,alpha.-Pinene             | 7785-70-8  | NIST05.L | 15188 | 98      | C10H16  | 136    |
| 1R-,alpha.-Pinene             | 7785-70-8  | NIST05.L | 15186 | 96      | C10H16  | 136    |
| ,alpha.-Pinene                | 80-56-8    | NIST05.L | 15178 | 96      | C10H16  | 136    |



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVHF111LANL

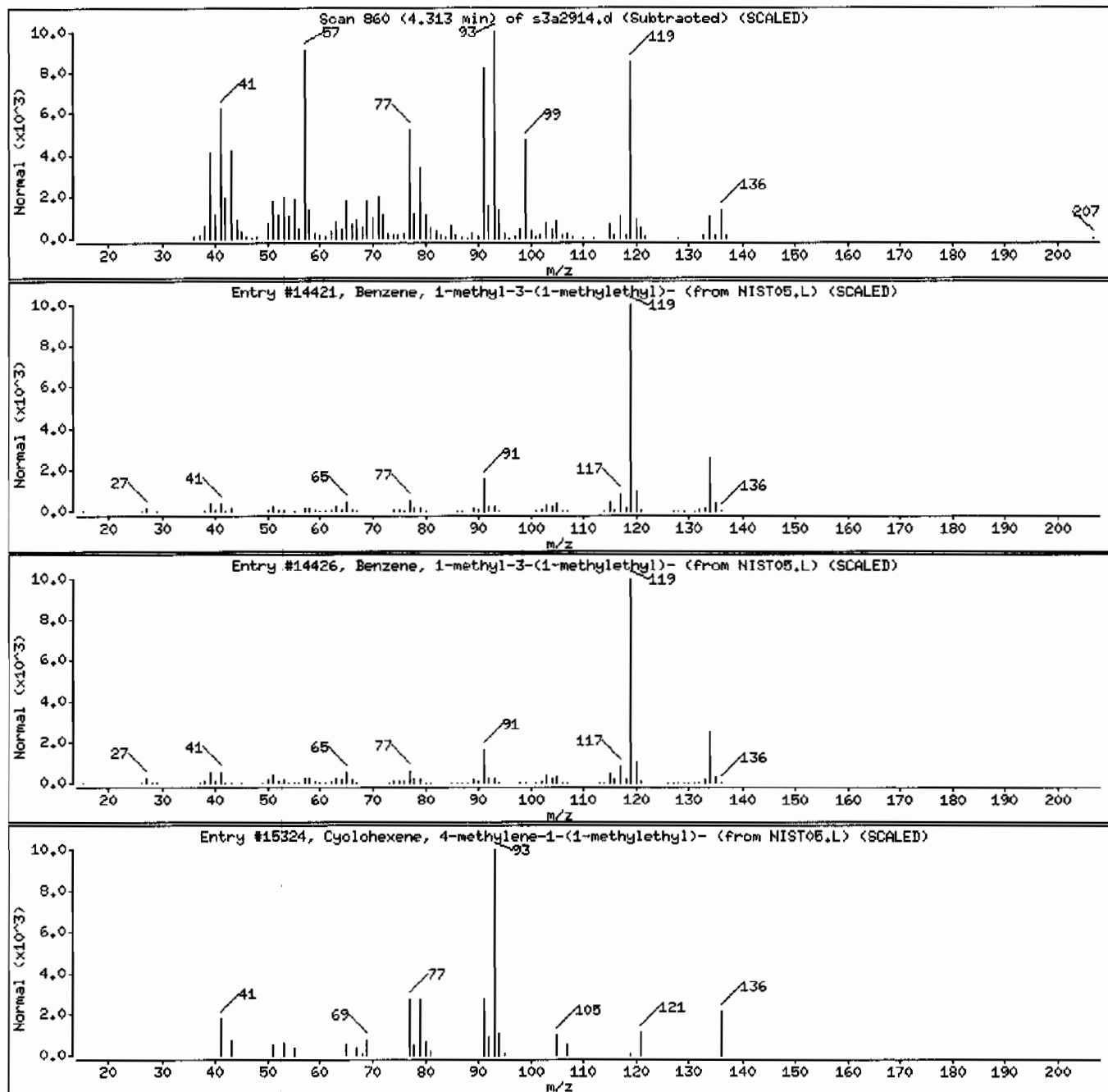
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match               | CAS Number | Library  | Entry | Quality | Formula | Weight |
|---|------------|----------|-------|---------|---------|--------|
| Unknown                                     |            |          |       |         |         |        |
| Benzene, 1-methyl-3-(1-methylethyl)-        | 535-77-3   | NIST05.L | 14421 | 70      | C10H14  | 134    |
| Benzene, 1-methyl-3-(1-methylethyl)-        | 535-77-3   | NIST05.L | 14426 | 70      | C10H14  | 134    |
| Cyclohexene, 4-methylene-1-(1-methylethyl)- | 99-84-3    | NIST05.L | 15324 | 50      | C10H16  | 136    |





Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVHF11ILANL

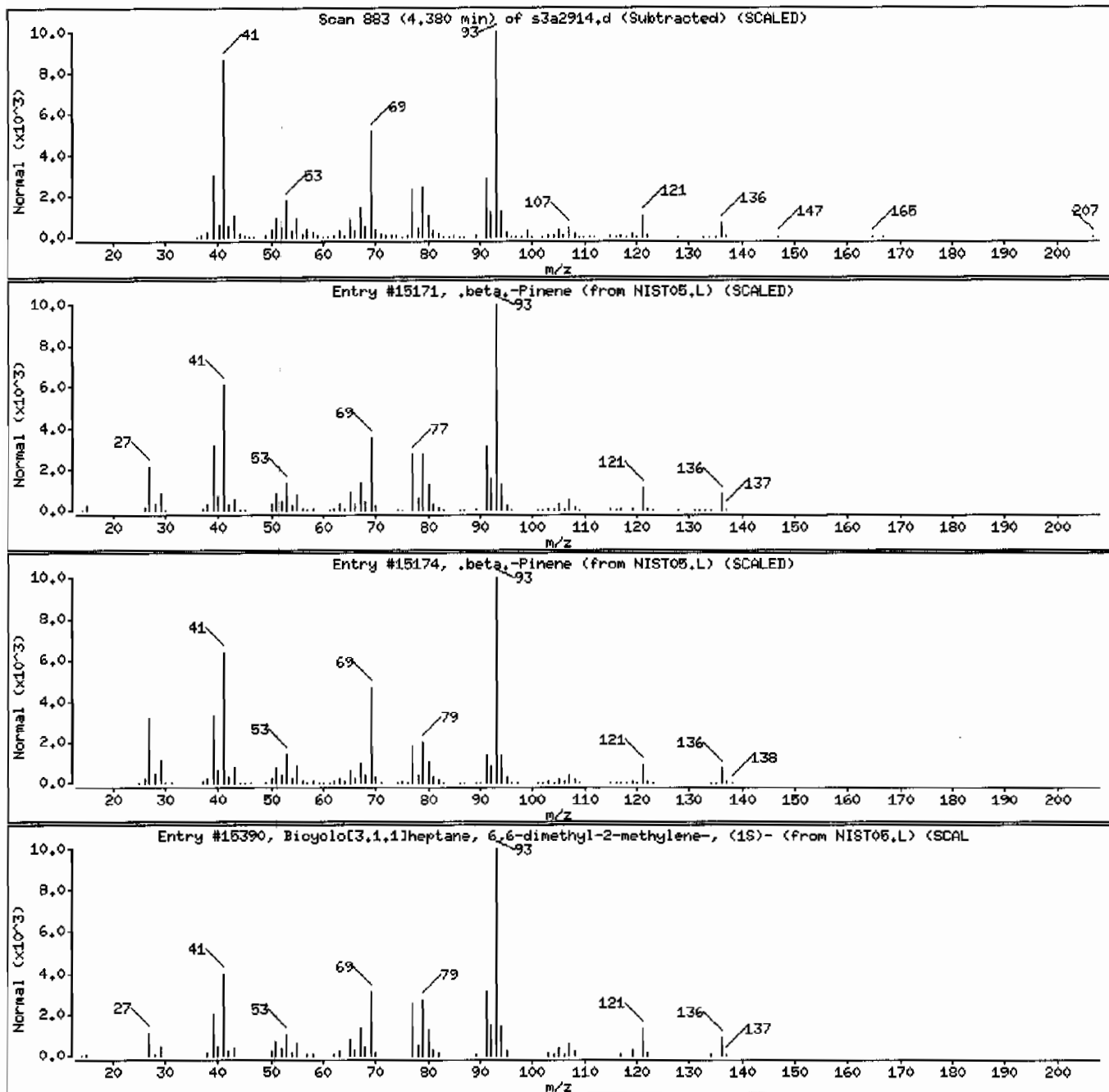
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry | Quality | Formula | Weight |
|--|------------|----------|-------|---------|---------|--------|
| .beta.-Pinene                            | 127-91-3   | NIST05.L | 15171 | 97      | C10H16  | 136    |
| .beta.-Pinene                            | 127-91-3   | NIST05.L | 15174 | 97      | C10H16  | 136    |
| Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me | 18172-67-3 | NIST05.L | 15390 | 95      | C10H16  | 136    |



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944874111SVHF111LANL

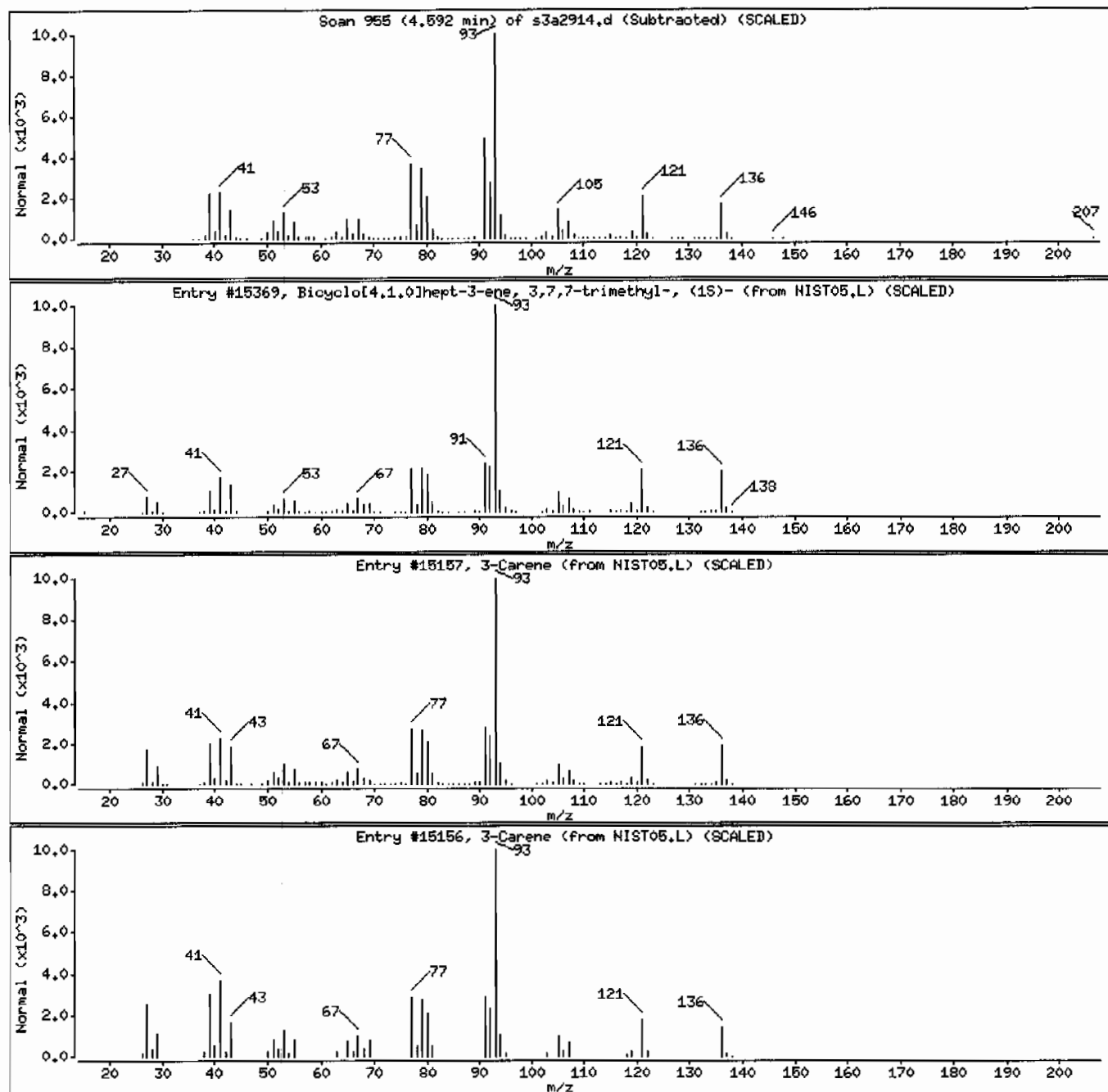
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match             | CAS Number | Library  | Entry | Quality | Formula | Weight |
|---|------------|----------|-------|---------|---------|--------|
| Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl | 498-15-7   | NIST05.L | 15369 | 97      | C10H16  | 136    |
| 3-Carene                                  | 13466-78-9 | NIST05.L | 15157 | 97      | C10H16  | 136    |
| 3-Carene                                  | 13466-78-9 | NIST05.L | 15156 | 96      | C10H16  | 136    |



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: I245114010194487411|SVHF|1|LANL

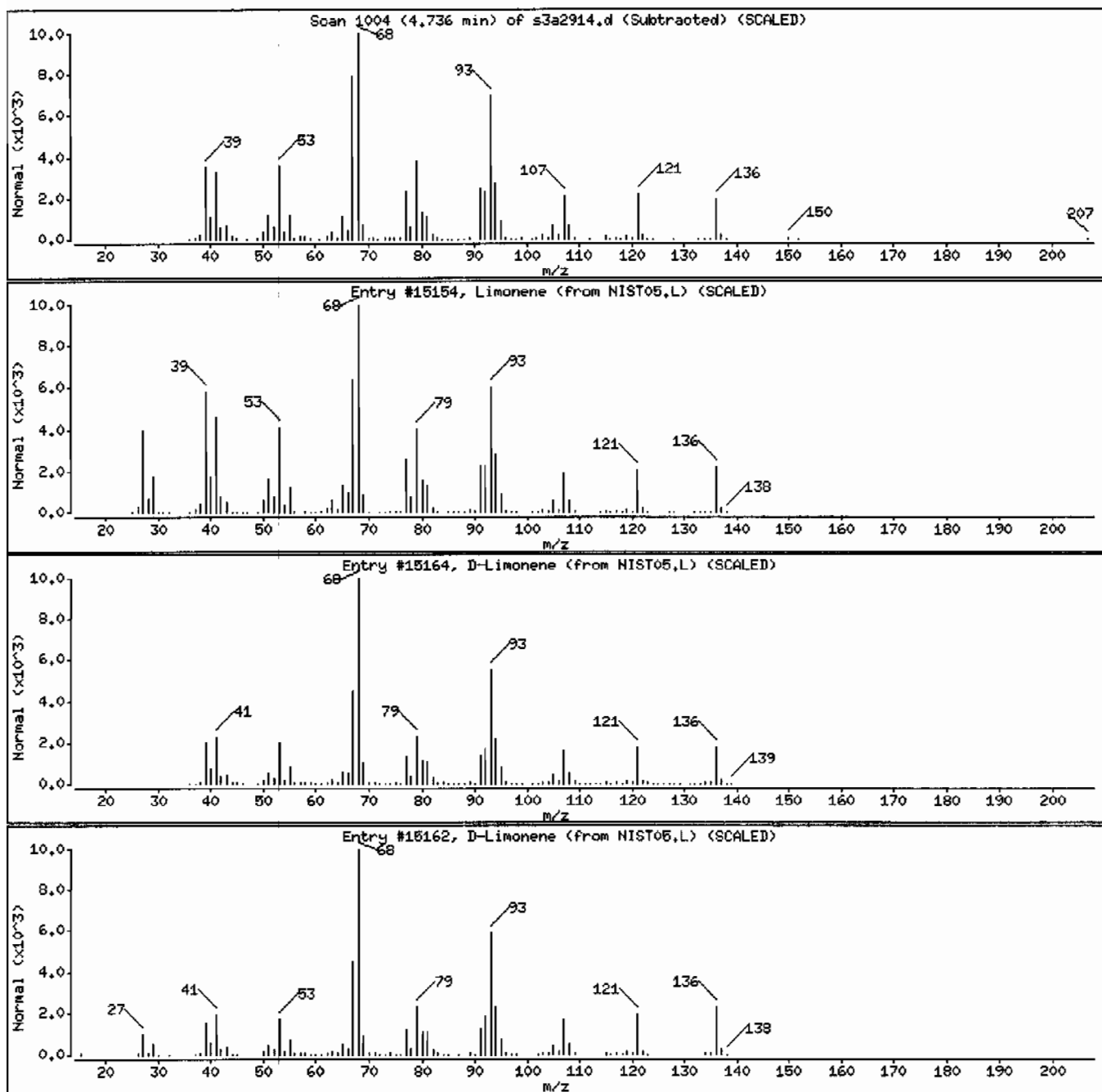
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Limonene                      | 138-86-3   | NIST05.L | 15154 | 95      | C10H16  | 136    |
| D-Limonene                    | 5989-27-5  | NIST05.L | 15164 | 94      | C10H16  | 136    |
| D-Limonene                    | 5989-27-5  | NIST05.L | 15162 | 94      | C10H16  | 136    |



Date: 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: HSD3.i

Sample Info: 12451140101944874111SVHF111LANL

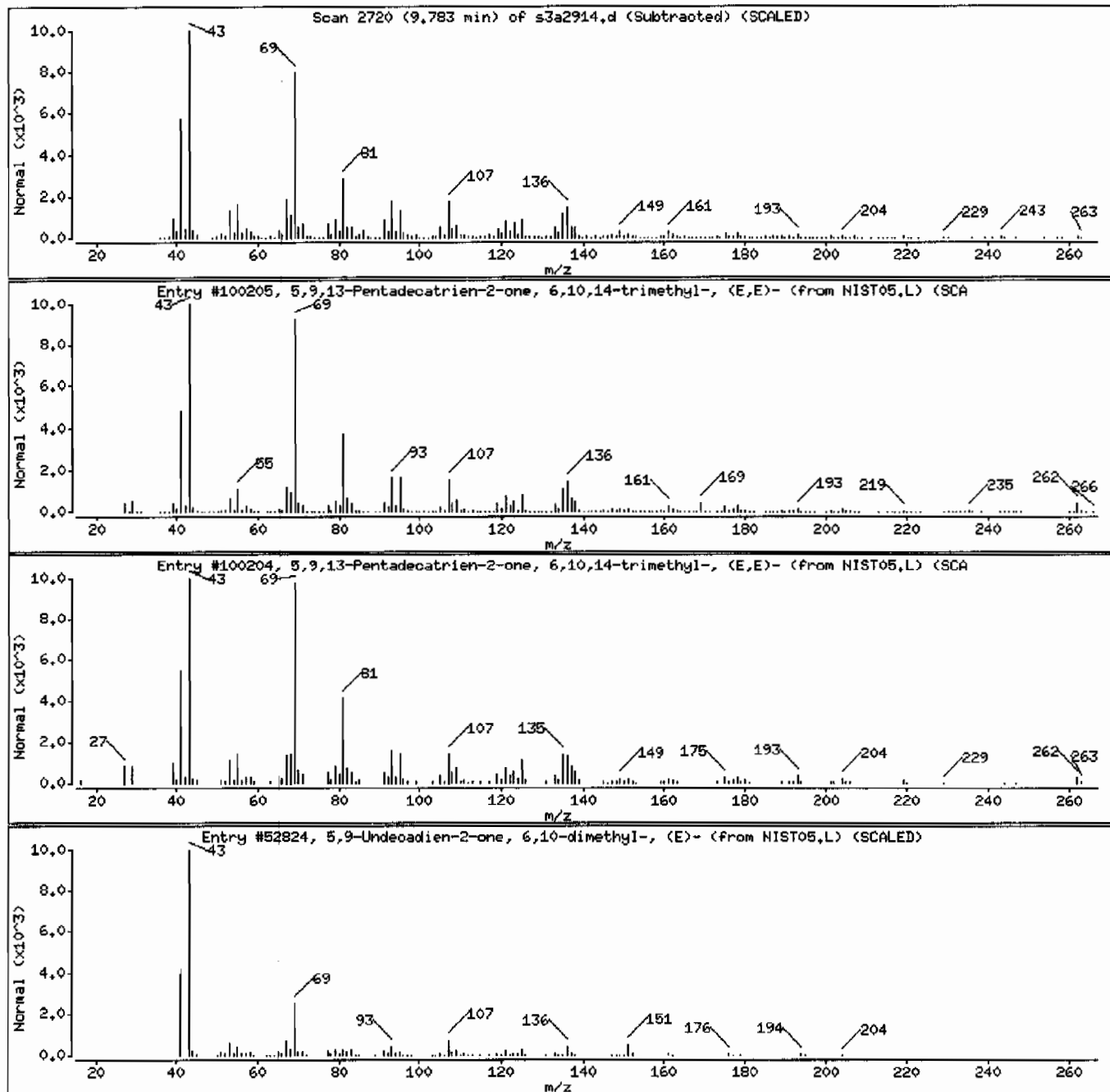
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula | Weight |
|--|------------|----------|--------|---------|---------|--------|
| 5,9,13-Pentadecatrien-2-one, 6,10,14-tri | 1117-52-8  | NIST05.L | 100205 | 91      | C18H30O | 262    |
| 5,9,13-Pentadecatrien-2-one, 6,10,14-tri | 1117-52-8  | NIST05.L | 100204 | 91      | C18H30O | 262    |
| 5,9-Undecadien-2-one, 6,10-dimethyl-, (E | 3796-70-1  | NIST05.L | 52824  | 59      | C13H22O | 194    |



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVHF111LANL

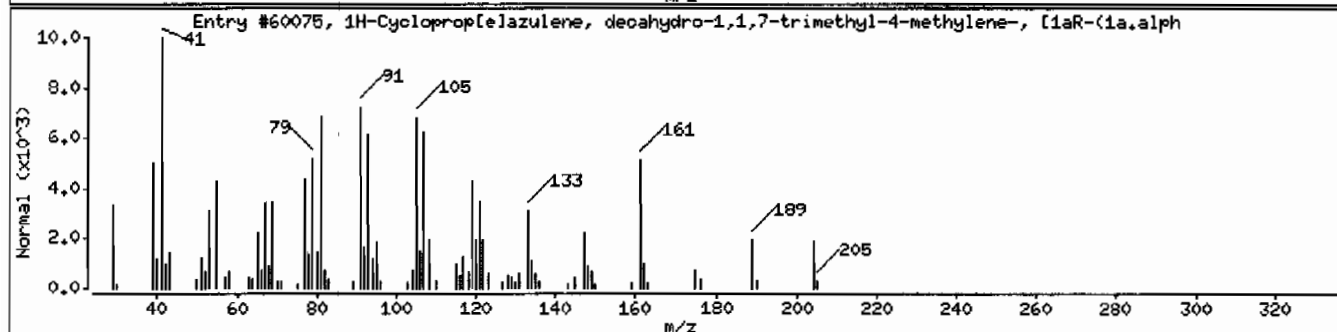
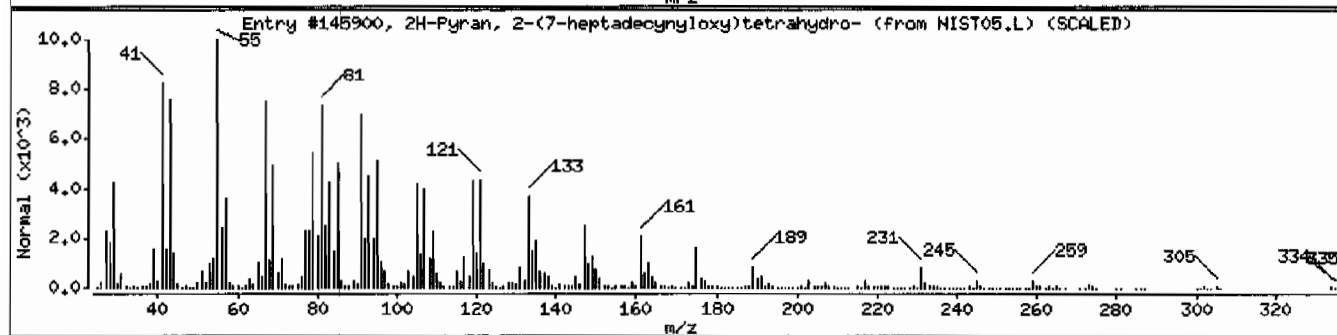
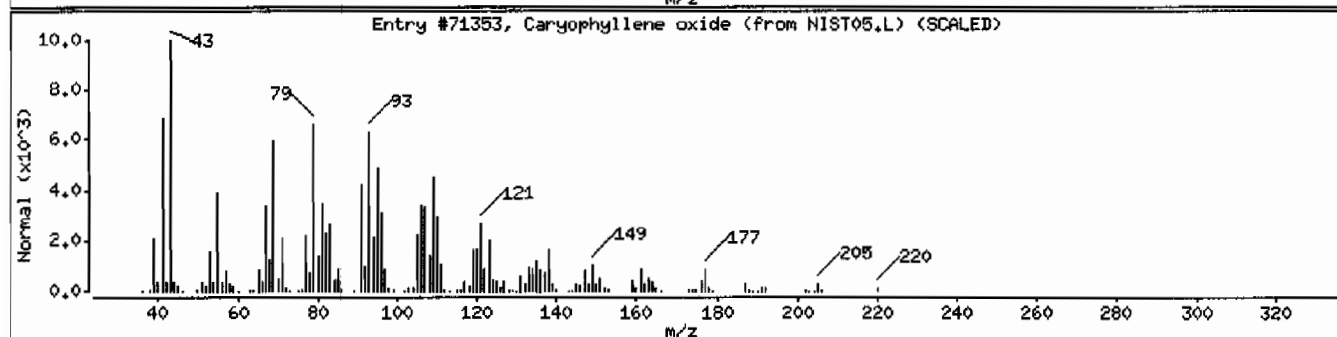
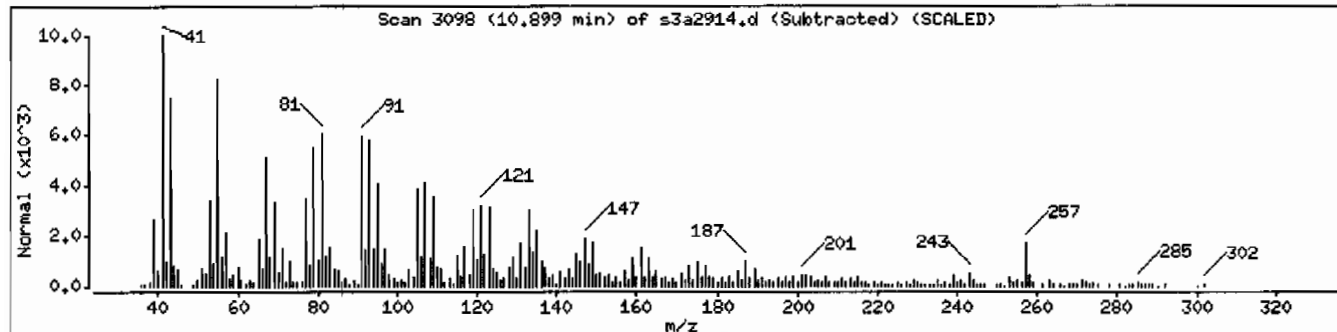
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| Unknown                                  |            |          |        |         |          |        |
| Caryophyllene oxide                      | 1139-30-6  | NIST05.L | 71353  | 60      | C15H24O  | 220    |
| 2H-Pyran, 2-(7-heptadecyloxy)tetrahydr   | 56599-50-9 | NIST05.L | 145900 | 52      | C22H40O2 | 336    |
| 1H-Cycloprop[elazulene, decahydro-1,1,7- | 26246-27-9 | NIST05.L | 60075  | 50      | C15H24   | 204    |



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411|SVHF11|LANL

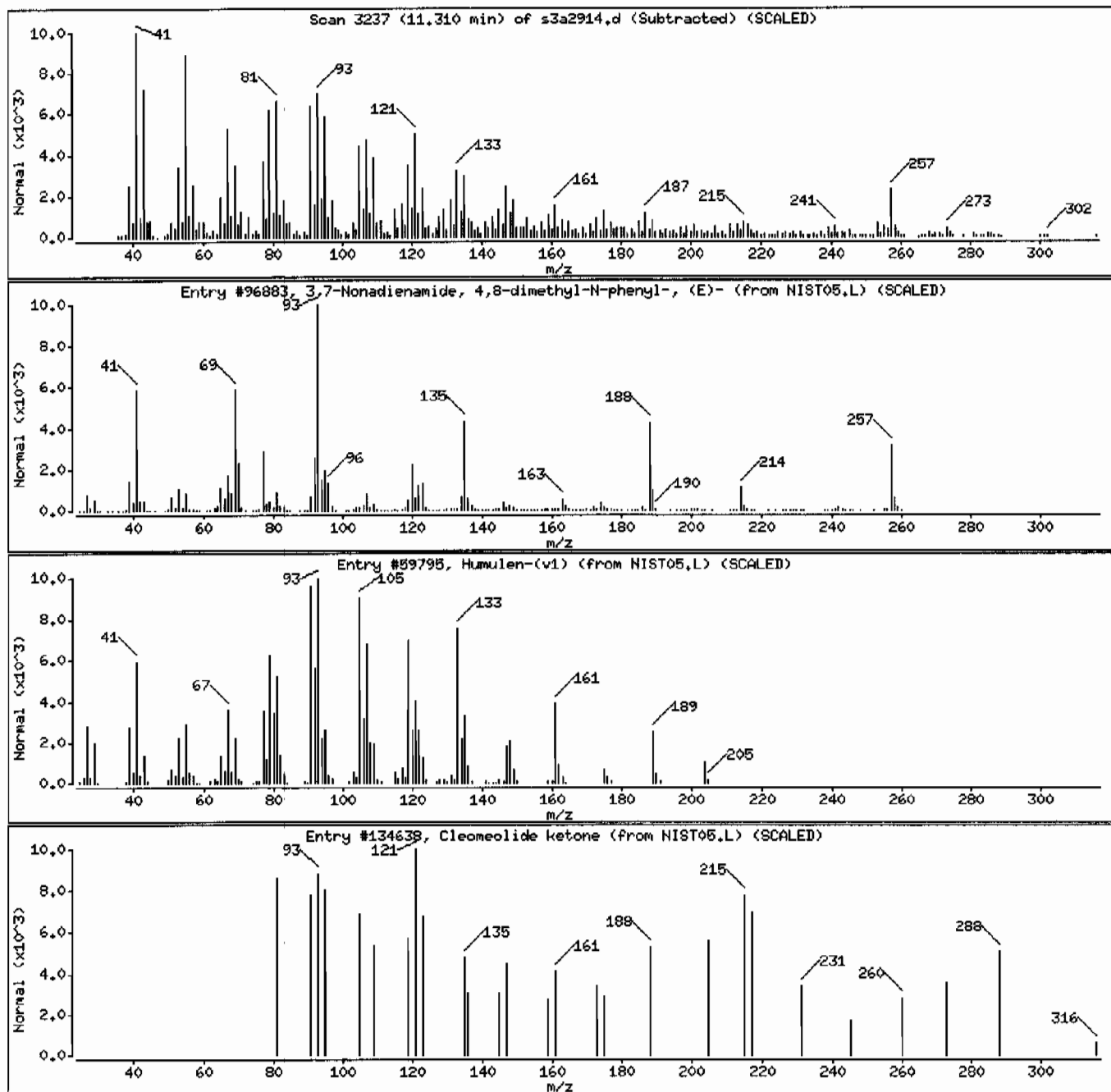
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|--|--------------|----------|--------|---------|----------|--------|
| Unknown                                  |              |          |        |         |          |        |
| 3,7-Nonadienamide, 4,8-dimethyl-N-phenyl | 104476-99-5  | NIST05.L | 96883  | 49      | C17H23NO | 257    |
| Humulen-(v1)                             | 1000159-39-4 | NIST05.L | 59795  | 46      | C15H24   | 204    |
| Cleomeolide ketone                       | 72190-22-8   | NIST05.L | 134638 | 43      | C20H28O3 | 316    |



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVHF111LANL

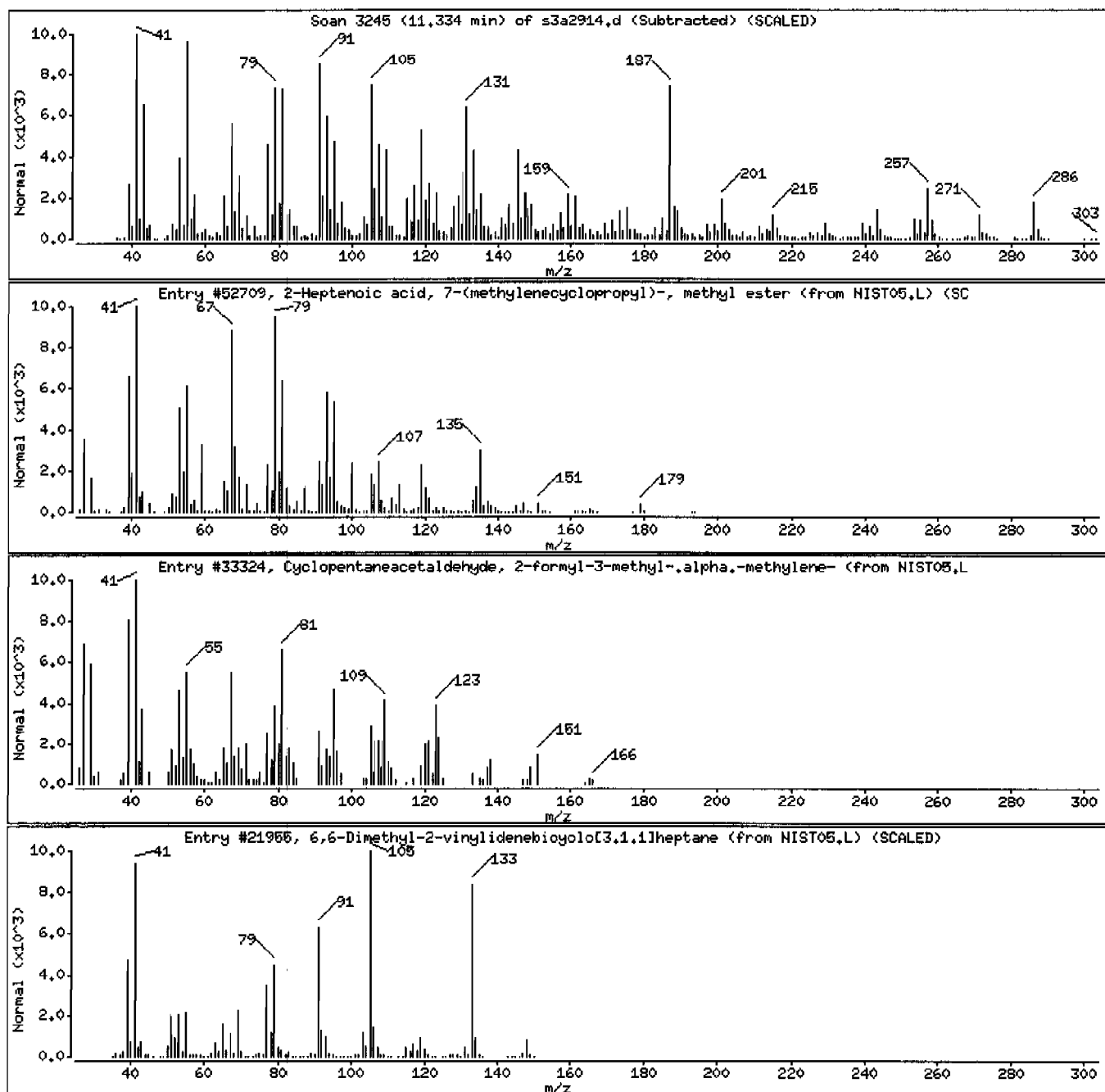
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5HS

Column diameter: 0.20

| Library Search Compound Match              | CAS Number   | Library  | Entry | Quality | Formula  | Weight |
|--|--------------|----------|-------|---------|----------|--------|
| Unknown                                    |              |          |       |         |          |        |
| 2-Heptenoic acid, 7-(methylenecyclopropyl) | 1000158-04-1 | NIST05.L | 52709 | 38      | C12H18O2 | 194    |
| Cyclopentaneacetaldehyde, 2-formyl-3-met   | 5951-57-5    | NIST05.L | 33324 | 30      | C10H14O2 | 166    |
| 6,6-Dimethyl-2-vinylidenebicyclo[3.1.1]h   | 39021-75-5   | NIST05.L | 21955 | 30      | C11H16   | 148    |



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: I245114010194487411SVHF111LANL

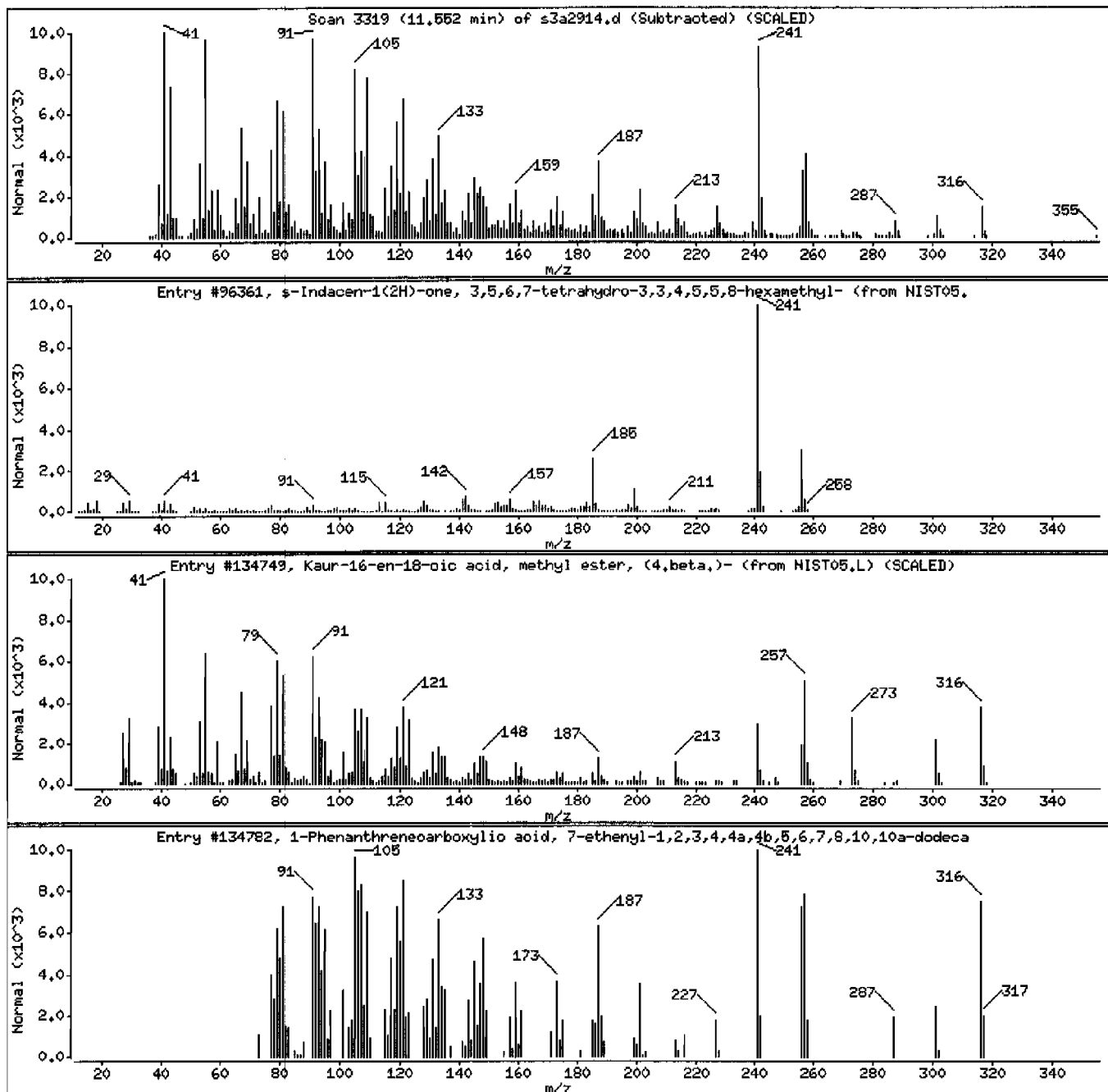
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match              | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| Unknown                                    |            |          |        |         |          |        |
| s-Indacen-1(2H)-one, 3,5,6,7-tetrahydro-   | 38754-94-8 | NIST05.L | 96361  | 59      | C18H24O  | 256    |
| Kaur-16-en-18-oic acid, methyl ester, (4   | 5524-25-4  | NIST05.L | 134749 | 59      | C21H32O2 | 316    |
| 1-Phenanthreneoicarboxylic acid, 7-ethenyl | 1686-62-0  | NIST05.L | 134782 | 58      | C21H32O2 | 316    |





Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944974111SVHF111LANL

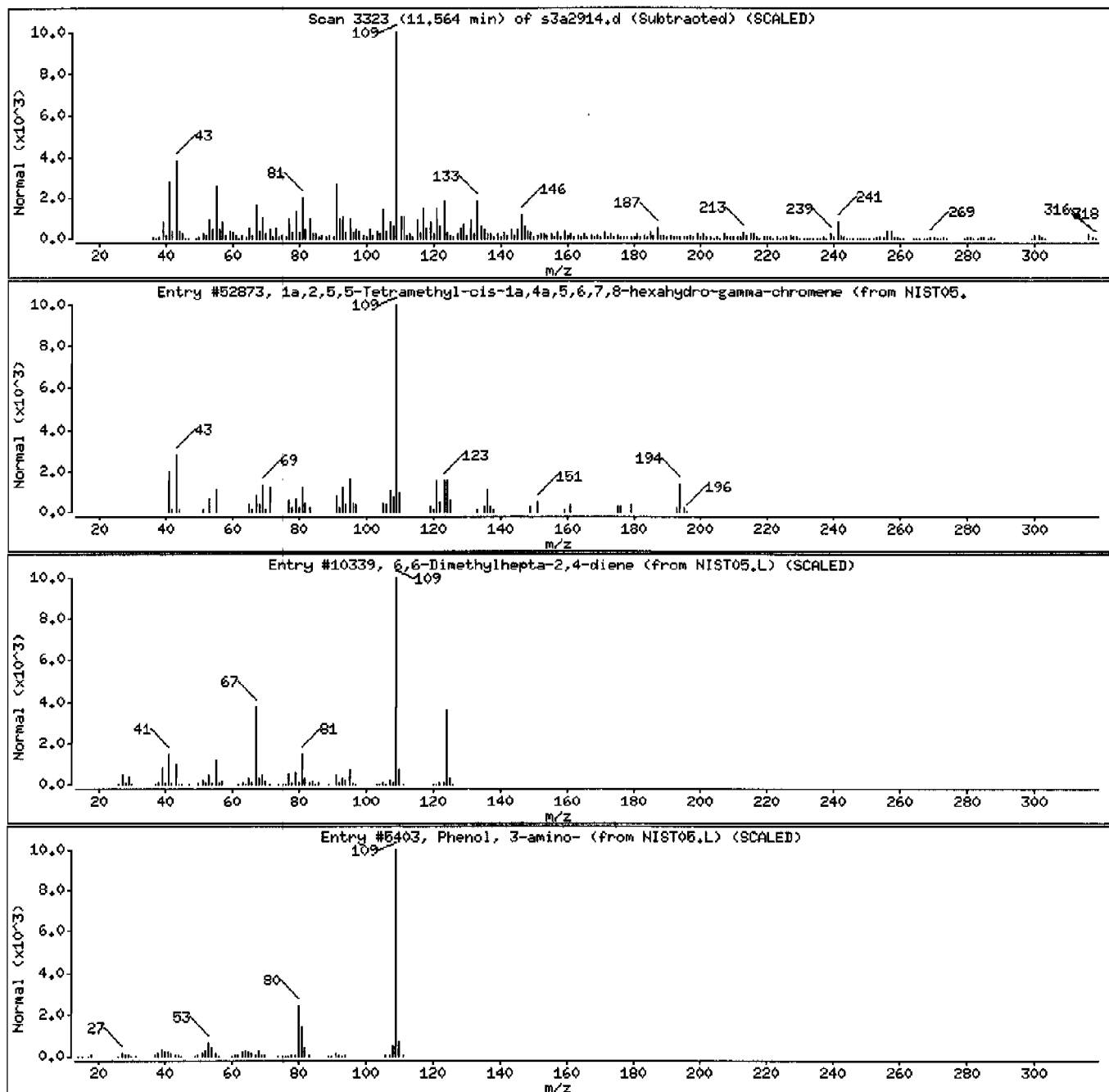
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula | Weight |
|--|--------------|----------|-------|---------|---------|--------|
| Unknown                                  |              |          |       |         |         |        |
| 1a,2,5,5-Tetramethyl-cis-1a,4a,5,6,7,8-h | 1000215-77-7 | NIST05.L | 52873 | 52      | C13H22O | 194    |
| 6,6-Dimethylhepta-2,4-diene              | 1000195-03-3 | NIST05.L | 10339 | 49      | C9H16   | 124    |
| Phenol, 3-amino-                         | 591-27-5     | NIST05.L | 5403  | 43      | C6H7NO  | 109    |



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVHF11ILANL

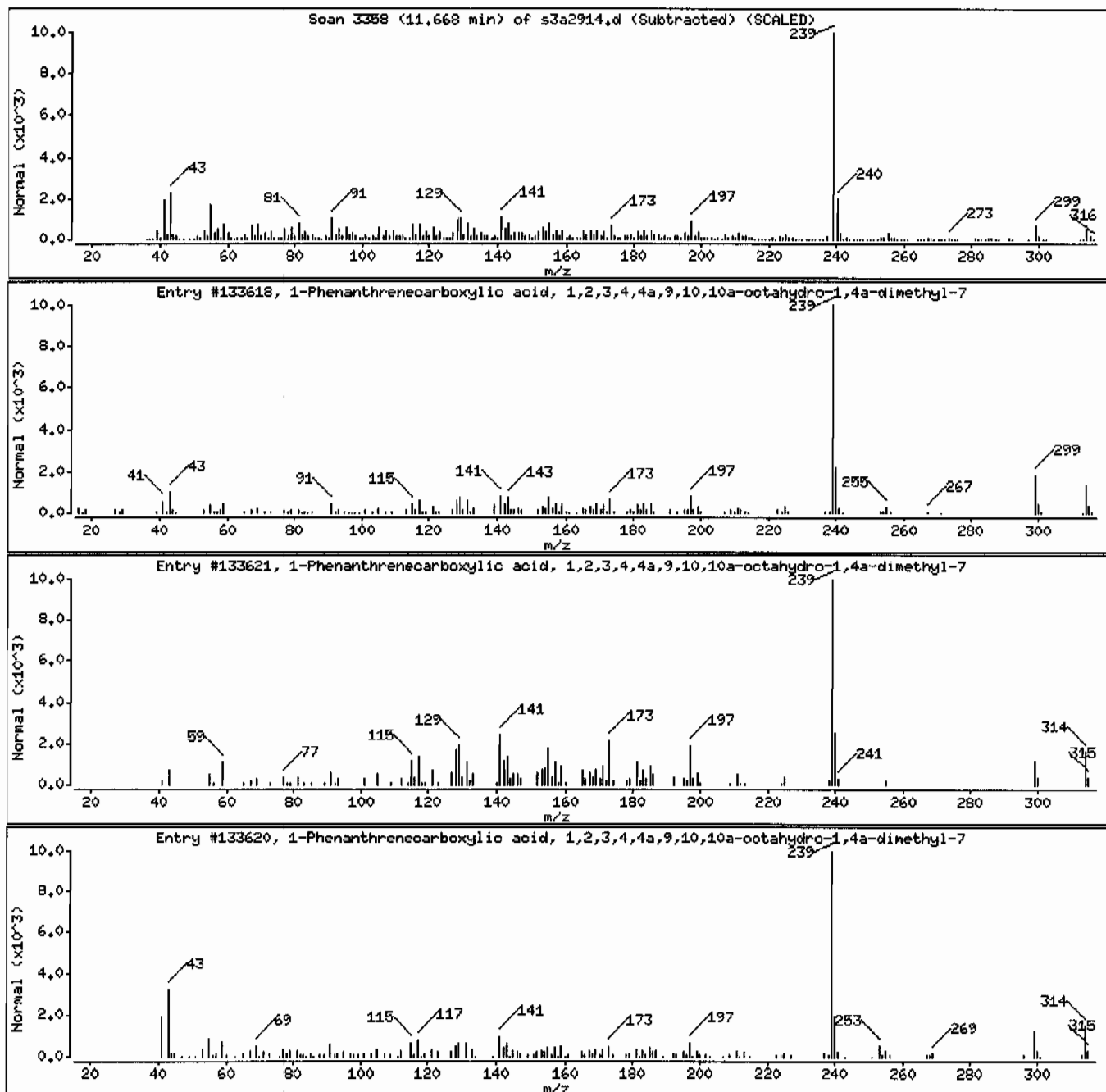
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133618 | 99      | C21H30O2 | 314    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133621 | 95      | C21H30O2 | 314    |
| 1-Phenanthrenecarboxylic acid, 1,2,3,4,4 | 1235-74-1  | NIST05.L | 133620 | 94      | C21H30O2 | 314    |



Date: 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944874111SVHF111LANL

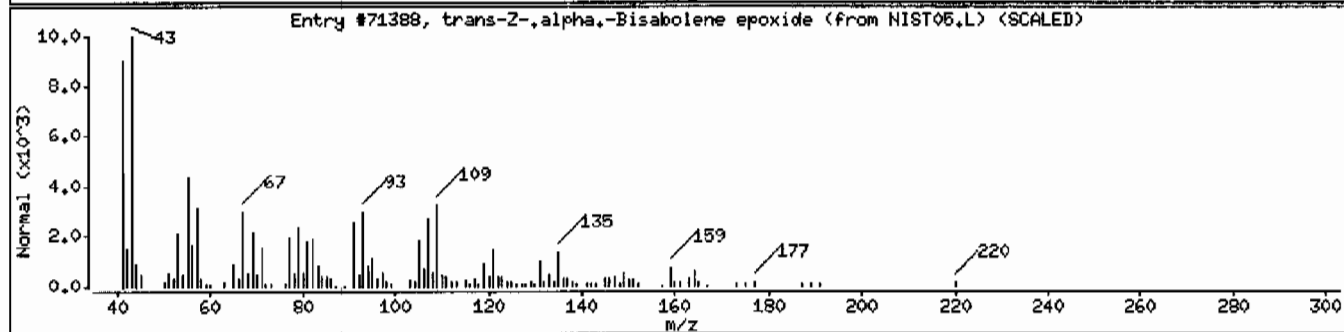
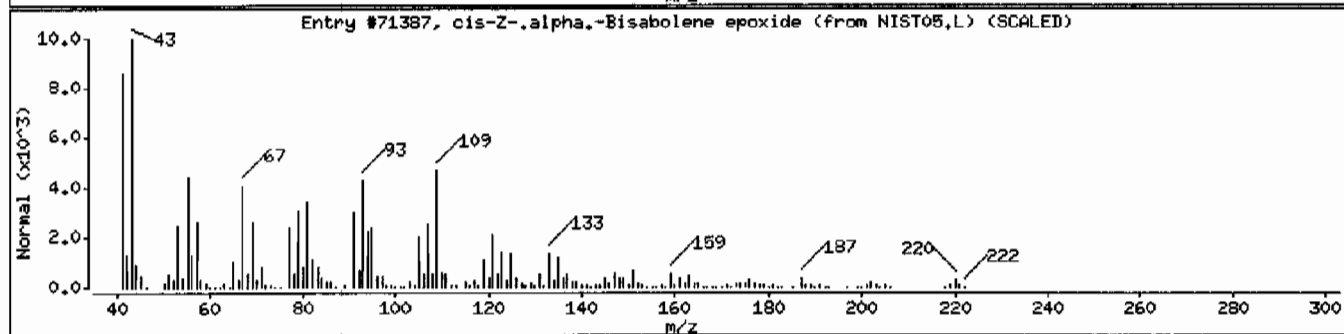
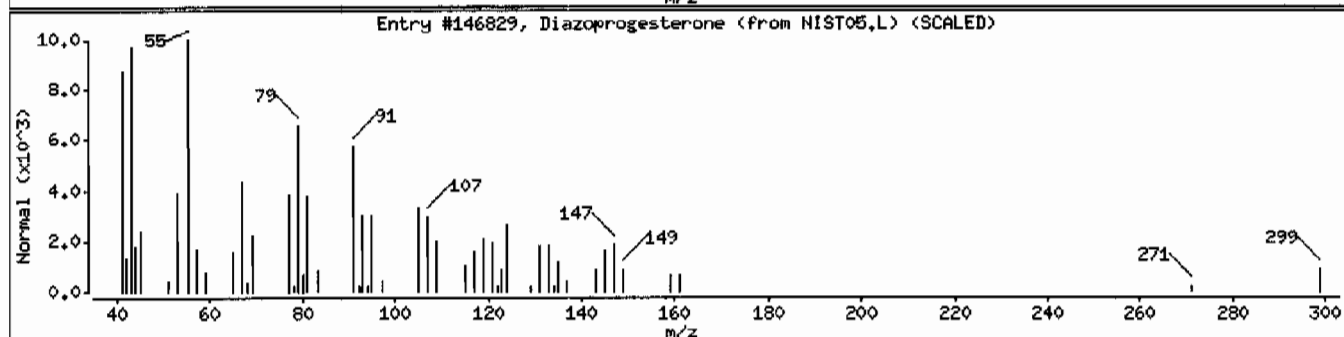
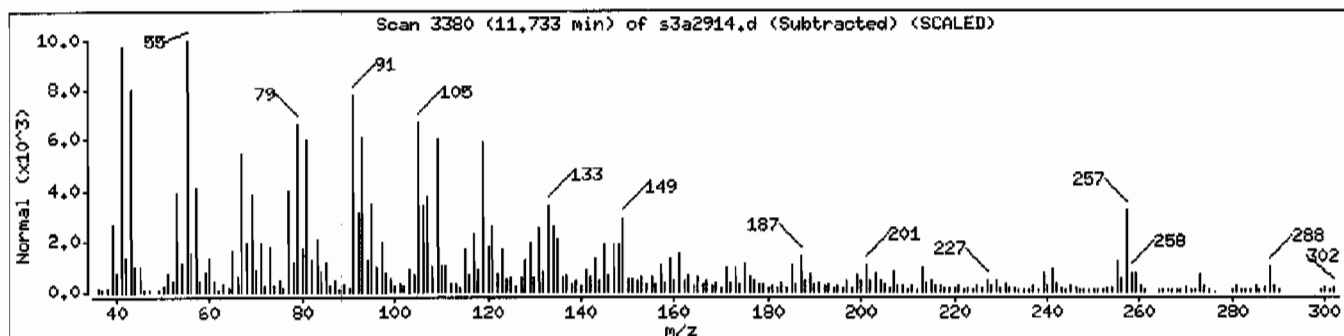
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match      | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|------------------------------------|--------------|----------|--------|---------|----------|--------|
| Unknown                            |              |          |        |         |          |        |
| Diazprogesterone                   | 1000255-30-9 | NIST05.L | 146829 | 58      | C21H30N4 | 338    |
| cis-Z,.alpha.-Bisabolene epoxide   | 1000131-71-2 | NIST05.L | 71387  | 52      | C15H24O  | 220    |
| trans-Z,.alpha.-Bisabolene epoxide | 1000131-71-1 | NIST05.L | 71388  | 50      | C15H24O  | 220    |



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944874111SVMF111LANL

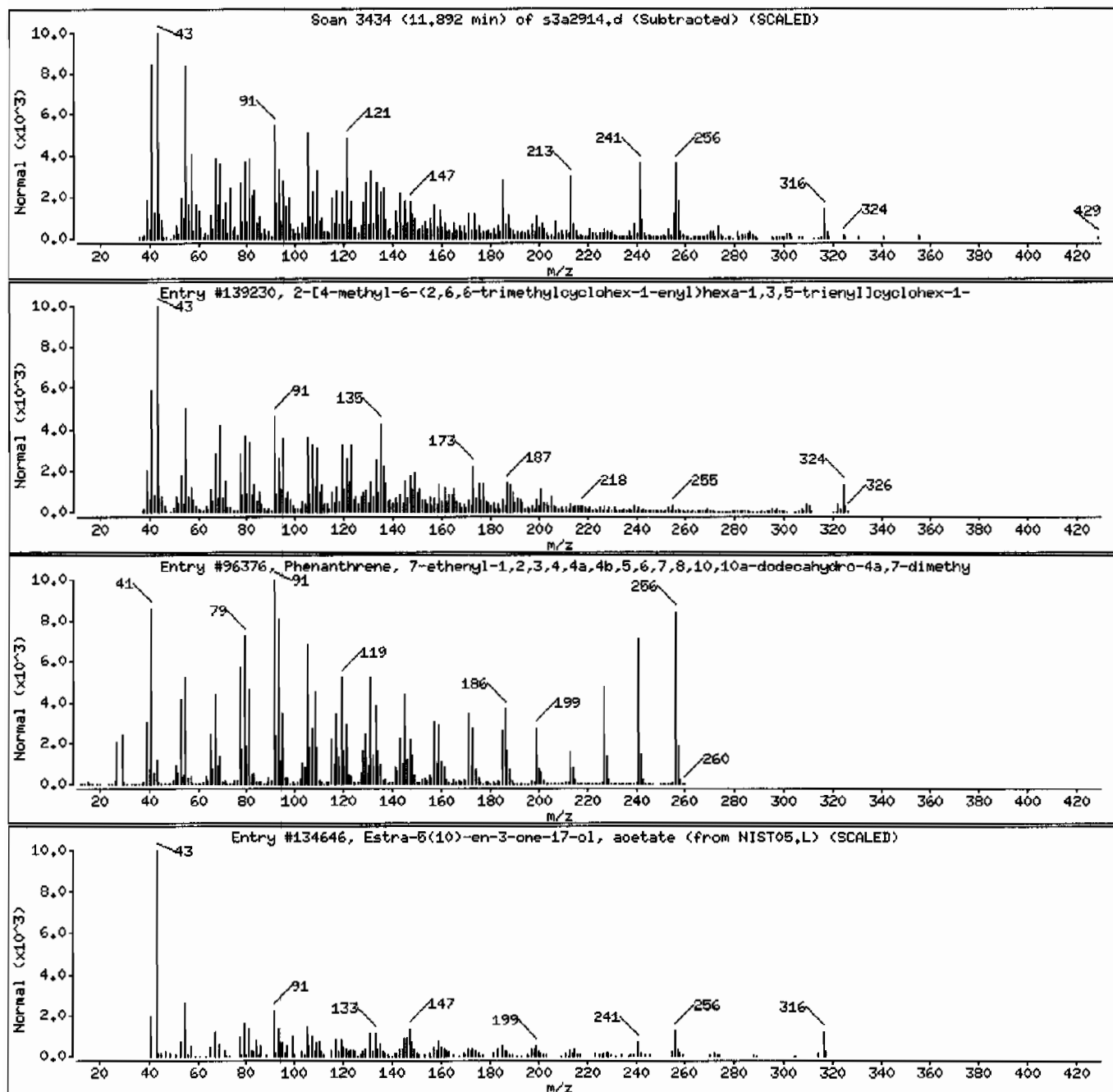
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|--|--------------|----------|--------|---------|----------|--------|
| Unknown                                  |              |          |        |         |          |        |
| 2-[4-methyl-6-(2,6,6-trimethylcyclohex-1 | 1000216-09-2 | NIST05.L | 139230 | 44      | C23H32O  | 324    |
| Phenanthrene, 7-ethenyl-1,2,3,4,4a,4b,5, | 26549-04-2   | NIST05.L | 96376  | 30      | C19H28   | 256    |
| Estra-5(10)-en-3-one-17-ol, acetate      | 19906-32-2   | NIST05.L | 134646 | 22      | C20H28O3 | 316    |



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVHFI11LANL

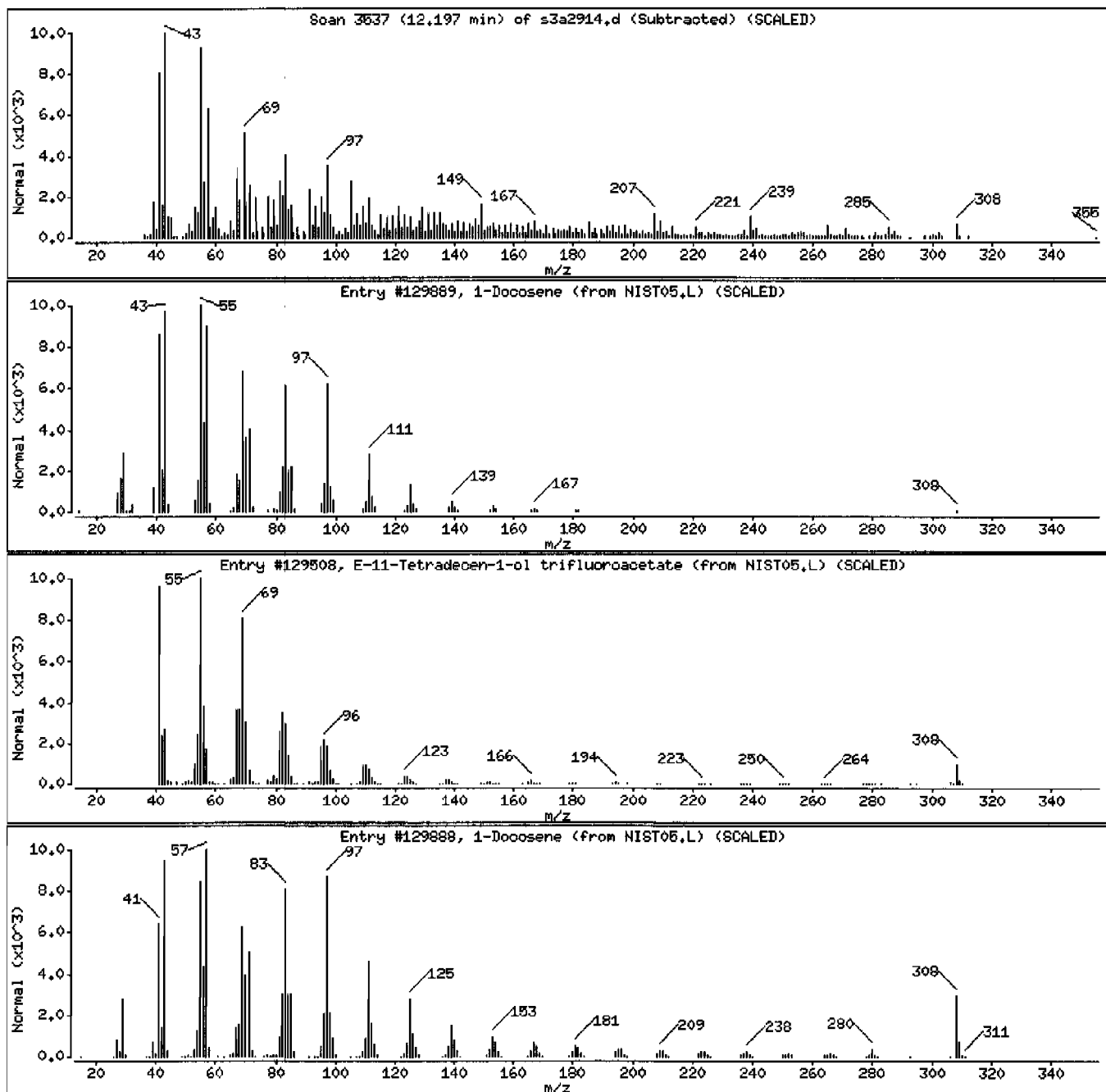
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match         | CAS Number   | Library  | Entry  | Quality | Formula    | Weight |
|---------------------------------------|--------------|----------|--------|---------|------------|--------|
| 1-Docosene                            | 1599-67-3    | NIST05.L | 129889 | 95      | C22H44     | 308    |
| E-11-Tetradecen-1-ol trifluoroacetate | 1000130-84-1 | NIST05.L | 129508 | 90      | C16H27F3O2 | 308    |
| 1-Docosene                            | 1599-67-3    | NIST05.L | 129888 | 87      | C22H44     | 308    |



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVHF111LANL

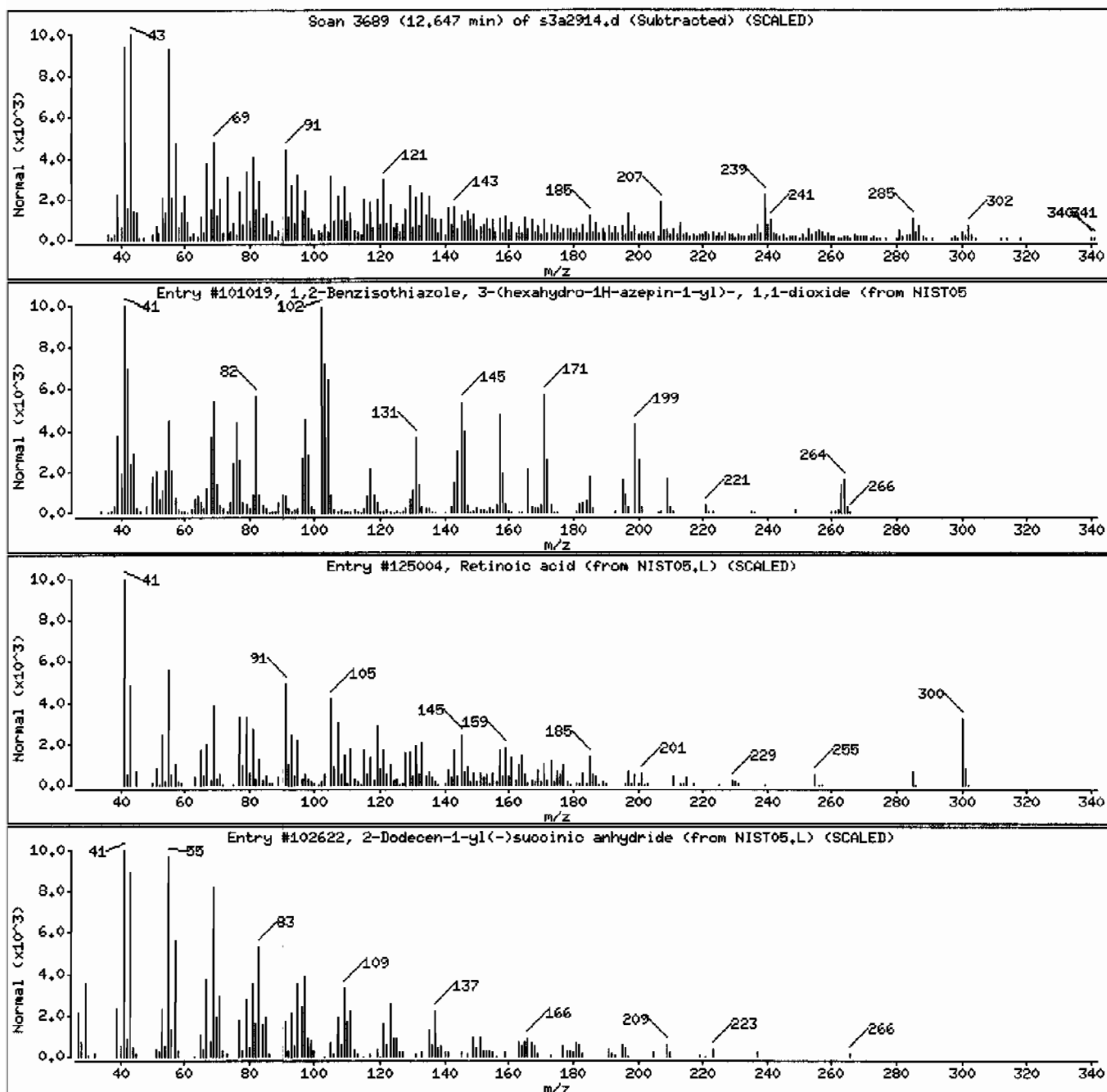
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number  | Library  | Entry  | Quality | Formula     | Weight |
|--|-------------|----------|--------|---------|-------------|--------|
| 1,2-Benzisothiazole, 3-(hexahydro-1H-aze | 309735-29-3 | NIST05.L | 101019 | 90      | C13H16N2O2S | 264    |
| Retinoic acid                            | 302-79-4    | NIST05.L | 125004 | 70      | C20H28O2    | 300    |
| 2-Dodecen-1-yl(-)succinic anhydride      | 19780-11-1  | NIST05.L | 102622 | 56      | C16H26O3    | 266    |



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944974111SVHF111LANL

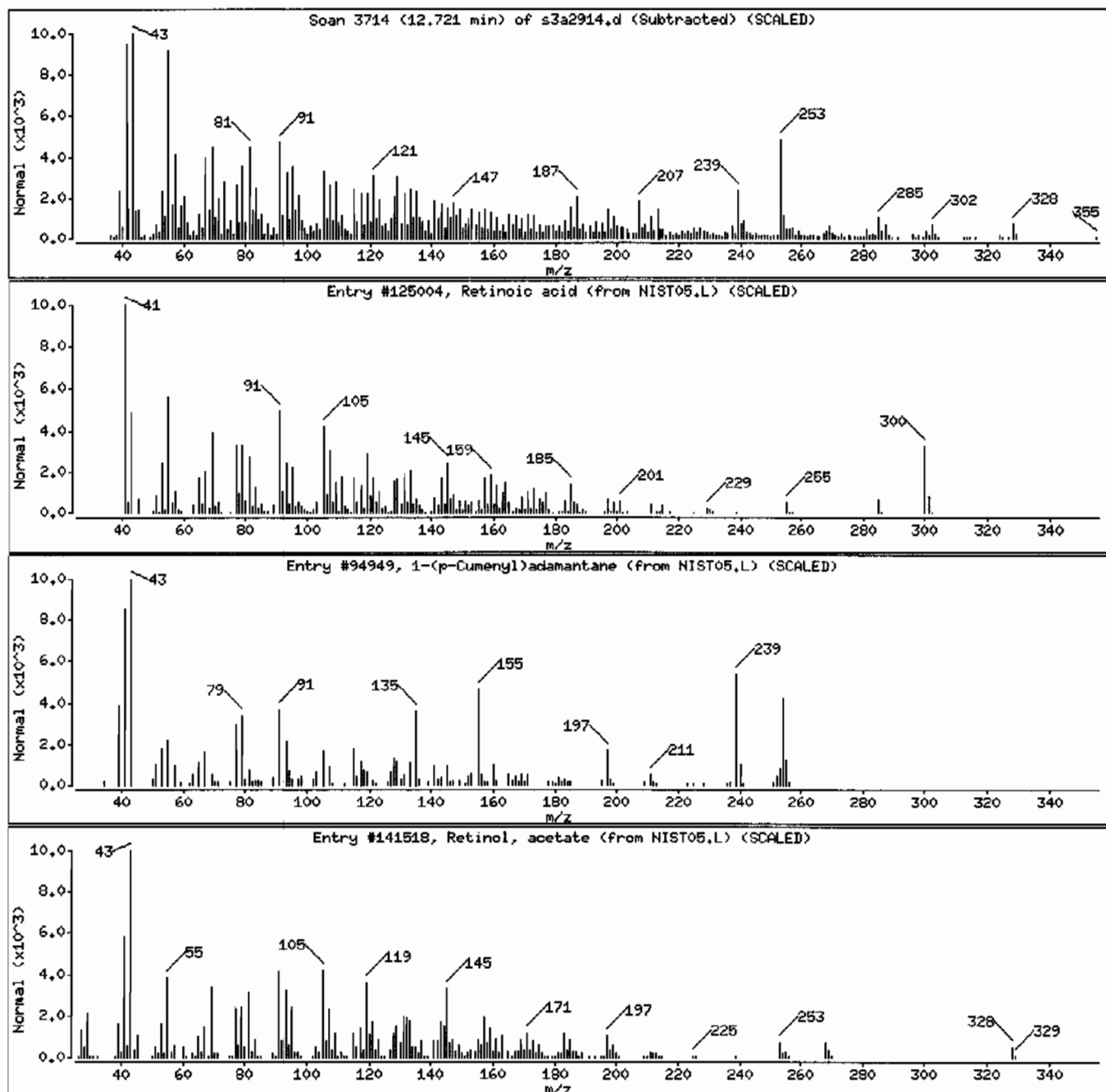
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|-------------------------------|------------|----------|--------|---------|----------|--------|
| Unknown                       |            |          |        |         |          |        |
| Retinoic acid                 | 302-79-4   | NIST05.L | 125004 | 45      | C20H28O2 | 300    |
| 1-(p-Cumenyl)adamantane       | 51812-98-7 | NIST05.L | 94949  | 18      | C19H26   | 254    |
| Retinol, acetate              | 127-47-9   | NIST05.L | 141518 | 15      | C22H32O2 | 328    |



Date: 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.1

Sample Info: 1245114010194487411SVHF11ILANL

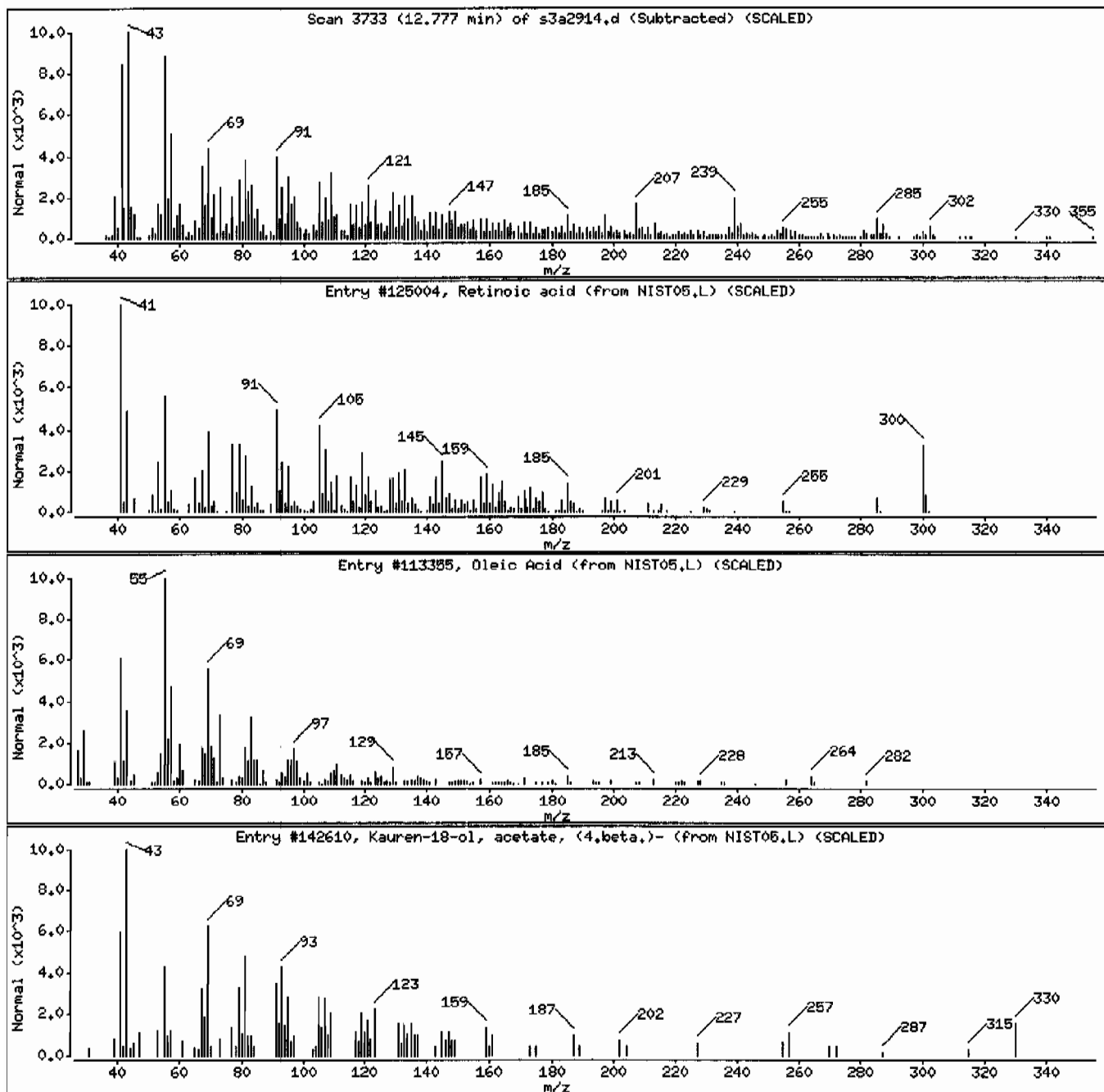
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match     | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|-----------------------------------|------------|----------|--------|---------|----------|--------|
| Unknown                           |            |          |        |         |          |        |
| Retinoic acid                     | 302-79-4   | NIST05.L | 125004 | 55      | C20H28O2 | 300    |
| Oleic Acid                        | 112-80-1   | NIST05.L | 113355 | 44      | C18H34O2 | 282    |
| Kauren-18-ol, acetate, (4.beta.)- | 72150-74-4 | NIST05.L | 142610 | 44      | C22H34O2 | 330    |





Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVMF111LANL

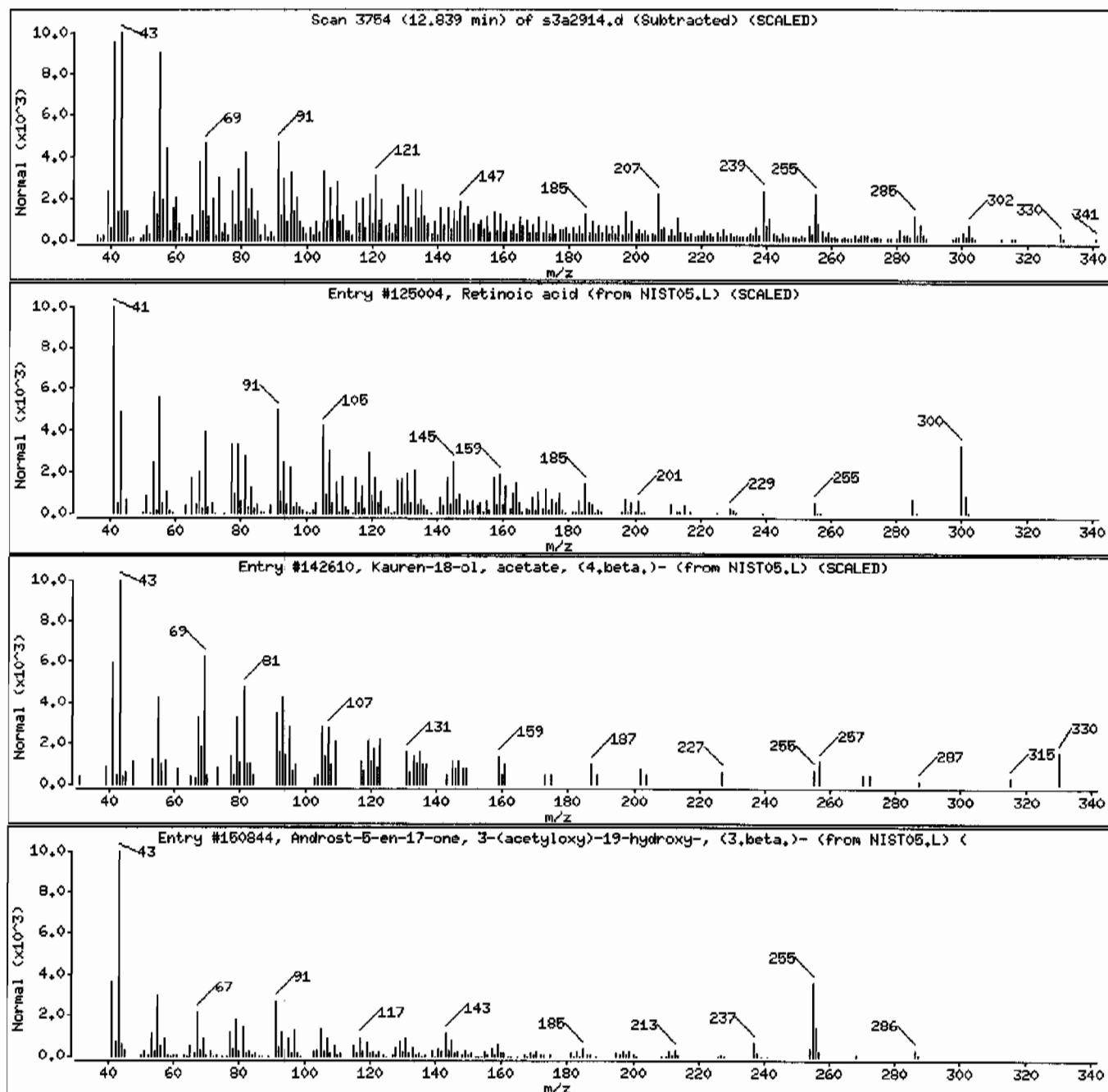
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| Unknown                                  |            |          |        |         |          |        |
| Retinoic acid                            | 302-79-4   | NIST05.L | 125004 | 53      | C20H28O2 | 300    |
| Kauren-18-ol, acetate, (4,beta.)-        | 72150-74-4 | NIST05.L | 142610 | 45      | C22H34O2 | 330    |
| Androst-5-en-17-one, 3-(acetyloxy)-19-hy | 2857-42-3  | NIST05.L | 150844 | 10      | C21H30O4 | 346    |



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944874111SVHF111LANL

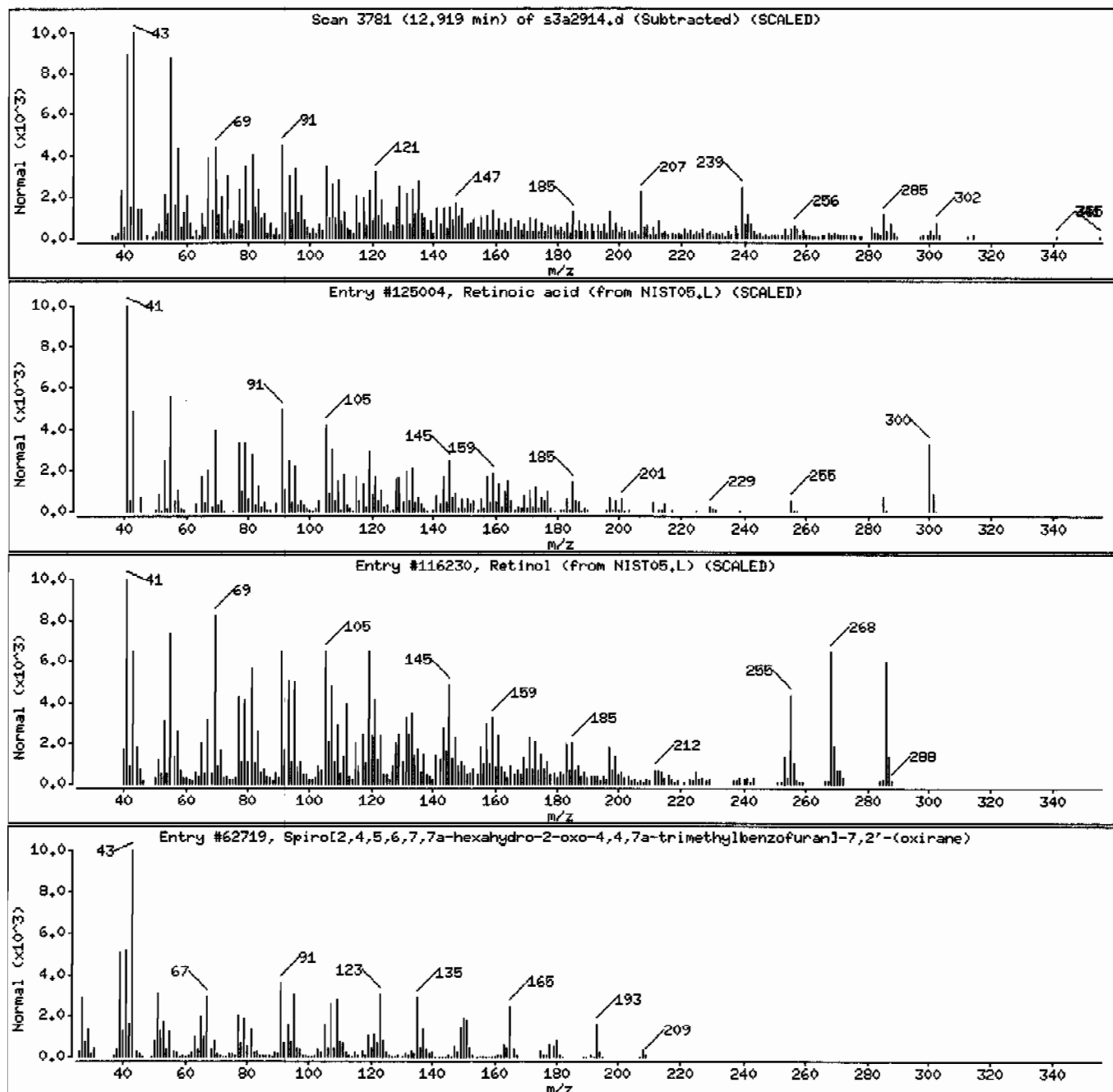
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|--|--------------|----------|--------|---------|----------|--------|
| Unknown                                  |              |          |        |         |          |        |
| Retinoic acid                            | 302-79-4     | NIST05.L | 125004 | 60      | C20H28O2 | 300    |
| Retinol                                  | 68-26-8      | NIST05.L | 116230 | 42      | C20H30O  | 286    |
| Spiro[2,4,5,6,7,7a-hexahydro-2-oxo-4,4,7 | 1000197-10-9 | NIST05.L | 62719  | 30      | C12H16O3 | 208    |



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 12451140101944874111SVMF111LANL

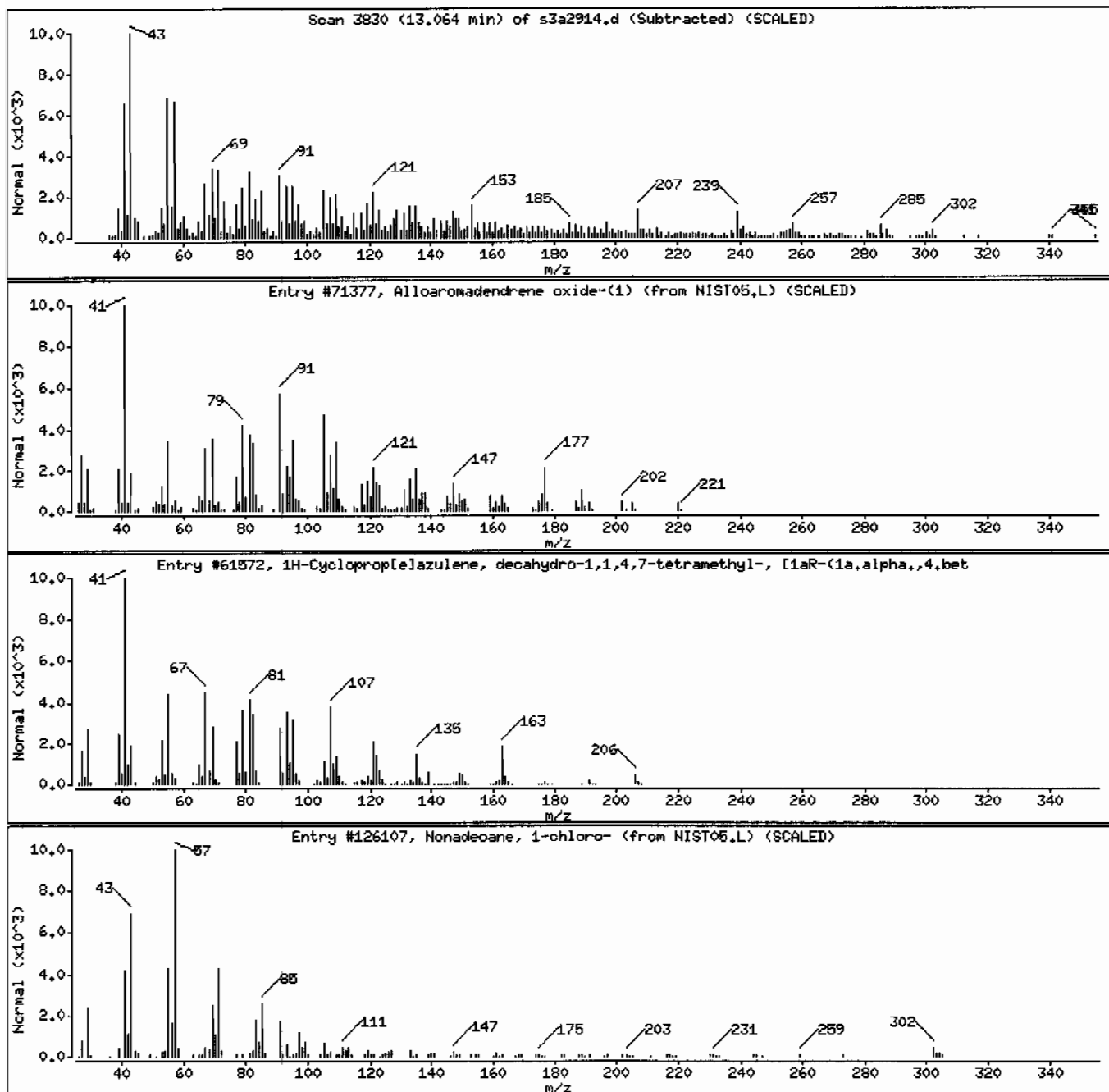
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|--|--------------|----------|--------|---------|----------|--------|
| Alloaromadendrene oxide-(1)              | 1000156-12-8 | NIST05.L | 71377  | 87      | C15H24O  | 220    |
| 1H-Cycloprop[elazulene, decahydro-1,1,4, | 28580-43-0   | NIST05.L | 61572  | 55      | C15H26   | 206    |
| Nonadecane, 1-chloro-                    | 62016-76-6   | NIST05.L | 126107 | 53      | C19H39Cl | 302    |



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVHF111LANL

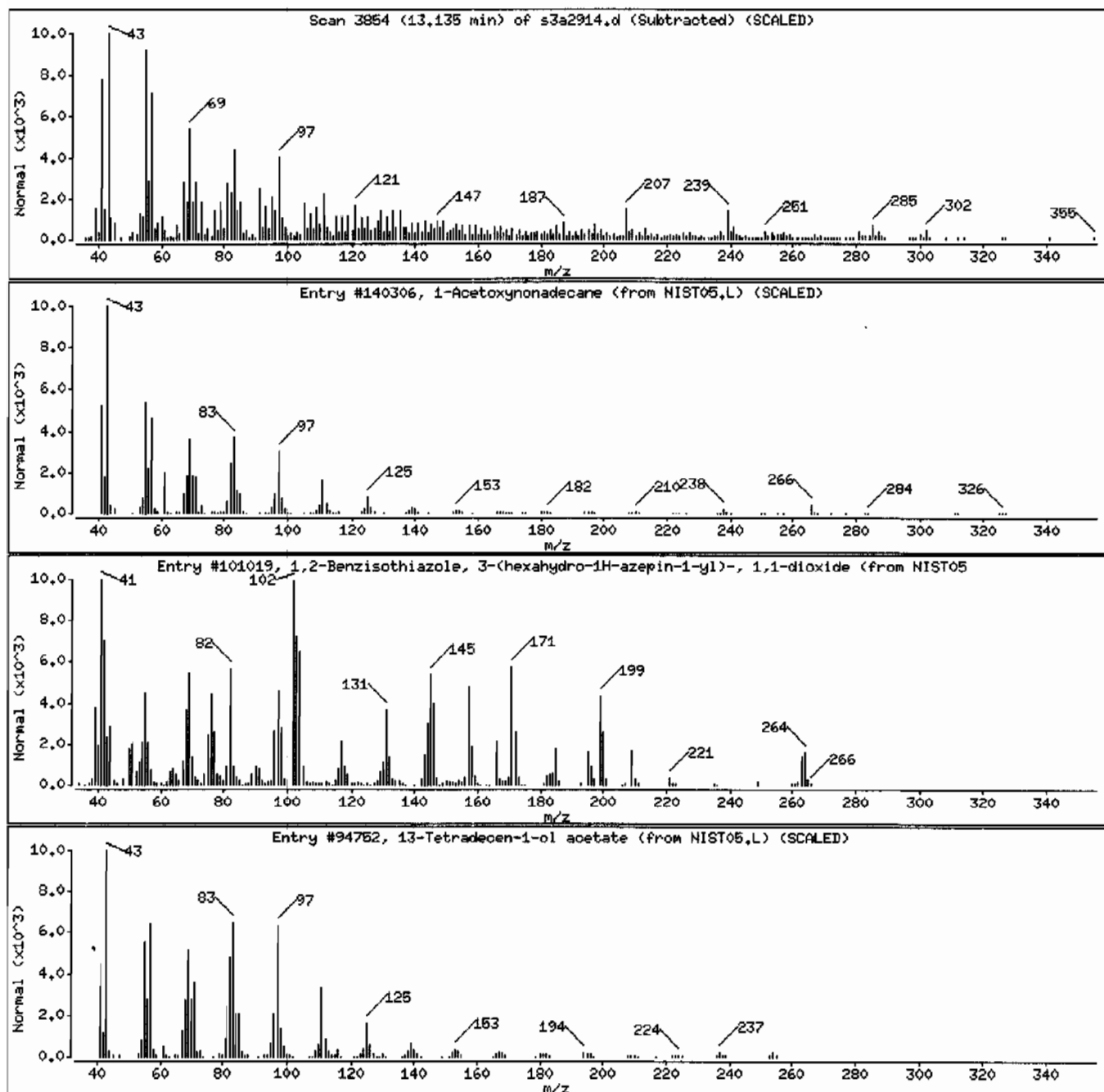
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match                                   | CAS Number  | Library  | Entry  | Quality | Formula     | Weight |
|---|-------------|----------|--------|---------|-------------|--------|
| 1-Acetoxyundecane   | 1577-43-1   | NIST05.L | 140306 | 91      | C21H42O2    | 326    |
| 1,2-Benzisothiazole, 3-(hexahydro-1H-azepin-1-yl)-, 1,1-dioxide | 309735-29-3 | NIST05.L | 101019 | 91      | C13H16N2O2S | 264    |
| 13-Tetradecen-1-ol acetate                                      | 56221-91-1  | NIST05.L | 94752  | 91      | C16H30O2    | 254    |



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010/944874111SVMF111LANL

Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

## Library Search Compound Match

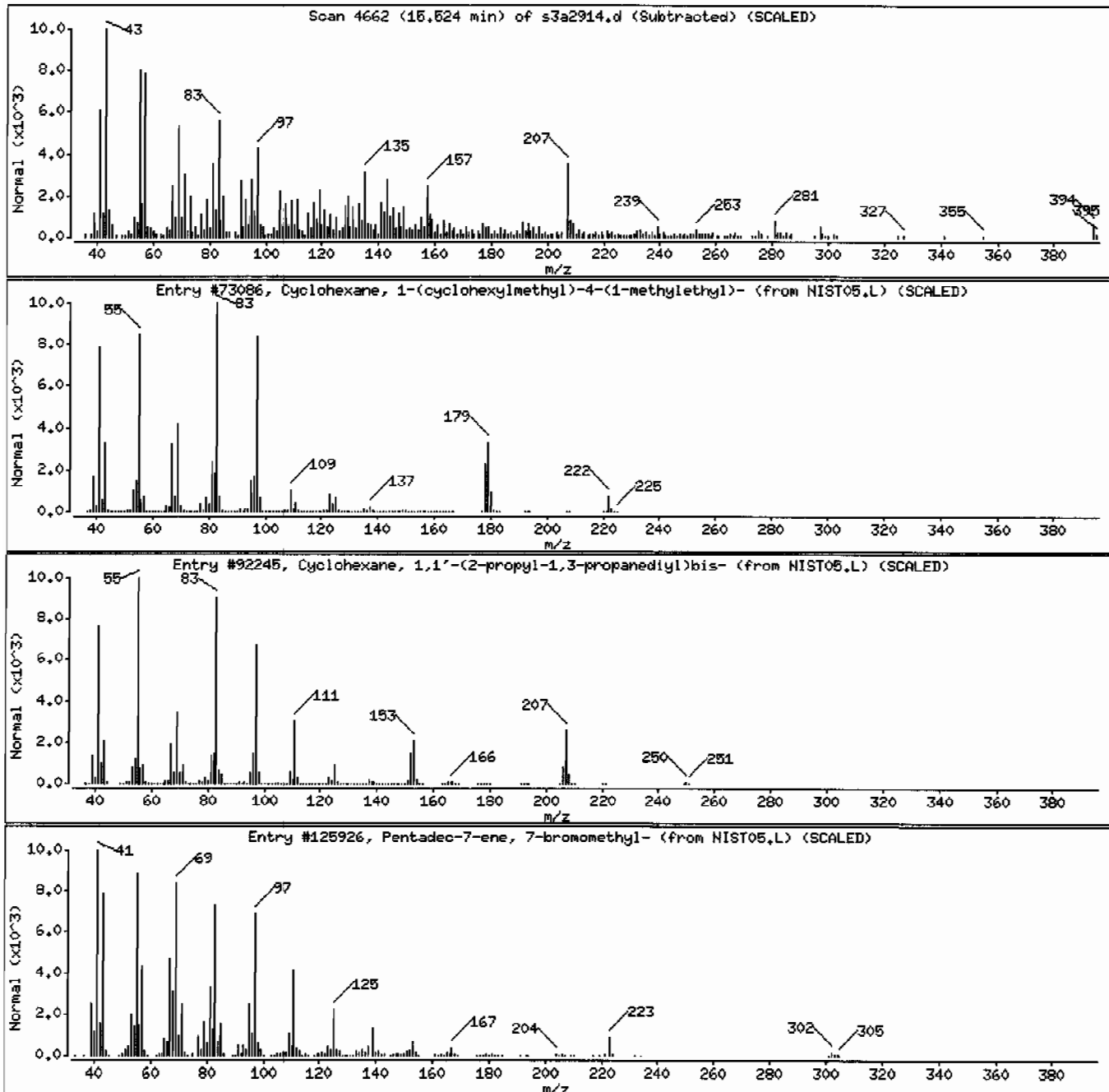
Unknown

Cyclohexane, 1-(cyclohexylmethyl)-4-(1-m

| CAS Number   | Library  | Entry  | Quality | Formula  | Weight |
|--------------|----------|--------|---------|----------|--------|
| 54965-61-6   | NIST05.L | 73086  | 38      | C16H30   | 222    |
| 55030-21-2   | NIST05.L | 92245  | 38      | C18H34   | 250    |
| 1000259-58-5 | NIST05.L | 125926 | 35      | C16H31Br | 302    |

Cyclohexane, 1,1'-(2-propyl-1,3-propanedi

Pentadec-7-ene, 7-bromomethyl-



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVHF111LANL

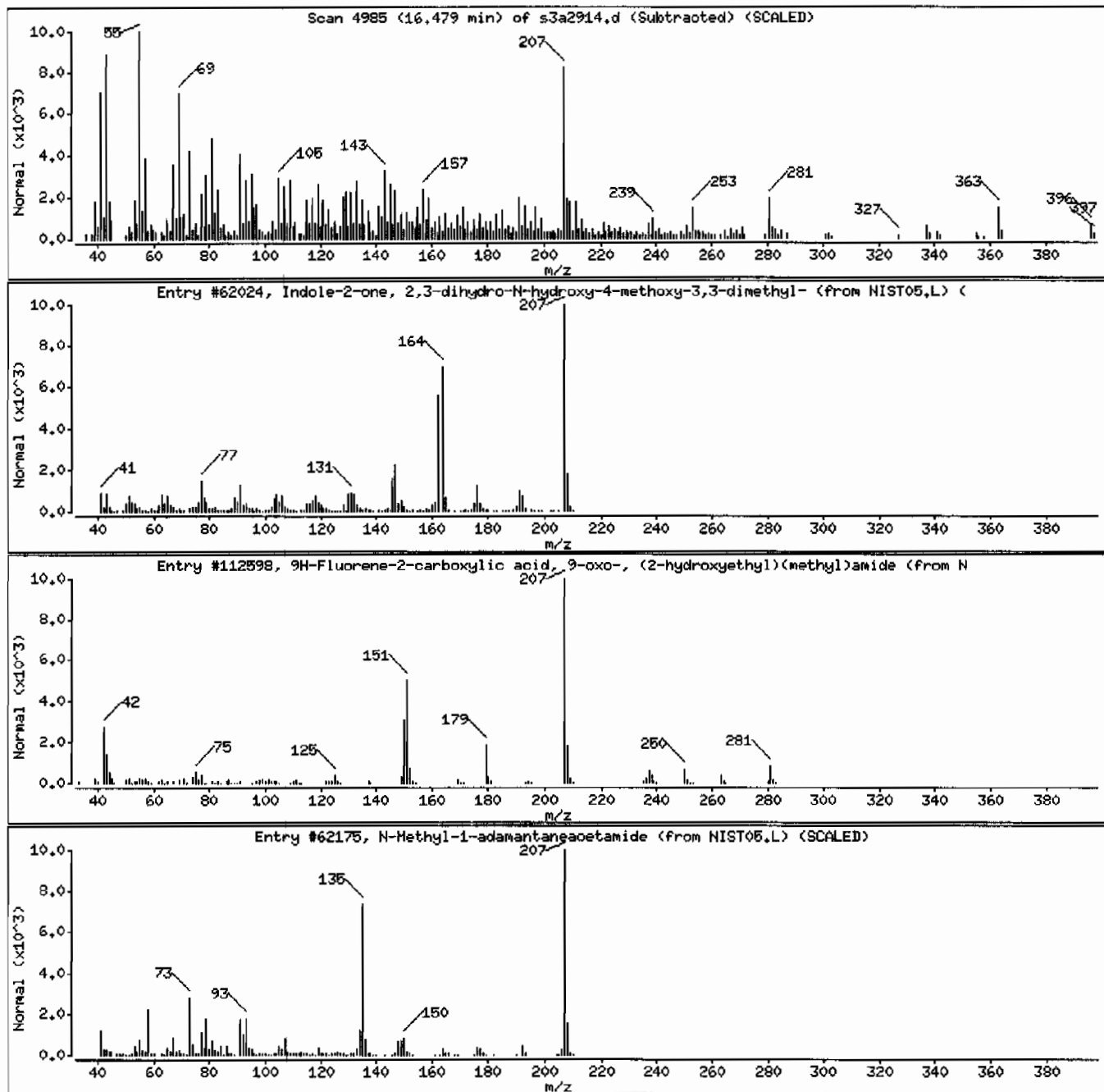
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match            | CAS Number   | Library  | Entry  | Quality | Formula   | Weight |
|--|--------------|----------|--------|---------|-----------|--------|
| Unknown                                  |              |          |        |         |           |        |
| Indole-2-one, 2,3-dihydro-N-hydroxy-4-me | 1000129-52-1 | NIST05,L | 62024  | 38      | C11H13NO3 | 207    |
| 9H-Fluorene-2-carboxylic acid, 9-oxo-, ( | 1000316-02-1 | NIST05,L | 112598 | 35      | C17H15NO3 | 281    |
| N-Methyl-1-adamantaneacetamide           | 31897-93-5   | NIST05,L | 62175  | 30      | C13H21NO  | 207    |



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVMF111LANL

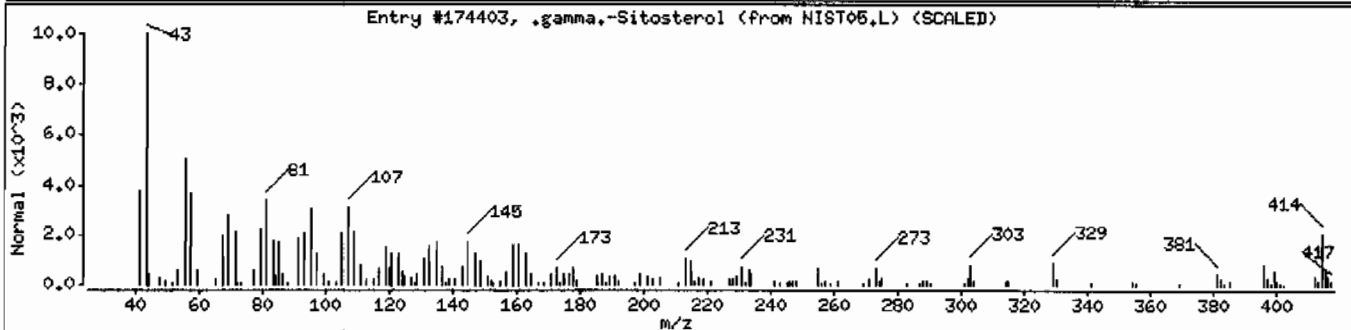
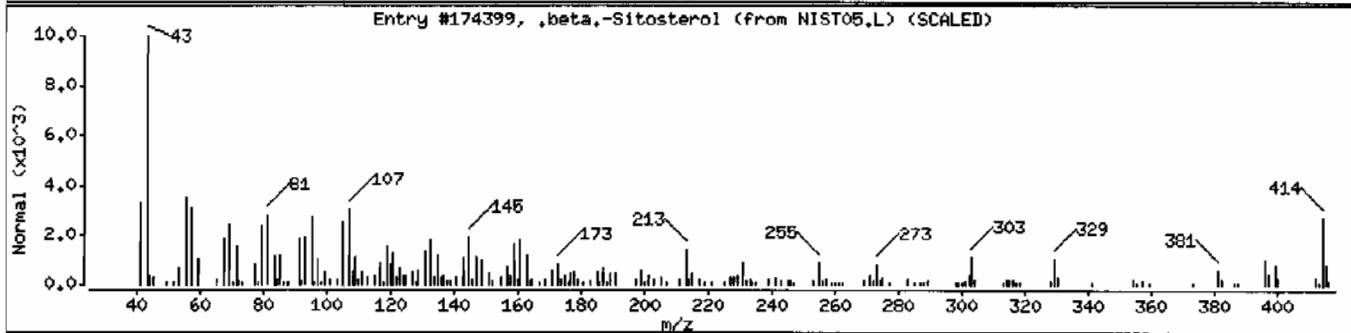
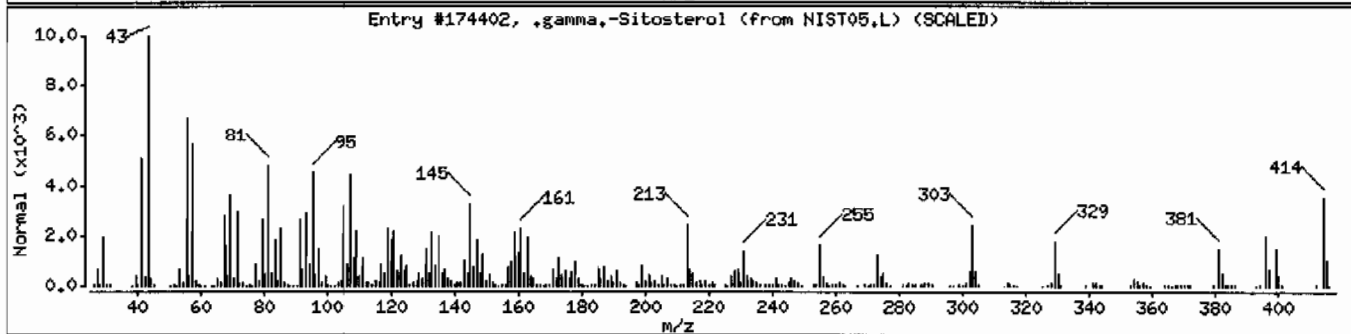
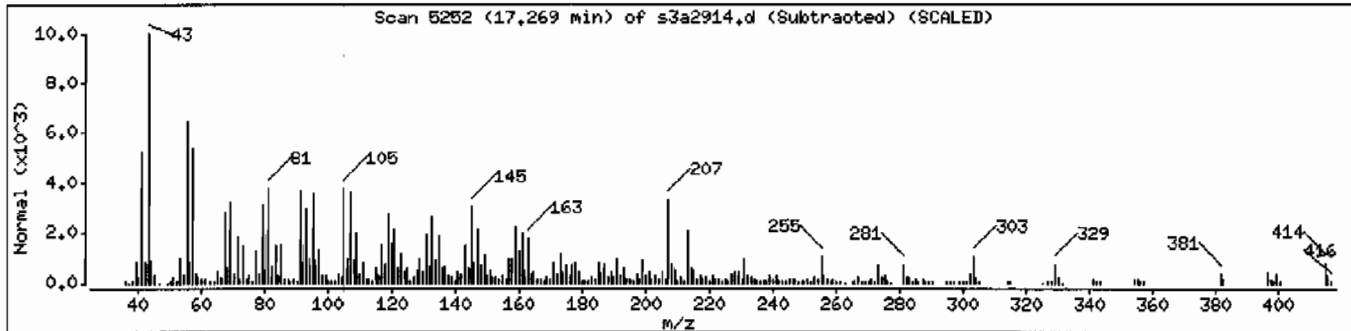
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match | CAS Number | Library  | Entry  | Quality | Formula | Weight |
|-------------------------------|------------|----------|--------|---------|---------|--------|
| .gamma.-Sitosterol            | 83-47-6    | NIST05.L | 174402 | 96      | C29H50O | 414    |
| .beta.-Sitosterol             | 83-46-5    | NIST05.L | 174399 | 95      | C29H50O | 414    |
| .gamma.-Sitosterol            | 83-47-6    | NIST05.L | 174403 | 72      | C29H50O | 414    |



Date : 29-JAN-2010 17:11

Client ID: RE15-10-8423

Instrument: MSD3.i

Sample Info: 1245114010194487411SVMF111LANL

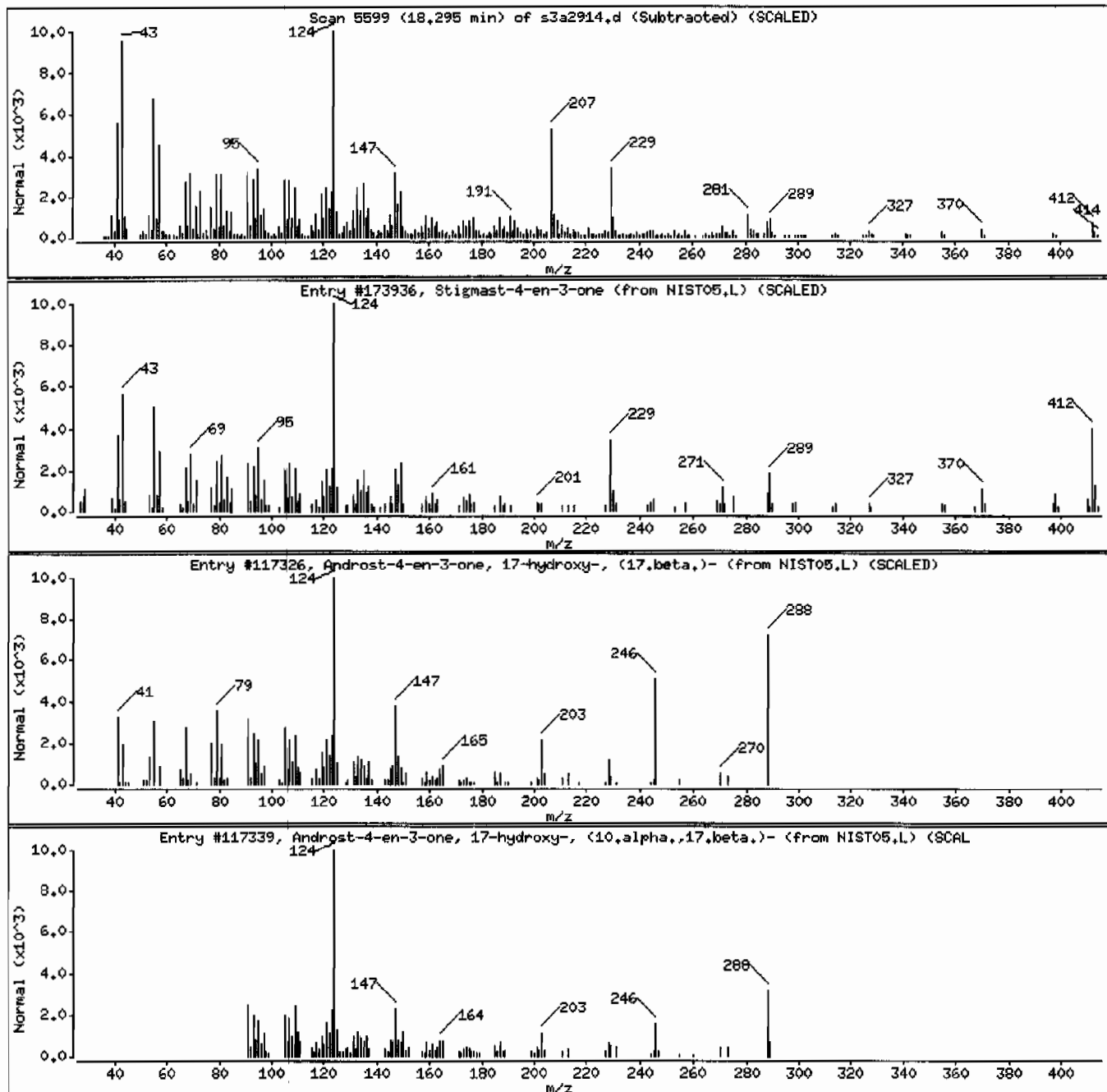
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

| Library Search Compound Match              | CAS Number | Library  | Entry  | Quality | Formula  | Weight |
|--|------------|----------|--------|---------|----------|--------|
| Stigmast-4-en-3-one                        | 1058-61-3  | NIST05.L | 173936 | 89      | C29H48O  | 412    |
| Androst-4-en-3-one, 17-hydroxy-, (17,beta) | 58-22-0    | NIST05.L | 117326 | 80      | C19H28O2 | 288    |
| Androst-4-en-3-one, 17-hydroxy-, (10,alp   | 604-39-7   | NIST05.L | 117339 | 50      | C19H28O2 | 288    |





# LC/MS/MS EXPLOSIVES ANALYSIS

**LC/MS/MS Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1324**

**Method/Analysis Information**

**Procedure:** Definitive Low Level Analysis of Nitroaromatic Explosives Utilizing Liquid Chromatography / Mass Spectrometry / Mass Spectrometry (LC/MS/MS) by SW-846 Method 8321 Modified (8321M)

**Analytical Method:** SW846 8321A Modified

**Prep Method:** SW846 8330 PREP

**Analytical Batch Number:** 944250

**Prep Batch Number:** 944249

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in SW846 8321A Modified:

| <b>Sample ID</b> | <b>Client ID</b>                                     |
|------------------|--|
| 245114002        | RE15-10-8410   |
| 245114003        | RE15-10-8411   |
| 245114004        | RE15-10-8412   |
| 245114005        | RE15-10-8441   |
| 245114006        | RE15-10-8413   |
| 245114007        | RE15-10-8425   |
| 245114008        | RE15-10-8422   |
| 245114009        | RE15-10-8417   |
| 245114010        | RE15-10-8423   |
| 245114011        | RE15-10-8416   |
| 245114012        | RE15-10-8418   |
| 245114013        | RE15-10-8424   |
| 245114014        | RE15-10-8421   |
| 245114015        | RE15-10-8420   |
| 1202021914       | Method Blank (MB)                                    |
| 1202021915       | Laboratory Control Sample (LCS)                      |
| 1202021916       | 245114002(RE15-10-8410) Matrix Spike (MS)            |
| 1202021917       | 245114002(RE15-10-8410) Matrix Spike Duplicate (MSD) |

**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-056 REV# 12.

10-1324-EXPLCMS

Page 1 of 5

## **Primary Analyte Analysis**

### **Calibration Information**

#### **Initial Calibration**

All initial calibration requirements for this analysis have been met for this SDG.

#### **Calibration Verification Standard Requirements**

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

#### **Calibration Blank Requirements**

All initial or continuing calibration blanks (ICB or CCB) bracketing the analyses associated with this batch for this analysis were within acceptance criteria. Due to software limitations, the CCBs and/or the ICBs may have a concentration for target analytes in the Found column. These values should be zero.

#### **CRI Requirements**

All low level calibration verification (CRI) requirements for this analysis were met by all bracketing CRI standards and may be based off the grand mean average percent recovery of all target analytes.

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

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

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

#### **Surrogate Recoveries**

All the surrogate recoveries were within the established acceptance criteria in this SDG in this analytical batch for this analysis.

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

The LCS spike recoveries were within the established acceptance limits.

#### **QC Sample Designation**

Sample 245114002 (RE15-10-8410) was chosen for matrix spike and matrix spike duplicate analysis.

#### **Matrix Spike (MS) Recovery Statement**

The MS spike recoveries were within the established acceptance limits.

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

The MSD spike 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.

#### **Internal Standard (ISTD) Acceptance**

QC sample 1202021916 (RE15-10-8410MS) had biased high internal standard recoveries. QC sample 1202021917 (RE15-10-8410MSD) confirmed the high recoveries. Both QC samples had passing spike recoveries. The data are reported. Please see data exception report 789725.

## **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**

According to the GEL SOP for Method 8321A, all sample and QC extracts are diluted 1:1 v/v with HPLC grade water. The samples in this SDG in this analytical batch for this analysis did not require any additional dilutions.

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

Re-extractions or re-analyses were not required in this SDG in this analytical batch for this analysis except for dilutions.

### **Secondary Analyte Analysis**

## **Calibration Information**

### **Initial Calibration**

All initial calibration requirements for this analysis have been met for this SDG.

### **Calibration Verification Standard Requirements**

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

### **Calibration Blank Requirements**

All initial or continuing calibration blanks (ICB or CCB) bracketing the analyses associated with this batch for this analysis were within acceptance criteria. Due to software limitations, the CCBs and/or the ICBs may have a concentration for target analytes in the Found column. These values should be zero.

### **CRI Requirements**

All low level calibration verification (CRI) requirements for this analysis were met by all bracketing CRI standards and may be based off the grand mean average percent recovery of all target analytes.

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

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

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

### **Surrogate Recoveries**

All the surrogate recoveries were within the established acceptance criteria in this SDG in this analytical batch for this analysis.

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

The LCS spike recoveries were within the established acceptance limits.

**QC Sample Designation**

Sample 245114002 (RE15-10-8410) was chosen for matrix spike and matrix spike duplicate analysis.

**Matrix Spike (MS) Recovery Statement**

The MS spike recoveries were within the established acceptance limits.

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

The MSD spike 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.

**Internal Standard (ISTD) Acceptance**

The internal standards were not added to the secondary analyte extracts.

**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**

According to the GEL SOP for Method 8321A, all sample and QC extracts are diluted 1:1 v/v with HPLC grade water. The samples in this SDG in this analytical batch for this analysis did not require any additional dilutions.

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

Re-extractions or re-analyses were not required in this SDG in this analytical batch for this analysis except for dilutions.

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

Data exception report 789725 was generated for this SDG.

QC sample 1202021916 (RE15-10-8410MS) had biased high internal standard recoveries. QC sample 1202021917 (RE15-10-841MSD) confirmed the high recoveries. Both QC samples had passing spike recoveries. The data are reported.

**Manual Integrations**

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

**Flagging Convention**

The samples were not originally analyzed using SW-846 Method 8330.

### **Additional Comments**

Due to software limitations, all initial calibration blanks must be designated as XIB001 in order for the forms to be correct.

Due to software limitations in the secondary analyte analysis, false positives and analytes detected below the MDL cannot be deleted from the raw data.

Due to software limitations, file extensions such as DL, RE, etc. may not appear on the generated forms and/or raw data.

### **System Configuration**

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for primary analyte 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 APCI (Atmospheric Pressure chemical Ionization) probe that is operated in the negative ionization mode for the primary analyte analysis. The laboratory also utilizes an Agilent 1100 liquid chromatography instrument for either primary or secondary analyte analysis. It is coupled with a Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as either LCMSMS #3 or LCMSMS #4. It is fitted with a APCI (Atmospheric Pressure chemical Ionization) probe that is operated in the negative ionization mode for both the primary and secondary analyte analysis.

### **Chromatographic Columns**

The detection of the primary analyte nitroaromatic and nitramines is accomplished through analysis on the following reversed phase column:

Phenomenex: Ultracarb 5u ODS (20), 250 x 4.60 mm ID.

The detection of the secondary analytes is accomplished through analysis on the following reversed phase column:

YMC: J'sphere ODS-H80, 150 x 4.6mm I.D.

### **Certification Statement**

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

### **Review Validation:**

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

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

Reviewer: Heather M. Moore Date: 02/12/10

# SAMPLE DATA SUMMARY

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8410

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114002

Sample Amount 2

Moisture: 24.9

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208041a

Date Analyzed: 09-FEB-10 10:24

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor



# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8410

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114002

Sample Amount 2

Moisture: 24.9

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100016.wiff

Date Analyzed: 10-FEB-10 12:23

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8411

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114003

Sample Amount 2

Moisture: 15.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208044a

Date Analyzed: 09-FEB-10 11:53

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8411

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114003

Sample Amount 2

Moisture: 15.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100019.wiff

Date Analyzed: 10-FEB-10 13:10

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8412

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114004

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208045a

Date Analyzed: 09-FEB-10 12:22

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8412

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114004

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100020.wiff

Date Analyzed: 10-FEB-10 13:25

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8441

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114005

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208046a

Date Analyzed: 09-FEB-10 12:52

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8441

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114005

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100021.wiff

Date Analyzed: 10-FEB-10 13:41

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8413

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114006

Sample Amount 2

Moisture: 10.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208047a

Date Analyzed: 09-FEB-10 13:21

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8413

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114006

Sample Amount 2

Moisture: 10.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100022.wiff

Date Analyzed: 10-FEB-10 13:57

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8425

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114007

Sample Amount 2

Moisture: 10.4

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208048a

Date Analyzed: 09-FEB-10 13:51

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8425

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114007

Sample Amount 2

Moisture: 10.4

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100023.wiff

Date Analyzed: 10-FEB-10 14:12

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8422

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114008

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208052a

Date Analyzed: 09-FEB-10 15:49

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8422

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114008

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100027.wiff

Date Analyzed: 10-FEB-10 15:15

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8417

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114009

Sample Amount 2

Moisture: 5.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208053a

Date Analyzed: 09-FEB-10 16:18

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

|                  |   |   |   |                 |
|------------------|---|---|---|-----------------|
| Instrument Value | X | $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ | X | Dilution Factor |
|------------------|---|---|---|-----------------|

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8417

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114009

Sample Amount 2

Moisture: 5.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100028.wiff

Date Analyzed: 10-FEB-10 15:31

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8423

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114010

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208054a

Date Analyzed: 09-FEB-10 16:48

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X Concentrated Extract Volume X Dilution Factor  
Sample Amount



# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8423

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114010

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100029.wiff

Date Analyzed: 10-FEB-10 15:47

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8416

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114011

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208055a

Date Analyzed: 09-FEB-10 17:17

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8416

Lab Code: GEI

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114011

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100030.wiff

Date Analyzed: 10-FEB-10 16:02

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

|            |   |                                    |   |          |
|------------|---|------------------------------------|---|----------|
| Instrument | X | <u>Concentrated Extract Volume</u> | X | Dilution |
| Value      |   | <u>Sample Amount</u>               |   | Factor   |

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8418

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114012

Sample Amount 2

Moisture: 11.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208056a

Date Analyzed: 09-FEB-10 17:47

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

|                  |   |                             |   |                 |
|------------------|---|-----------------------------|---|-----------------|
| Instrument Value | X | Concentrated Extract Volume | X | Dilution Factor |
|                  |   | Sample Amount               |   |                 |

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8418

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114012

Sample Amount 2

Moisture: 11.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100031.wiff

Date Analyzed: 10-FEB-10 16:18

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8424

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114013

Sample Amount 2

Moisture: 10.0

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208057a

Date Analyzed: 09-FEB-10 18:16

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8424

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114013

Sample Amount 2

Moisture: 10.0

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100032.wiff

Date Analyzed: 10-FEB-10 16:34

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8421

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114014

Sample Amount 2

Moisture: 12.5

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208058a

Date Analyzed: 09-FEB-10 18:46

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor



# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8421

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114014

Sample Amount 2

Moisture: 12.5

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100033.wiff

Date Analyzed: 10-FEB-10 16:50

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8420

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114015

Sample Amount 2

Molsture: 30.1

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208059a

Date Analyzed: 09-FEB-10 19:15

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8420

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114015

Sample Amount 2

Moisture: 30.1

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100034.wiff

Date Analyzed: 10-FEB-10 17:05

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

# QUALITY CONTROL SUMMARY

# High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1324

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

| Lab Sample ID | Client Sample ID           | DNT | QC Limits | Flg |
|---------------|----------------------------|-----|-----------|-----|
| 245114002     | RE15-10-8410               | 113 | 70 - 144  |     |
| 245114002     | RE15-10-8410               | 113 | 70 - 144  |     |
| 245114003     | RE15-10-8411               | 123 | 70 - 144  |     |
| 245114003     | RE15-10-8411               | 132 | 70 - 144  |     |
| 245114004     | RE15-10-8412               | 113 | 70 - 144  |     |
| 245114004     | RE15-10-8412               | 121 | 70 - 144  |     |
| 245114005     | RE15-10-8441               | 113 | 70 - 144  |     |
| 245114005     | RE15-10-8441               | 133 | 70 - 144  |     |
| 245114006     | RE15-10-8413               | 113 | 70 - 144  |     |
| 245114006     | RE15-10-8413               | 128 | 70 - 144  |     |
| 245114007     | RE15-10-8425               | 118 | 70 - 144  |     |
| 245114007     | RE15-10-8425               | 122 | 70 - 144  |     |
| 245114008     | RE15-10-8422               | 118 | 70 - 144  |     |
| 245114008     | RE15-10-8422               | 127 | 70 - 144  |     |
| 245114009     | RE15-10-8417               | 120 | 70 - 144  |     |
| 245114009     | RE15-10-8417               | 137 | 70 - 144  |     |
| 245114010     | RE15-10-8423               | 116 | 70 - 144  |     |
| 245114010     | RE15-10-8423               | 129 | 70 - 144  |     |
| 245114011     | RE15-10-8416               | 115 | 70 - 144  |     |
| 245114011     | RE15-10-8416               | 121 | 70 - 144  |     |
| 245114012     | RE15-10-8418               | 114 | 70 - 144  |     |
| 245114012     | RE15-10-8418               | 129 | 70 - 144  |     |
| 245114013     | RE15-10-8424               | 115 | 70 - 144  |     |
| 245114013     | RE15-10-8424               | 134 | 70 - 144  |     |
| 245114014     | RE15-10-8421               | 114 | 70 - 144  |     |
| 245114014     | RE15-10-8421               | 128 | 70 - 144  |     |
| 245114015     | RE15-10-8420               | 119 | 70 - 144  |     |
| 245114015     | RE15-10-8420               | 125 | 70 - 144  |     |
| 1202021914    | MB for batch 944249        | 107 | 70 - 144  |     |
| 1202021914    | MB for batch 944249        | 123 | 70 - 144  |     |
| 1202021915    | LCS for batch 944249       | 103 | 70 - 144  |     |
| 1202021915    | LCS for batch 944249       | 119 | 70 - 144  |     |
| 1202021916    | RE15-10-8410(245114002MS)  | 113 | 70 - 144  |     |
| 1202021916    | RE15-10-8410(245114002MS)  | 124 | 70 - 144  |     |
| 1202021917    | RE15-10-8410(245114002MSD) | 117 | 70 - 144  |     |
| 1202021917    | RE15-10-8410(245114002MSD) | 120 | 70 - 144  |     |

# High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1324

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

| Lab Sample ID | Client Sample ID | DNT | QC Limits | Flg |
|---------------|------------------|-----|-----------|-----|
|---------------|------------------|-----|-----------|-----|

DNT = 3,4-Dinitrotoluene

3B  
High Explosives LCS/LCS Duplicate Summary

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10-1324

Extract Batch Code: 944249

Date Extracted: 26-JAN-10

GEL LCS ID: 1202021915

GEL LCSDUP ID:

Analysis Date/Time: 10-FEB-10 12:07

DUP Analysis Date/Time:

Reporting Units: ug/kg

QC Type: LCS/LCSD

| Compound                   | Spike Added | LCS Conc | LCS Rec # | LCSD Conc | LCSD Rec # | RPD # | RPD | Recovery Limits |
|----------------------------|-------------|----------|-----------|-----------|------------|-------|-----|-----------------|
| 2,4-Diamino-6-nitrotoluene | 5000        | 5390     | 108       |           |            |       |     | 52 - 114        |
| 2,6-Diamino-4-nitrotoluene | 5000        | 5490     | 110       |           |            |       |     | 64 - 122        |
| 3,5-Dinitroaniline         | 5000        | 5170     | 103       |           |            |       |     | 70 - 127        |
| TATB                       | 7500        | 8990     | 120       |           |            |       |     | 28 - 162        |
| tris(o-cresyl) phosphate   | 5000        | 5460     | 109       |           |            |       |     | 84 - 119        |

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

3B  
High Explosives LCS/LCS Duplicate Summary

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10-1324

Extract Batch Code: 944249

Date Extracted: 26-JAN-10

GEL LCS ID: 1202021915

GEL LCSDUP ID:

Analysis Date/Time: 09-FEB-10 09:55

DUP Analysis Date/Time:

Reporting Units: ug/kg

QC Type: LCS/LCSD

| Compound                   | Spike Added | LCS Conc | LCS Rec # | LCSD Conc | LCSD Rec # | RPD # | RPD | Recovery Limits |
|----------------------------|-------------|----------|-----------|-----------|------------|-------|-----|-----------------|
| 1,3,5-Trinitrobenzene      | 5000        | 4180     | 83.5      |           |            |       |     | 69 - 126        |
| 2,4,6-Trinitrotoluene      | 5000        | 5170     | 103       |           |            |       |     | 73 - 149        |
| 2,4-Dinitrotoluene         | 5000        | 6060     | 121       |           |            |       |     | 87 - 137        |
| 2,6-Dinitrotoluene         | 5000        | 5680     | 114       |           |            |       |     | 89 - 120        |
| 2-Amino-4,6-dinitrotoluene | 5000        | 4850     | 97        |           |            |       |     | 90 - 130        |
| 4-Amino-2,6-dinitrotoluene | 5000        | 5090     | 102       |           |            |       |     | 84 - 130        |
| HMX                        | 5000        | 4750     | 94.9      |           |            |       |     | 58 - 138        |
| Nitrobenzene               | 5000        | 4810     | 96.3      |           |            |       |     | 71 - 122        |
| PETN                       | 5000        | 4630     | 92.7      |           |            |       |     | 64 - 137        |
| RDX                        | 5000        | 5170     | 103       |           |            |       |     | 81 - 137        |
| Tetryl                     | 5000        | 2640     | 52.7      |           |            |       |     | 51 - 112        |
| m-Dinitrobenzene           | 5000        | 5320     | 106       |           |            |       |     | 83 - 122        |
| m-Nitrotoluene             | 5000        | 4780     | 95.6      |           |            |       |     | 73 - 118        |
| o-Nitrotoluene             | 5000        | 5090     | 102       |           |            |       |     | 72 - 119        |
| p-Nitrotoluene             | 5000        | 5490     | 110       |           |            |       |     | 67 - 131        |

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



# High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE15-10-8410

Lab Code: GEL

GEL Job No (SDG) 10-1324

Extract Batch Code: 944249

Date Extracted: 26-JAN-10

GEL Spike ID: 1202021916

GEL SpikeDup ID: 1202021917

Analysis Date/Time: 10-FEB-10 12:38

MSD Analysis Date/Time:

Reporting Units: ug/kg

QC Type: MS/MSD

| Compound                   | Spike Added | Sample Conc | MS Conc | MS Rec # | MSD Conc | MSD Rec # | RPD # | RPD Limit | Rec Limits |
|----------------------------|-------------|-------------|---------|----------|----------|-----------|-------|-----------|------------|
| 2,4-Diamino-6-nitrotoluene | 5000        | 0           | 2870    | 57.4     | 3150     | 63        | 9.3   | 26        | 34 - 135   |
| 2,6-Diamino-4-nitrotoluene | 5000        | 0           | 4490    | 89.8     | 4660     | 93.2      | 3.72  | 30        | 55 - 130   |
| 3,5-Dinitroaniline         | 5000        | 0           | 5190    | 104      | 5130     | 103       | 1.16  | 30        | 73 - 129   |
| TATB                       | 7500        | 0           | 5710    | 76.1     | 5980     | 79.7      | 4.62  | 30        | 29 - 155   |
| tris(o-cresyl) phosphate   | 5000        | 0           | 5370    | 107      | 5380     | 108       | .186  | 30        | 72 - 127   |

#Column to be used to flag recovery and RPD values with an asterisk

# High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE15--10-8410

Lab Code: GEL

GEL Job No (SDG) 10-1324

Extract Batch Code: 944249

Date Extracted: 26-JAN-10

GEL Spike ID: 1202021916

GEL SpikeDup ID: 1202021917

Analysis Date/Time: 09-FEB-10 10:54

MSD Analysis Date/Time:

Reporting Units: ug/kg

QC Type: MS/MSD

| Compound                   | Spike Added | Sample Conc | MS Conc | MS Rec # | MSD Conc | MSD Rec # | RPD # | RPD Limit | Rec Limits |
|----------------------------|-------------|-------------|---------|----------|----------|-----------|-------|-----------|------------|
| 1,3,5-Trinitrobenzene      | 5000        | 0           | 4600    | 92       | 4350     | 87        | 5.58  | 30        | 50 - 140   |
| 2,4,6-Trinitrotoluene      | 5000        | 0           | 4950    | 99       | 4600     | 92.1      | 7.23  | 30        | 76 - 144   |
| 2,4-Dinitrotoluene         | 5000        | 0           | 5730    | 115      | 5620     | 112       | 1.85  | 30        | 86 - 135   |
| 2,6-Dinitrotoluene         | 5000        | 0           | 5230    | 105      | 5220     | 104       | .152  | 30        | 90 - 118   |
| 2-Amino-4,6-dinitrotoluene | 5000        | 0           | 5590    | 112      | 5250     | 105       | 6.18  | 30        | 85 - 137   |
| 4-Amino-2,6-dinitrotoluene | 5000        | 0           | 5150    | 103      | 5060     | 101       | 1.88  | 30        | 72 - 143   |
| HMX                        | 5000        | 0           | 4560    | 91.3     | 4340     | 86.8      | 5     | 30        | 51 - 144   |
| Nitrobenzene               | 5000        | 0           | 4620    | 92.3     | 4370     | 87.4      | 5.42  | 30        | 70 - 122   |
| PETN                       | 5000        | 0           | 4640    | 92.8     | 4560     | 91.2      | 1.76  | 30        | 60 - 140   |
| RDX                        | 5000        | 0           | 4760    | 95.1     | 4710     | 94.2      | .937  | 30        | 59 - 152   |
| Tetryl                     | 5000        | 0           | 2850    | 57       | 2160     | 43.2      | 27.5  | 30        | 36 - 124   |
| m-Dinitrobenzene           | 5000        | 0           | 5350    | 107      | 5230     | 105       | 2.3   | 30        | 85 - 118   |
| m-Nitrotoluene             | 5000        | 0           | 4610    | 92.2     | 4500     | 90.1      | 2.33  | 30        | 70 - 120   |
| o-Nitrotoluene             | 5000        | 0           | 4940    | 98.8     | 4640     | 92.8      | 6.32  | 30        | 69 - 123   |
| p-Nitrotoluene             | 5000        | 0           | 5070    | 101      | 4860     | 97.2      | 4.17  | 30        | 65 - 133   |

#Column to be used to flag recovery and RPD values with an asterisk

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1324

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 08-FEB-10 14:44

GEL Data File: EXP0208001a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found (ug/L) |
|----------------------------|------|--------------|
| 3,4-Dinitrotoluene         | 0    | 0            |
| 1,3,5-Trinitrobenzene      | 0    | 0            |
| 1,3-Dinitrobenzene-d4      | 500  | 481.075      |
| 2,4,6-Trinitrotoluene      | 0    | 0            |
| 2,4-Dinitrotoluene         | 0    | 0            |
| 2,6-Dinitrotoluene         | 0    | 0            |
| 2,6-Dinitrotoluene-d3      | 500  | 515.914      |
| 2-Amino-4,6-dinitrotoluene | 0    | 0            |
| 4-Amino-2,6-dinitrotoluene | 0    | 0            |
| HMX                        | 0    | 0            |
| Nitrobenzene               | 0    | 0            |
| PETN                       | 0    | 0            |
| RDX                        | 0    | 0            |
| Tetryl                     | 0    | 0            |
| m-Dinitrobenzene           | 0    | 0            |
| m-Nitrotoluene             | 0    | 0            |
| o-Nitrotoluene             | 0    | 0            |
| p-Nitrotoluene             | 0    | 0            |

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Method: C:\MASSLYNX\New\_Exp.PRO\MethDB\020810expa.mdb, Time: Tue Feb 09 09:17:48 2010

Calibration: Untitled, Time: Tue Feb 09 10:19:05 2010

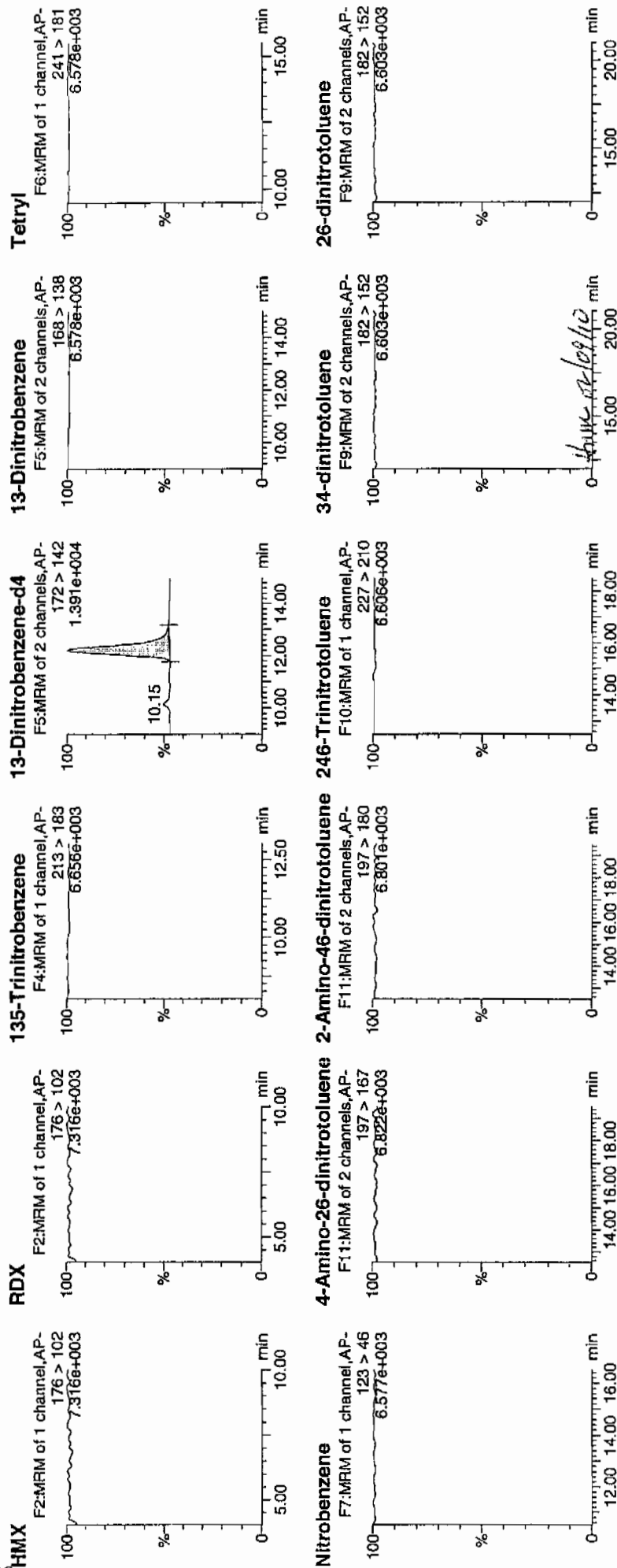
Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208001a

Date: 08-Feb-2010

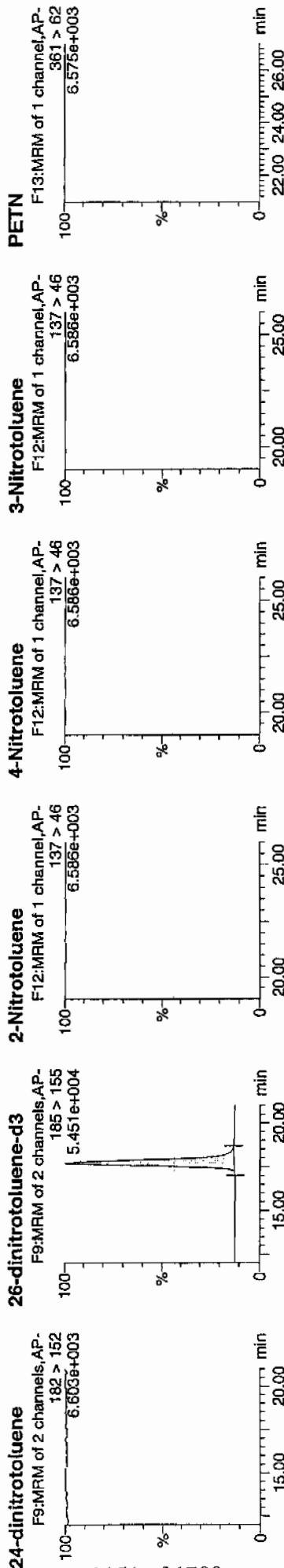
Time: 14:44:17

ID: XIBLK01

Vial: 1:1,A



Dataset: C:\MASSLYNX\New\_Exp\_PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



| ID      | Name                      | Trace     | RT    | Area      | IS Area   | Abs Resp  | Response  | Flags | Mod Date | Mod Time | Conc/mL | %Rec     | %Dev  | SN    |
|---------|---------------------------|-----------|-------|-----------|-----------|-----------|-----------|-------|----------|----------|---------|----------|-------|-------|
| XIBLK01 | HMX                       | 176 > 102 |       |           | 3092.901  |           |           |       |          |          |         |          |       |       |
| XIBLK01 | RDX                       | 176 > 102 |       |           | 3092.901  |           |           |       |          |          |         |          |       |       |
| XIBLK01 | 135-Trinitrobenzene       | 213 > 183 |       |           | 3092.901  |           |           |       |          |          |         |          |       |       |
| XIBLK01 | 13-Dinitrobenzene-d4      | 172 > 142 | 12.20 | 3092.901  |           |           |           |       |          |          |         |          |       |       |
| XIBLK01 | 13-Dinitrobenzene         | 168 > 138 |       |           | 3092.901  |           |           |       |          |          |         |          |       |       |
| XIBLK01 | Tetryl                    | 241 > 181 |       |           | 3092.901  |           |           |       |          |          |         |          |       |       |
| XIBLK01 | Nitrobenzene              | 123 > 46  |       |           | 3092.901  |           |           |       |          |          |         |          |       |       |
| XIBLK01 | 4-Amino-26-dinitrotoluene | 197 > 167 |       |           | 19047.234 |           |           |       |          |          |         |          |       |       |
| XIBLK01 | 2-Amino-46-dinitrotoluene | 197 > 180 |       |           | 19047.234 |           |           |       |          |          |         |          |       |       |
| XIBLK01 | 246-Trinitrotoluene       | 227 > 210 |       |           | 19047.234 |           |           |       |          |          |         |          |       |       |
| XIBLK01 | 34-dinitrotoluene         | 182 > 152 |       |           | 19047.234 |           |           |       |          |          |         |          |       |       |
| XIBLK01 | 26-dinitrotoluene         | 182 > 152 |       |           | 19047.234 |           |           |       |          |          |         |          |       |       |
| XIBLK01 | 24-dinitrotoluene         | 182 > 152 |       |           | 19047.234 |           |           |       |          |          |         |          |       |       |
| XIBLK01 | 26-dinitrotoluene-d3      | 185 > 155 | 17.71 | 19047.234 |           |           |           |       |          |          |         |          |       |       |
| XIBLK01 | 2-Nitrotoluene            | 137 > 46  |       |           | 19047.234 |           |           |       |          |          |         |          |       |       |
| XIBLK01 | 4-Nitrotoluene            | 137 > 46  |       |           | 19047.234 |           |           |       |          |          |         |          |       |       |
| XIBLK01 | 3-Nitrotoluene            | 137 > 46  |       |           | 19047.234 |           |           |       |          |          |         |          |       |       |
| XIBLK01 | PETN                      | 361 > 62  |       |           | 19047.234 |           |           |       |          |          |         |          |       |       |
|         |                           |           |       |           |           | 19047.234 | 19047.234 | bb    |          |          |         | 515.9145 | 103.2 | 3.2   |
|         |                           |           |       |           |           | 3092.901  | 3092.901  | bb    |          |          |         | 481.0748 | 96.2  | -3.8  |
|         |                           |           |       |           |           |           |           |       |          |          |         |          |       | 573.7 |

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1324

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 08-FEB-10 15:13

GEL Data File: EXP0208002a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found (ug/L) |
|----------------------------|------|--------------|
| 3,4-Dinitrotoluene         | 0    | 0            |
| 1,3,5-Trinitrobenzene      | 0    | 0            |
| 1,3-Dinitrobenzene-d4      | 500  | 552.32       |
| 2,4,6-Trinitrotoluene      | 0    | 0            |
| 2,4-Dinitrotoluene         | 0    | 0            |
| 2,6-Dinitrotoluene         | 0    | 0            |
| 2,6-Dinitrotoluene-d3      | 500  | 568.377      |
| 2-Amino-4,6-dinitrotoluene | 0    | 0            |
| 4-Amino-2,6-dinitrotoluene | 0    | 0            |
| HMX                        | 0    | 0            |
| Nitrobenzene               | 0    | 0            |
| PETN                       | 0    | 0            |
| RDX                        | 0    | 0            |
| Tetryl                     | 0    | 0            |
| m-Dinitrobenzene           | 0    | 0            |
| m-Nitrotoluene             | 0    | 0            |
| o-Nitrotoluene             | 0    | 0            |
| p-Nitrotoluene             | 0    | 0            |

# Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Feb 09 10:21:18 2010, Page 3 of 77

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP02080002a

Date: 08-Feb-2010

Time: 15:13:49

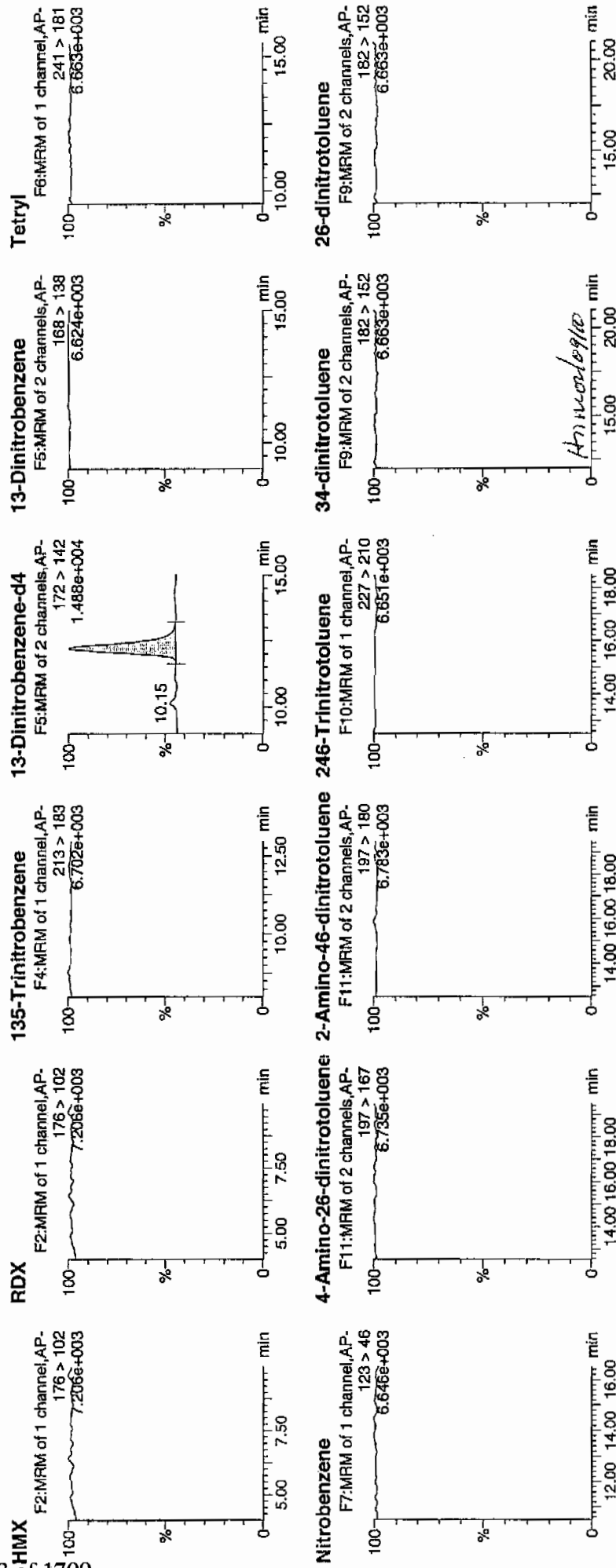
ID: XIBLK01

Vial: 1:1,A

10.15  
2/9/10

1153

of 1709

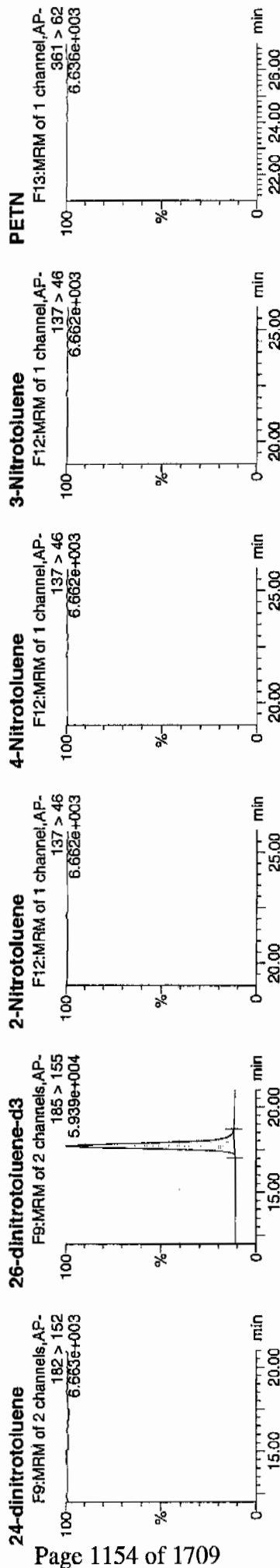


# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Feb 09 10:21:18 2010, Page 4 of 77

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



| ID      | Name                      | Trace     | RT    | Area      | IS:Area   | Abs:Resp | Response  | Flags | Mod:Date | Mod:Time | ng/ml    | %Rec  | %Dev | S/N    |
|---------|---------------------------|-----------|-------|-----------|-----------|----------|-----------|-------|----------|----------|----------|-------|------|--------|
| XIBLK01 | HMX                       | 176 > 102 |       |           | 3550.947  |          |           |       |          |          |          |       |      |        |
| XIBLK01 | RDX                       | 176 > 102 |       |           | 3550.947  |          |           |       |          |          |          |       |      |        |
| XIBLK01 | 135-Trinitrobenzene       | 213 > 183 |       |           | 3550.947  |          |           |       |          |          |          |       |      |        |
| XIBLK01 | 13-Dinitrobenzene-d4      | 172 > 142 | 12.20 | 3550.947  |           |          | 3550.947  |       |          |          | 552.3201 | 110.5 | 10.5 | 593.6  |
| XIBLK01 | 13-Dinitrobenzene         | 168 > 138 |       |           |           |          |           |       |          |          |          |       |      |        |
| XIBLK01 | Tetryl                    | 241 > 181 |       |           | 3550.947  |          |           |       |          |          |          |       |      |        |
| XIBLK01 | Nitrobenzene              | 123 > 46  |       |           | 3550.947  |          |           |       |          |          |          |       |      |        |
| XIBLK01 | 4-Amino-26-dinitrotoluene | 197 > 167 |       |           | 3550.947  |          |           |       |          |          |          |       |      |        |
| XIBLK01 | 2-Amino-46-dinitrotoluene | 197 > 180 |       |           | 20984.104 |          |           |       |          |          |          |       |      |        |
| XIBLK01 | 246-Trinitrotoluene       | 227 > 210 |       |           | 20984.104 |          |           |       |          |          |          |       |      |        |
| XIBLK01 | 34-dinitrotoluene         | 182 > 152 |       |           | 20984.104 |          |           |       |          |          |          |       |      |        |
| XIBLK01 | 26-dinitrotoluene         | 182 > 152 |       |           | 20984.104 |          |           |       |          |          |          |       |      |        |
| XIBLK01 | 24-dinitrotoluene         | 182 > 152 |       |           | 20984.104 |          |           |       |          |          |          |       |      |        |
| XIBLK01 | 26-dinitrotoluene-d3      | 185 > 155 | 17.72 | 20984.104 |           |          | 20984.104 |       |          |          | 568.3767 | 113.7 | 13.7 | 1591.1 |
| XIBLK01 | 2-Nitrotoluene            | 137 > 46  |       |           | 20984.104 |          |           |       |          |          |          |       |      |        |
| XIBLK01 | 4-Nitrotoluene            | 137 > 46  |       |           | 20984.104 |          |           |       |          |          |          |       |      |        |
| XIBLK01 | 3-Nitrotoluene            | 137 > 46  |       |           | 20984.104 |          |           |       |          |          |          |       |      |        |
| XIBLK01 | PETN                      | 361 > 62  |       |           | 20984.104 |          |           |       |          |          |          |       |      |        |



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1324

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 10-FEB-10 08:27

GEL Data File: EXS02100001.wiff

Instrument ID: LCMSMS

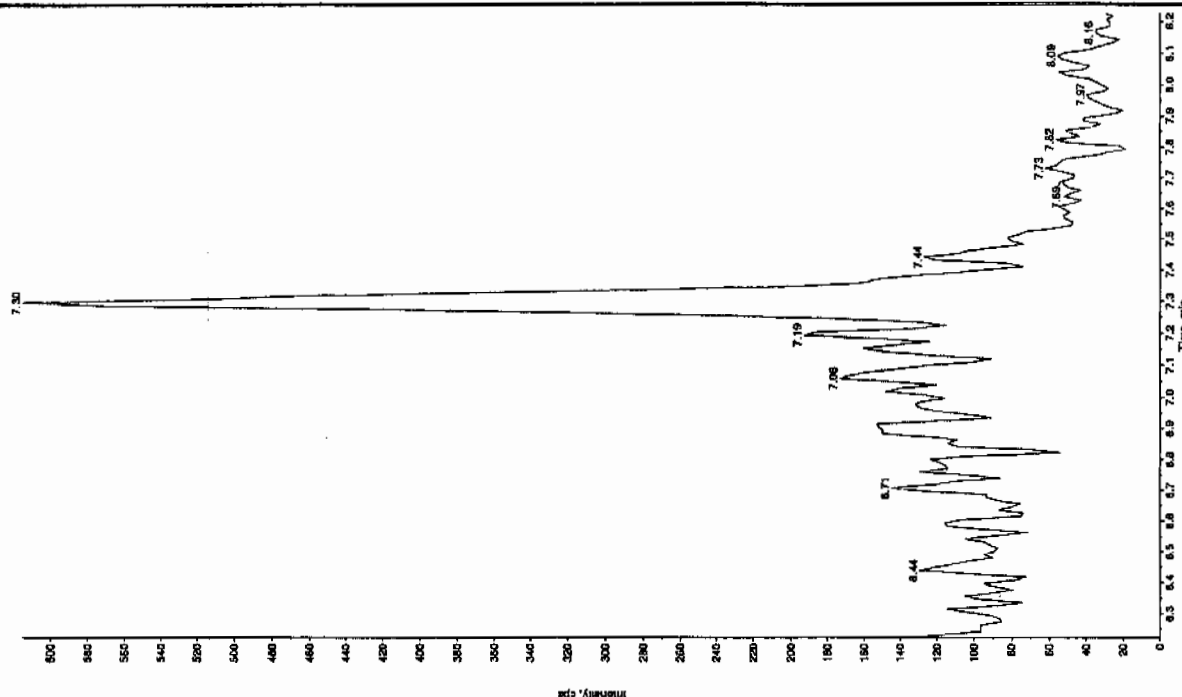
Column: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found (ug/L) |
|----------------------------|------|--------------|
| 3,4-Dinitrotoluene         | 0    | 0            |
| tris(o-cresyl) phosphate   | 0    | 0            |
| TATB                       | 0    | 0            |
| 3,5-Dinitroaniline         | 0    | 0            |
| 2,4-Diamino-6-nitrotoluene | 0    | 0            |
| 2,6-Diamino-4-nitrotoluene | 0    | 0            |

Jan 2/11/10

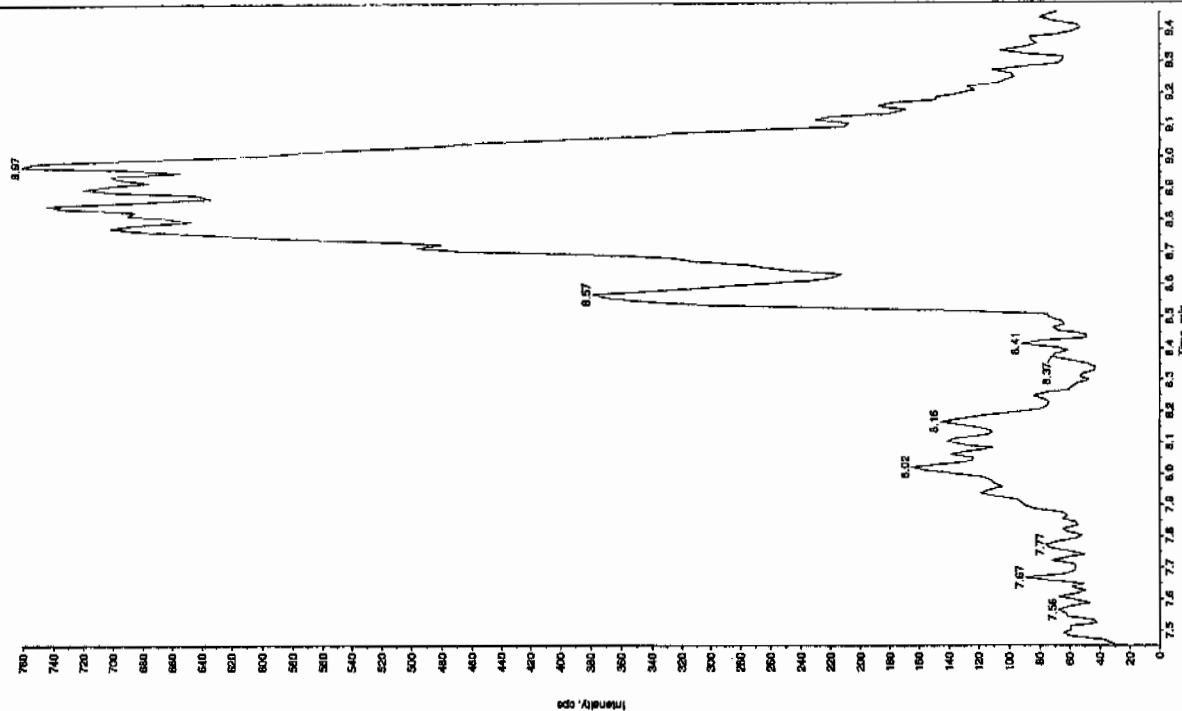
Sample Name: YIELK01 Sample ID: YIELK01 File: EXS2100001.wif  
 Peak Name: TATB Mass(es): 257.2204.9 amu  
 Comment: LCMSXP\_B1 Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 2/10/2010  
 Acq. Date: 8:27:27 AM  
 Acq. Time: 8:27:27 AM  
 Modified: No

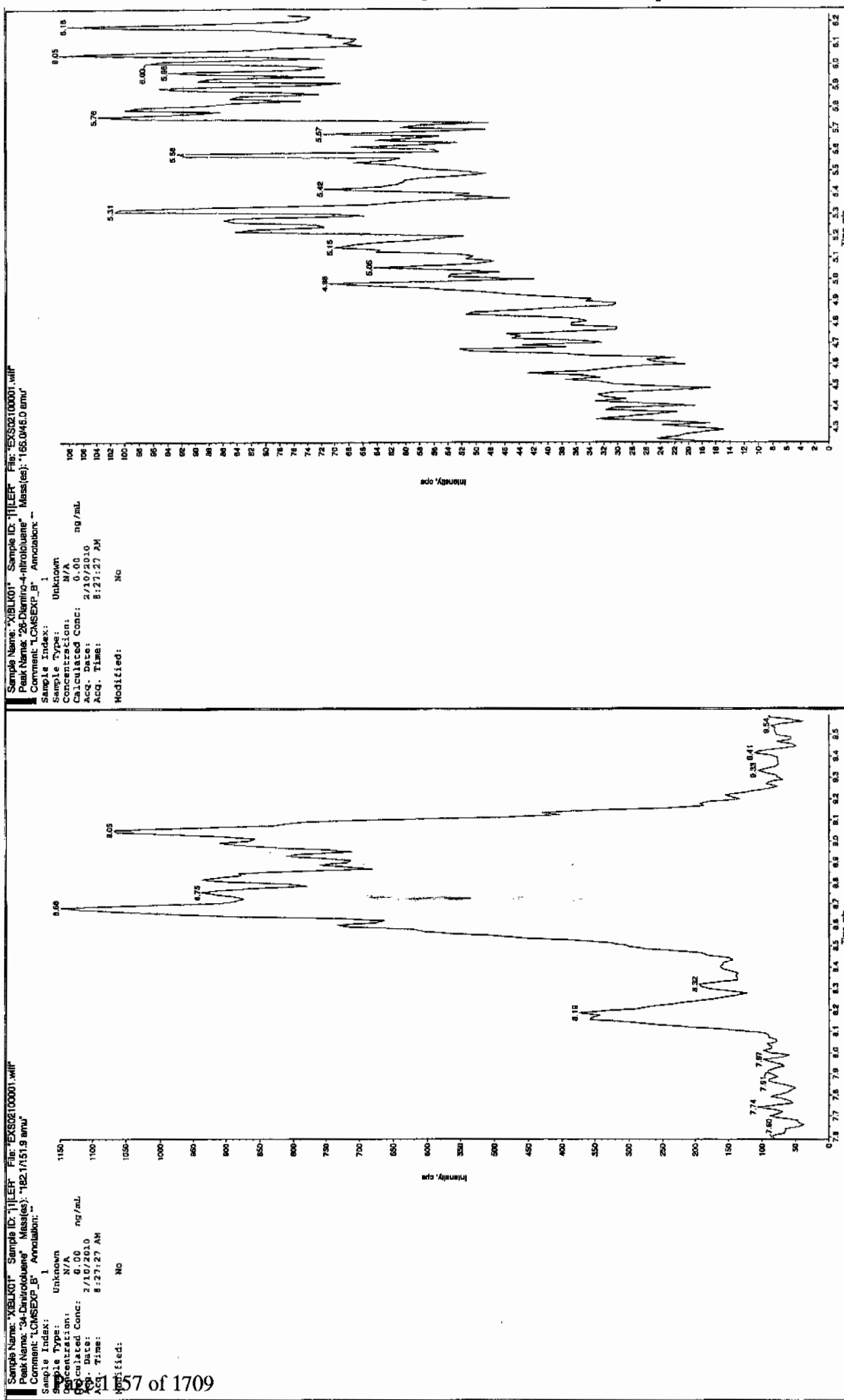


Sample Name: YIELK01 Sample ID: YIELK01 File: EXS2100001.wif  
 Peak Name: TATB Mass(es): 257.2204.9 amu  
 Comment: LCMSXP\_B1 Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 2/10/2010  
 Acq. Date: 8:27:27 AM  
 Acq. Time: 8:27:27 AM  
 Modified: No

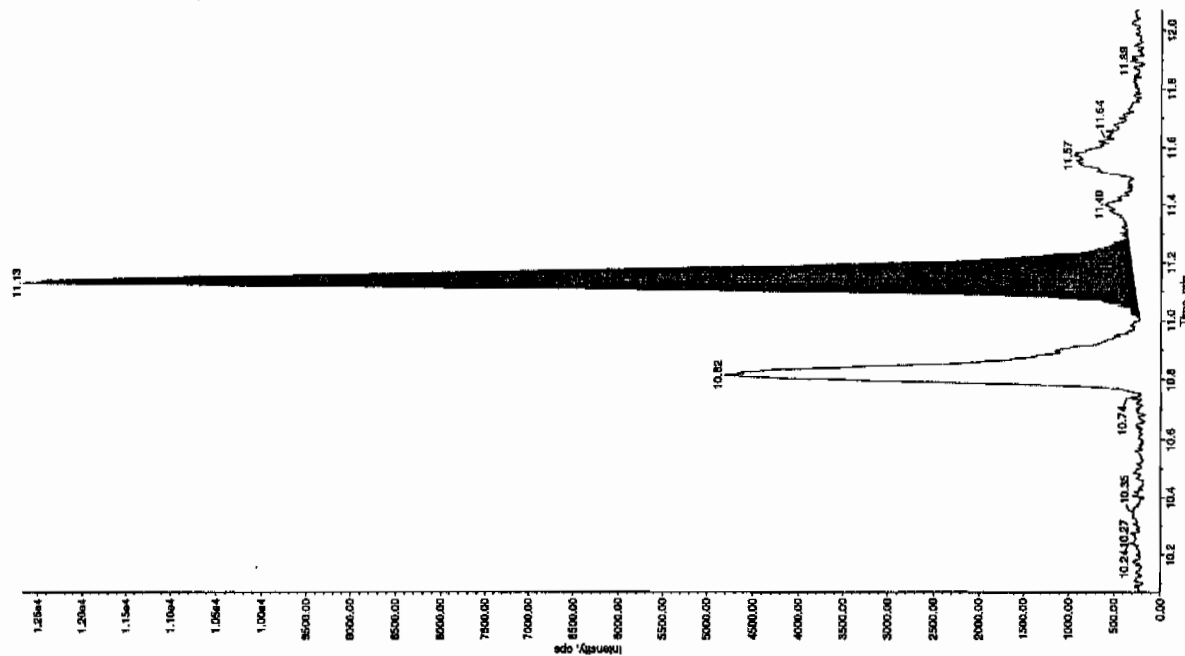


Jan 2/11/10



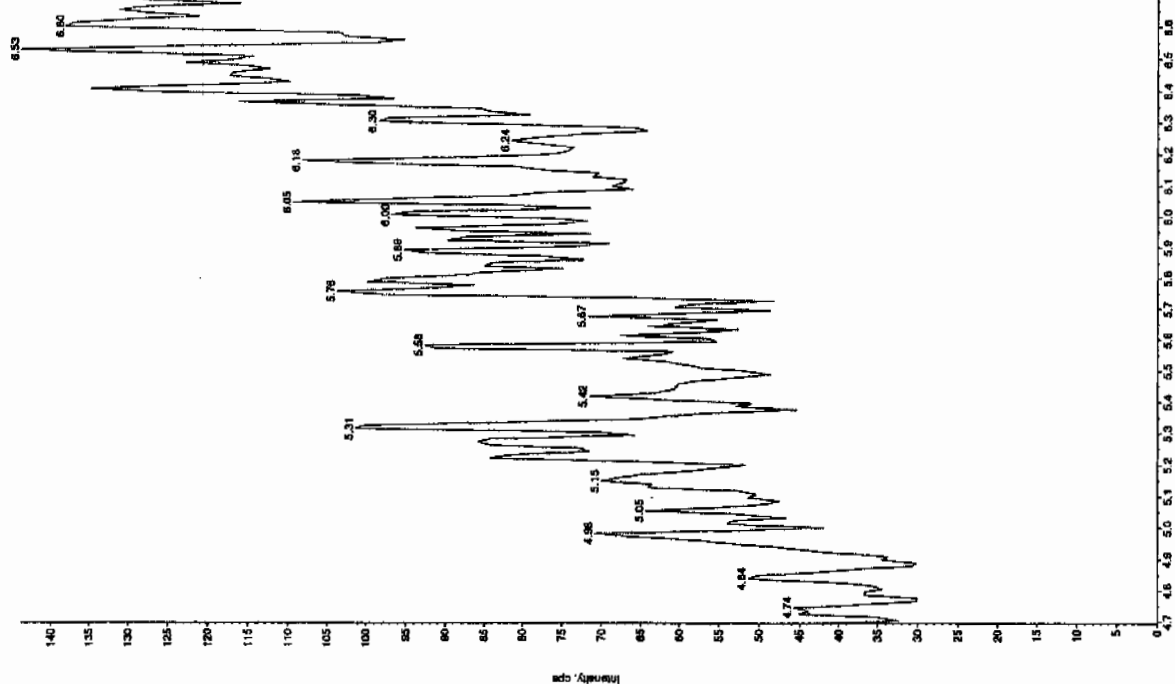
Sample Name: "XBLK01" Sample ID: "11LER" File: "EX502100001.wif"  
 Peak Name: "tris(2-cyanoethyl) phosphite" Mass(es): "369.191.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: No Intercept  
 Acq. Date: 2/10/2010  
 Acq. Time: 8:27:27 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 RT Window: 30.0 sec  
 Expected RT: 11.1 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 11.1 min  
 Peak: 5.52e4 cps  
 Height: 1.24e4 cps  
 Start Time: 11.0 min  
 End Time: 11.3 min



Sample Name: "XBLK01" Sample ID: "11LER" File: "EX502100001.wif"  
 Peak Name: "24-Diamino-2-nitroethane" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 8:27:27 AM  
 Modified: No



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1324

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 10-FEB-10 08:43

GEL Data File: EXS02100002.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found (ug/L) |
|----------------------------|------|--------------|
| 3,4-Dinitrotoluene         | 0    | 0            |
| tris(o-cresyl) phosphate   | 0    | 0            |
| TATB                       | 0    | 0            |
| 3,5-Dinitroaniline         | 0    | 0            |
| 2,4-Diamino-6-nitrotoluene | 0    | 0            |
| 2,6-Diamino-4-nitrotoluene | 0    | 0            |

Jan 21/11/10

Sample Name: "XIBLK01" Sample ID: "JILLER" File: "EXS02100002.wif"

Peak Name: "35-Dihydroquinoline" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

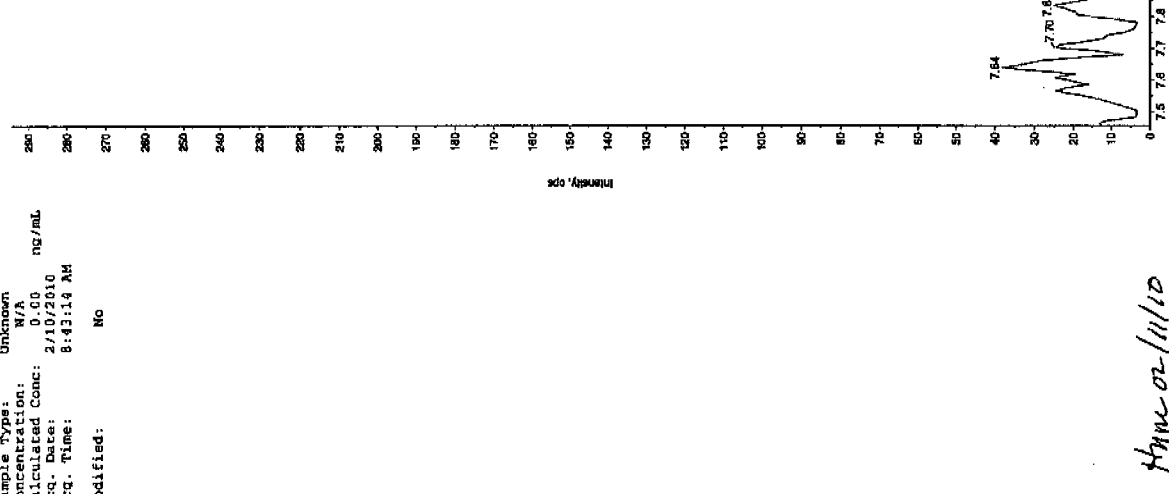
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 2/10/2010

Acq. Time: 8:43:14 AM

Modified: No



Jan-21/11/10

Sample Name: "XIBLK01" Sample ID: "JILLER" File: "EXS02100002.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

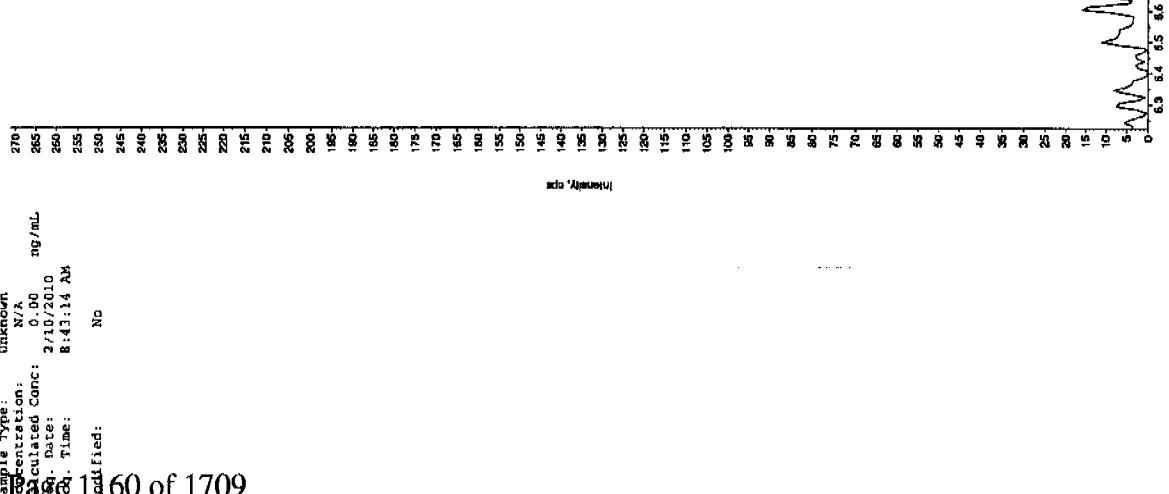
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 2/10/2010

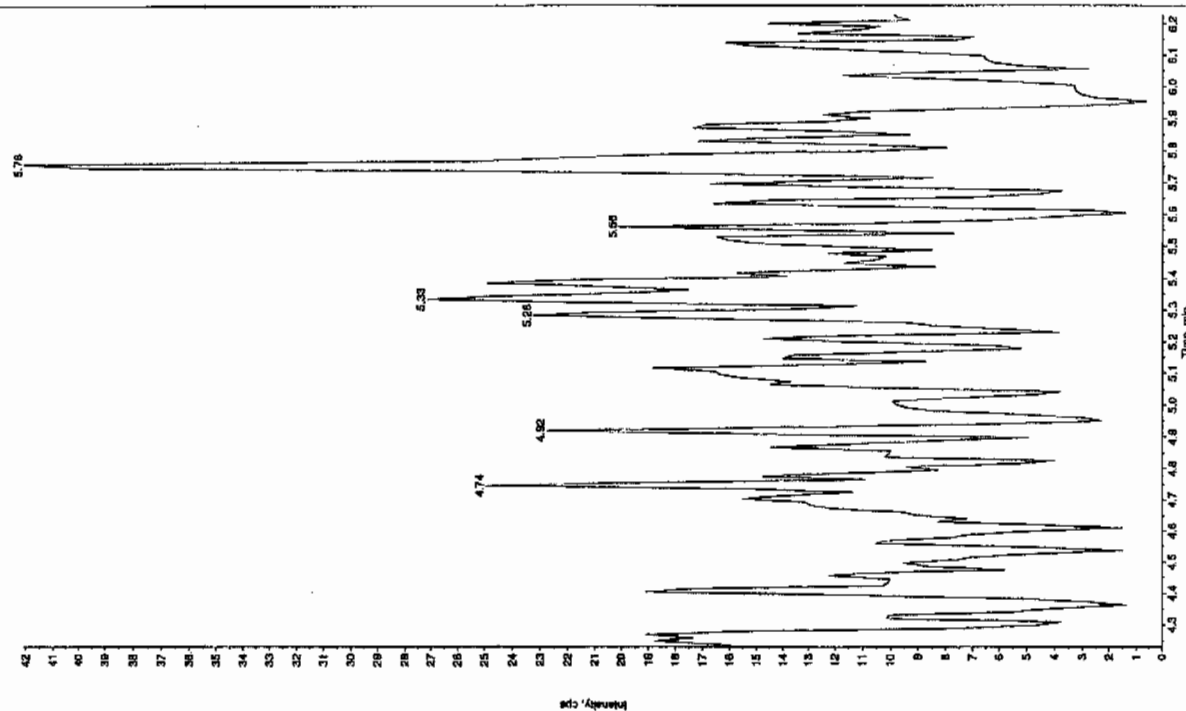
Acq. Time: 8:43:14 AM

Modified: No



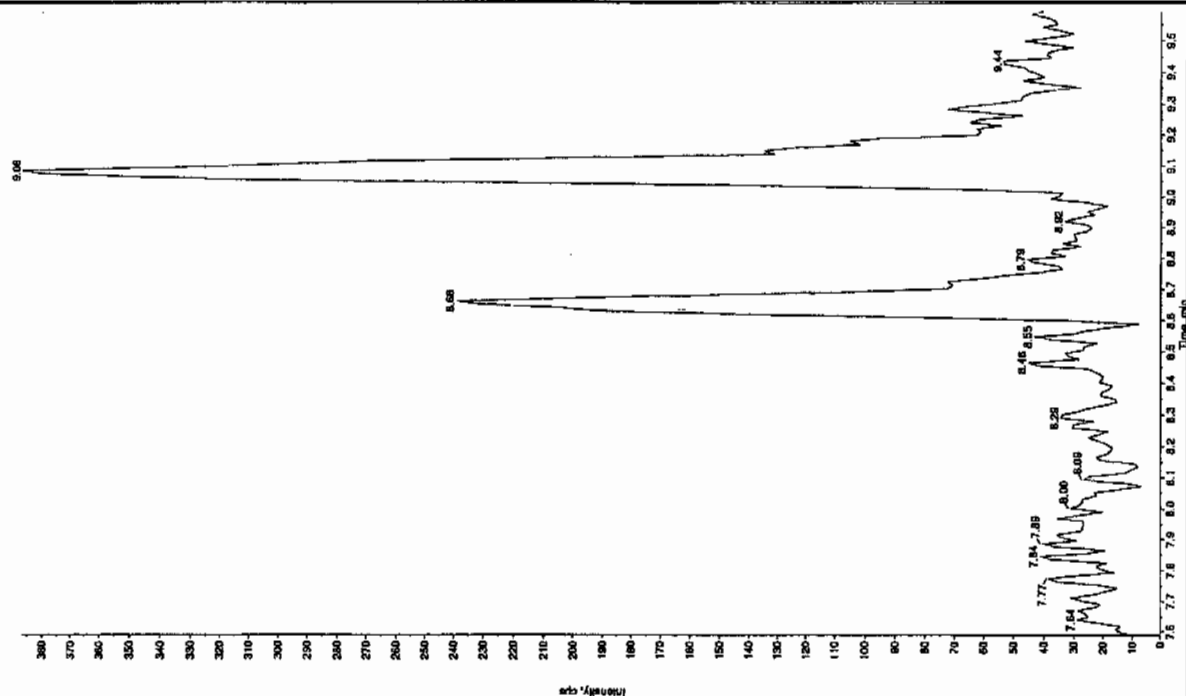
Sample Name: "XIBLK01" Sample ID: "111LFR" File: "EXS02100002.wif"  
 Peak Name: "26-Dinitro-4-nitrotoluene" Mass(es): "165.0465.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 8:43:14 AM  
 Modified: No



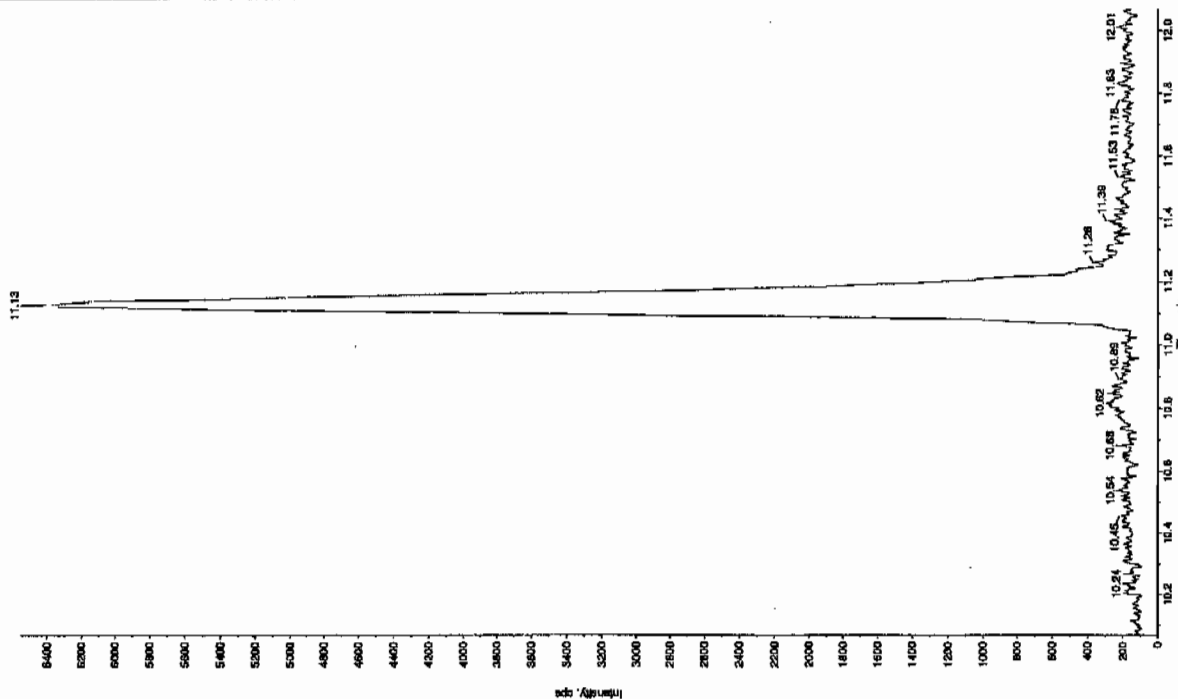
Sample Name: "XIBLK01" Sample ID: "111LFR" File: "EXS02100002.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.17151.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 8:43:14 AM  
 Modified: No



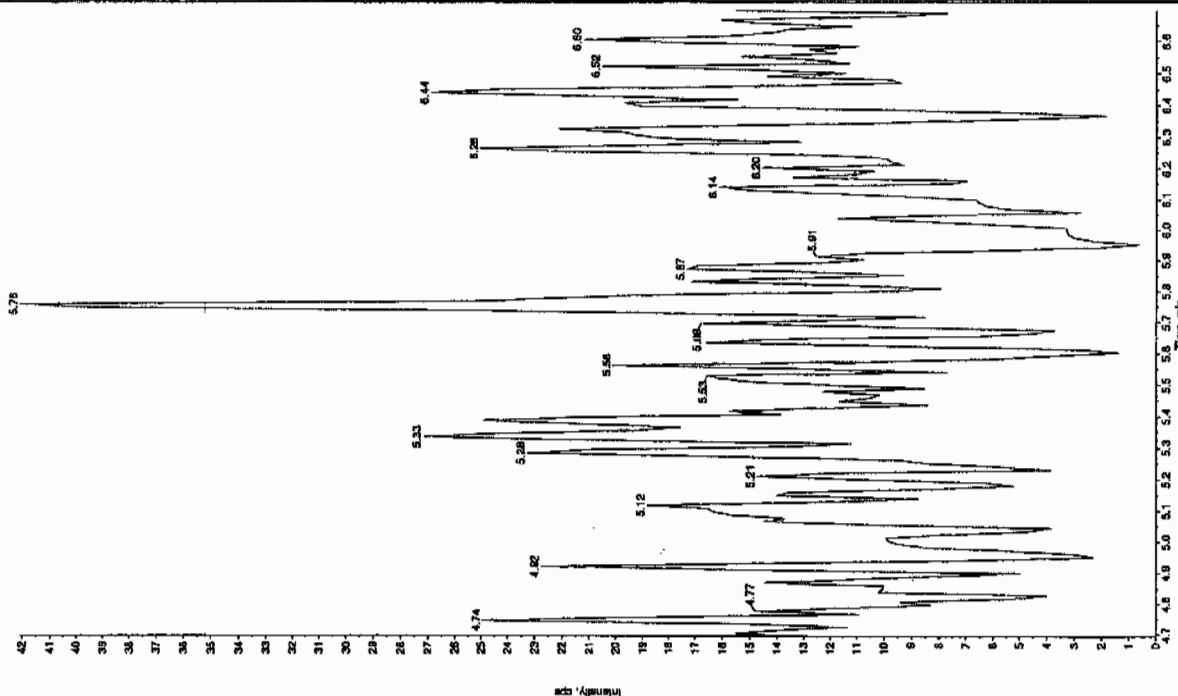
Sample Name: "XIBLKO1" Sample ID: "J11LRF" File: "EXS02100002.wml"  
 Peak Name: "bis(o-cresyl) phosphite" Mass(es): "369.1/91.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 8:43:14 AM  
 Modified: No



Sample Name: "XIBLKO1" Sample ID: "J11LRF" File: "EXS02100002.wml"  
 Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "166.0/46.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 8:43:14 AM  
 Modified: No





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1324

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 08-FEB-10 18:40

GEL Data File: EXP0208009a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found (ug/L) |
|----------------------------|------|--------------|
| 3,4-Dinitrotoluene         | 0    | 0            |
| 1,3,5-Trinitrobenzene      | 0    | 0            |
| 1,3-Dinitrobenzene-d4      | 500  | 519.67       |
| 2,4,6-Trinitrotoluene      | 0    | 0            |
| 2,4-Dinitrotoluene         | 0    | 0            |
| 2,6-Dinitrotoluene         | 0    | 0            |
| 2,6-Dinitrotoluene-d3      | 500  | 546.786      |
| 2-Amino-4,6-dinitrotoluene | 0    | 0            |
| 4-Amino-2,6-dinitrotoluene | 0    | 0            |
| HMX                        | 0    | 0            |
| Nitrobenzene               | 0    | 0            |
| PETN                       | 0    | 0            |
| RDX                        | 0    | 0            |
| Tetryl                     | 0    | 0            |
| m-Dinitrobenzene           | 0    | 0            |
| m-Nitrotoluene             | 0    | 0            |
| o-Nitrotoluene             | 0    | 0            |
| p-Nitrotoluene             | 0    | 0            |

# Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Feb 09 10:21:18 2010, Page 17 of 77

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208009a

Date: 08-Feb-2010

Time: 18:40:36

ID: XIBLK02

Vial: 1:1,A

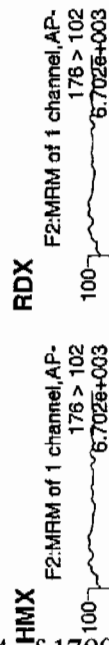
187  
2/9/10

164

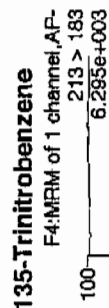
CHMX

1709

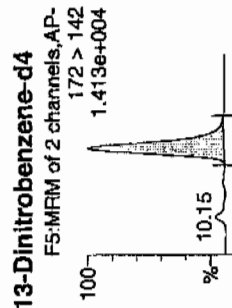
RDX



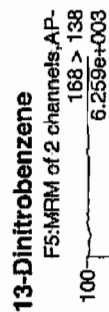
135-Trinitrobenzene



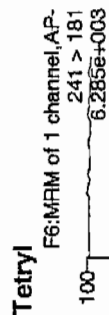
13-Dinitrobenzene-d4



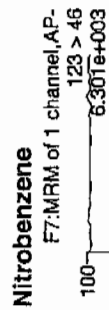
13-Dinitrobenzene



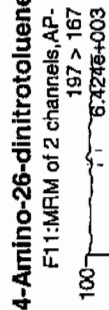
Tetryl



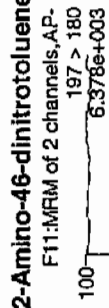
Nitrobenzene



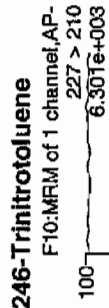
4-Amino-26-dinitrotoluene



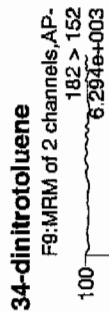
2-Amino-46-dinitrotoluene



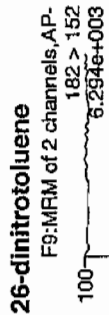
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene

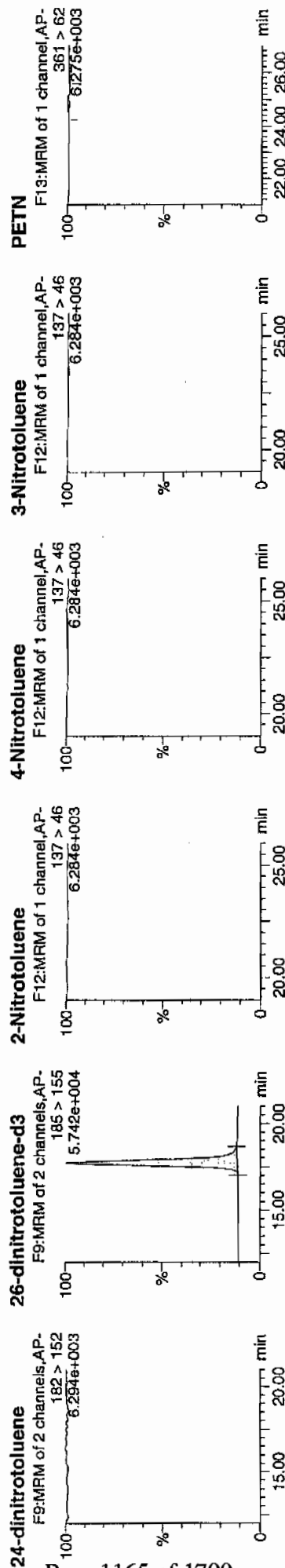


# Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Feb 09 10:21:18 2010, Page 18 of 77

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



| ID      | Name                      | Trace     | RT    | Area      | IS Area   | Abs. Resp | Response | Flags | Mod Date | Mod Time  | ng/mL    | % Rec | % Dev | SN     |
|---------|---------------------------|-----------|-------|-----------|-----------|-----------|----------|-------|----------|-----------|----------|-------|-------|--------|
| XIBLK02 | HMX                       | 176 > 102 |       |           | 3341.034  |           |          |       |          |           |          |       |       |        |
| XIBLK02 | RDX                       | 176 > 102 |       |           | 3341.034  |           |          |       |          |           |          |       |       |        |
| XIBLK02 | 135-Trinitrobenzene       | 213 > 183 |       |           | 3341.034  |           |          |       |          |           |          |       |       |        |
| XIBLK02 | 13-Dinitrobenzene-d4      | 172 > 142 | 12.20 | 3341.034  |           |           |          | bb    |          |           | 519.6698 | 103.9 | 3.9   | 344.2  |
| XIBLK02 | 13-Dinitrobenzene         | 168 > 138 |       |           | 3341.034  |           |          |       |          |           |          |       |       |        |
| XIBLK02 | Tetryl                    | 241 > 181 |       |           | 3341.034  |           |          |       |          |           |          |       |       |        |
| XIBLK02 | Nitrobenzene              | 123 > 46  |       |           | 20186.990 |           |          |       | MM-      | 09-Feb-10 | 10:07:01 |       |       |        |
| XIBLK02 | 4-Amino-26-dinitrotoluene | 197 > 167 |       |           | 20186.990 |           |          |       |          |           |          |       |       |        |
| XIBLK02 | 2-Amino-46-dinitrotoluene | 197 > 180 |       |           | 20186.990 |           |          |       |          |           |          |       |       |        |
| XIBLK02 | 246-Trinitrotoluene       | 227 > 210 |       |           | 20186.990 |           |          |       |          |           |          |       |       |        |
| XIBLK02 | 34-dinitrotoluene         | 182 > 152 |       |           | 20186.990 |           |          |       |          |           |          |       |       |        |
| XIBLK02 | 26-dinitrotoluene         | 182 > 152 |       |           | 20186.990 |           |          |       |          |           |          |       |       |        |
| XIBLK02 | 24-dinitrotoluene         | 182 > 152 |       |           | 20186.990 |           |          |       |          |           |          |       |       |        |
| XIBLK02 | 26-dinitrotoluene-d3      | 185 > 155 | 17.71 | 20186.990 |           |           |          | bb    |          |           | 546.7850 | 109.4 | 9.4   | 1811.7 |
| XIBLK02 | 2-Nitrotoluene            | 137 > 46  |       |           | 20186.990 |           |          |       |          |           |          |       |       |        |
| XIBLK02 | 4-Nitrotoluene            | 137 > 46  |       |           | 20186.990 |           |          |       |          |           |          |       |       |        |
| XIBLK02 | 3-Nitrotoluene            | 137 > 46  |       |           | 20186.990 |           |          |       |          |           |          |       |       |        |
| XIBLK02 | PETN                      | 361 > 62  |       |           | 20186.990 |           |          |       | MM-      | 09-Feb-10 | 10:12:32 |       |       |        |

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1324

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 08-FEB-10 19:39

GEL Data File: EXP0208011a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found (ug/L) |
|----------------------------|------|--------------|
| 3,4-Dinitrotoluene         | 0    | 0            |
| 1,3,5-Trinitrobenzene      | 0    | 0            |
| 1,3-Dinitrobenzene-d4      | 500  | 534.714      |
| 2,4,6-Trinitrotoluene      | 0    | 0            |
| 2,4-Dinitrotoluene         | 0    | 0            |
| 2,6-Dinitrotoluene         | 0    | 0            |
| 2,6-Dinitrotoluene-d3      | 500  | 583.46       |
| 2-Amino-4,6-dinitrotoluene | 0    | 0            |
| 4-Amino-2,6-dinitrotoluene | 0    | 0            |
| HMX                        | 0    | 0            |
| Nitrobenzene               | 0    | 0            |
| PETN                       | 0    | 0            |
| RDX                        | 0    | 0            |
| Tetryl                     | 0    | 0            |
| m-Dinitrobenzene           | 0    | 0            |
| m-Nitrotoluene             | 0    | 0            |
| o-Nitrotoluene             | 0    | 0            |
| p-Nitrotoluene             | 0    | 0            |

# Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Feb 09 10:21:18 2010, Page 21 of 77

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208011a

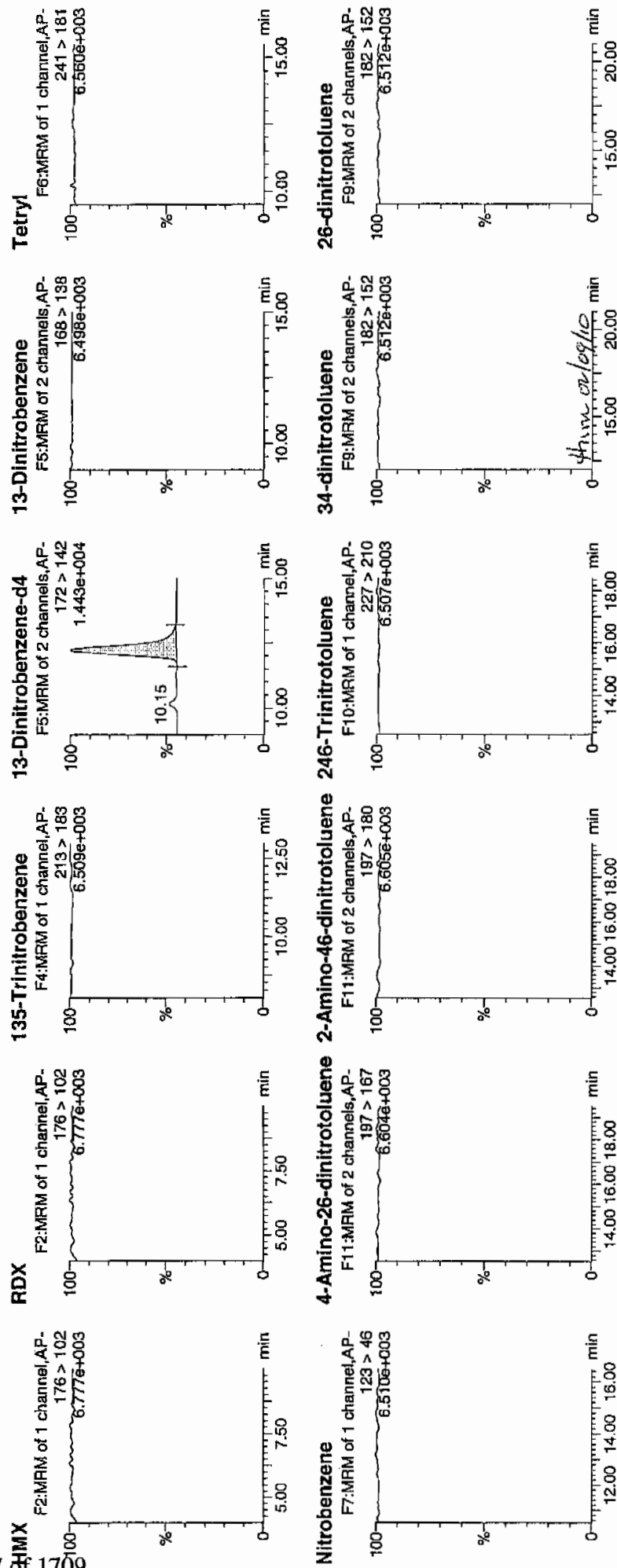
Date: 08-Feb-2010

Time: 19:39:33

ID: XIBLK03

Vial: 1:1,A

10/10  
2/10

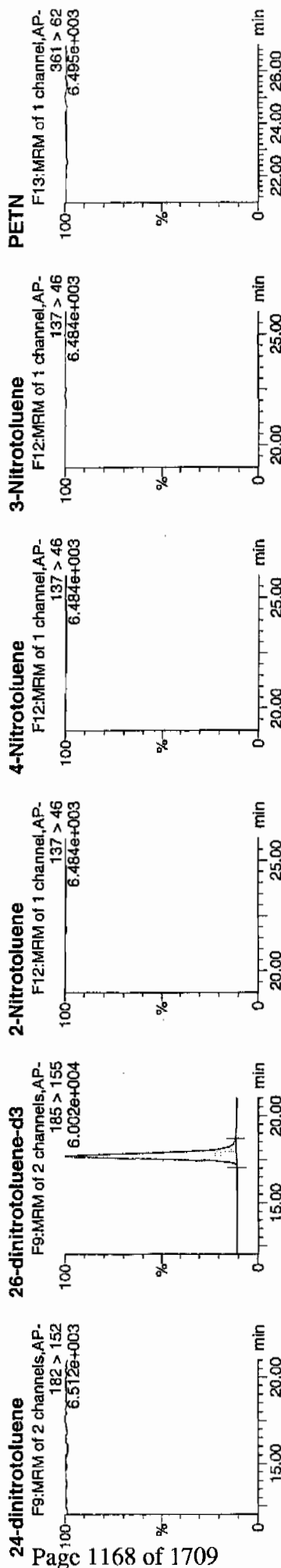


# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Feb 09 10:21:18 2010, Page 22 of 77

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



| ID      | Name                      | Trace     | RT    | Area      | IS:Area   | Abs:Resp | Response | Flags | Mod:Date | Mod:Time | %Rec  | %Dev | S/N   |
|---------|---------------------------|-----------|-------|-----------|-----------|----------|----------|-------|----------|----------|-------|------|-------|
| XIBLK03 | HMX                       | 176 > 102 |       |           | 3437.753  |          |          |       |          |          |       |      |       |
| XIBLK03 | RDX                       | 176 > 102 |       |           | 3437.753  |          |          |       |          |          |       |      |       |
| XIBLK03 | 135-Trinitrobenzene       | 213 > 183 |       |           | 3437.753  |          |          |       |          |          |       |      |       |
| XIBLK03 | 13-Dinitrobenzene-d4      | 172 > 142 | 12.20 | 3437.753  |           |          |          | bb    |          |          | 106.9 | 6.9  | 235.9 |
| XIBLK03 | 13-Dinitrobenzene         | 168 > 138 |       |           | 3437.753  |          |          |       |          |          |       |      |       |
| XIBLK03 | Tetryl                    | 241 > 181 |       |           | 3437.753  |          |          |       |          |          |       |      |       |
| XIBLK03 | Nitrobenzene              | 123 > 46  |       |           | 3437.753  |          |          |       |          |          |       |      |       |
| XIBLK03 | 4-Amino-26-dinitrotoluene | 197 > 167 |       |           | 21540.977 |          |          |       |          |          |       |      |       |
| XIBLK03 | 2-Amino-46-dinitrotoluene | 197 > 180 |       |           | 21540.977 |          |          |       |          |          |       |      |       |
| XIBLK03 | 246-Trinitrotoluene       | 227 > 210 |       |           | 21540.977 |          |          |       |          |          |       |      |       |
| XIBLK03 | 34-dinitrotoluene         | 182 > 152 |       |           | 21540.977 |          |          |       |          |          |       |      |       |
| XIBLK03 | 26-dinitrotoluene         | 182 > 152 |       |           | 21540.977 |          |          |       |          |          |       |      |       |
| XIBLK03 | 24-dinitrotoluene         | 182 > 152 |       |           | 21540.977 |          |          |       |          |          |       |      |       |
| XIBLK03 | 26-dinitrotoluene-d3      | 185 > 155 | 17.72 | 21540.977 |           |          |          | bb    |          |          | 116.7 | 16.7 | 396.6 |
| XIBLK03 | 2-Nitrotoluene            | 137 > 46  |       |           | 21540.977 |          |          |       |          |          |       |      |       |
| XIBLK03 | 4-Nitrotoluene            | 137 > 46  |       |           | 21540.977 |          |          |       |          |          |       |      |       |
| XIBLK03 | 3-Nitrotoluene            | 137 > 46  |       |           | 21540.977 |          |          |       |          |          |       |      |       |
| XIBLK03 | PETN                      | 361 > 62  |       |           | 21540.977 |          |          |       |          |          |       |      |       |

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1324

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 09-FEB-10 02:02

GEL Data File: EXP0208024a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found (ug/L) |
|----------------------------|------|--------------|
| 3,4-Dinitrotoluene         | 0    | 0            |
| 1,3,5-Trinitrobenzene      | 0    | 0            |
| 1,3-Dinitrobenzene-d4      | 500  | 594.411      |
| 2,4,6-Trinitrotoluene      | 0    | 0            |
| 2,4-Dinitrotoluene         | 0    | 0            |
| 2,6-Dinitrotoluene         | 0    | 0            |
| 2,6-Dinitrotoluene-d3      | 500  | 592.137      |
| 2-Amino-4,6-dinitrotoluene | 0    | 0            |
| 4-Amino-2,6-dinitrotoluene | 0    | 0            |
| HMX                        | 0    | 0            |
| Nitrobenzene               | 0    | 0            |
| PETN                       | 0    | 0            |
| RDX                        | 0    | 0            |
| Tetryl                     | 0    | 0            |
| m-Dinitrobenzene           | 0    | 0            |
| m-Nitrotoluene             | 0    | 0            |
| o-Nitrotoluene             | 0    | 0            |
| p-Nitrotoluene             | 0    | 0            |

Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208024a

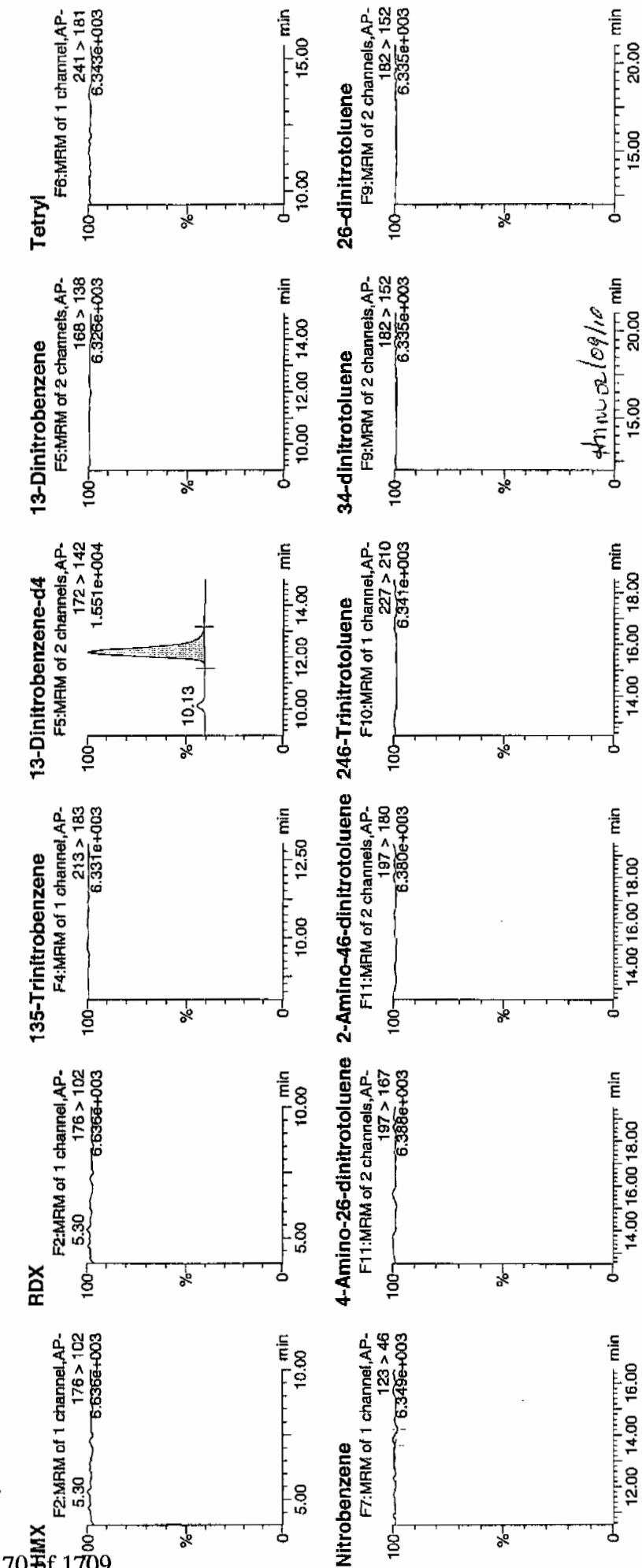
Date: 09-Feb-2010

Time: 02:02:53

ID: XIBLK04

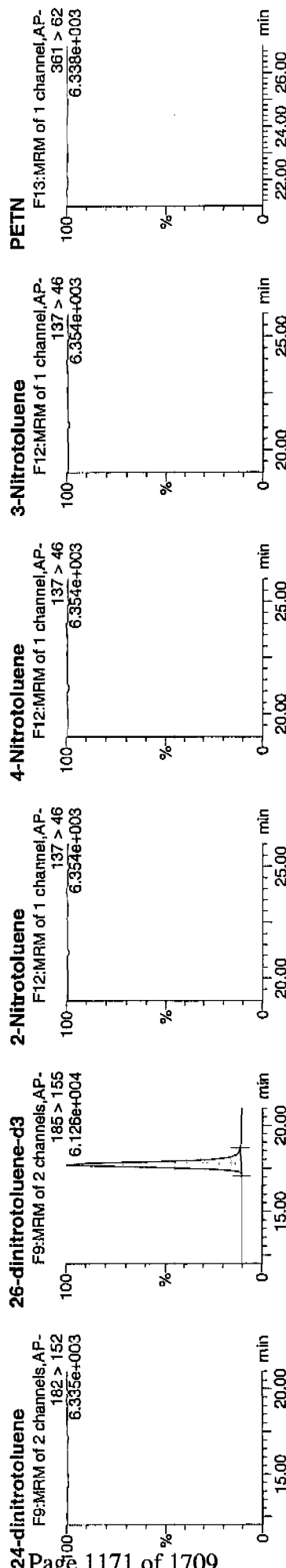
Trial: 1:1,A

10/10  
2/9/10





Dataset: C:\MASSLYNX\New\_Exp\_PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



| ID      | Name                      | RT        | Area     | IS Area   | Abs Resp  | Response  | Flags | Mod Date | Mod Time               | Conc     | %Rec  | %Dev | S/N    |
|---------|---------------------------|-----------|----------|-----------|-----------|-----------|-------|----------|------------------------|----------|-------|------|--------|
| XIBLK04 | HMX                       | 176 > 102 | 3821.559 | 3821.559  |           |           |       |          |                        |          |       |      |        |
| XIBLK04 | RDX                       | 176 > 102 | 3821.559 | 3821.559  |           |           |       |          |                        |          |       |      |        |
| XIBLK04 | 135-Trinitrobenzene       | 213 > 183 | 3821.559 | 3821.559  |           |           |       |          |                        |          |       |      |        |
| XIBLK04 | 13-Dinitrobenzene-d4      | 172 > 142 | 12.20    | 3821.559  | 3821.559  | 3821.559  | bb    |          |                        | 594.4115 | 118.9 | 18.9 | 582.0  |
| XIBLK04 | 13-Dinitrobenzene         | 168 > 138 |          |           | 3821.559  |           |       |          |                        |          |       |      |        |
| XIBLK04 | Tetryl                    | 241 > 181 |          |           | 3821.559  |           |       |          |                        |          |       |      |        |
| XIBLK04 | Nitrobenzene              | 123 > 46  |          |           | 3821.559  |           |       |          | MM- 09-Feb-10 10:05:00 |          |       |      |        |
| XIBLK04 | 4-Amino-26-dinitrotoluene | 197 > 167 |          |           | 21861.324 |           |       |          |                        |          |       |      |        |
| XIBLK04 | 2-Amino-46-dinitrotoluene | 197 > 180 |          |           | 21861.324 |           |       |          |                        |          |       |      |        |
| XIBLK04 | 246-Trinitrotoluene       | 227 > 210 |          |           | 21861.324 |           |       |          |                        |          |       |      |        |
| XIBLK04 | 34-dinitrotoluene         | 182 > 152 |          |           | 21861.324 |           |       |          |                        |          |       |      |        |
| XIBLK04 | 26-dinitrotoluene         | 182 > 152 |          |           | 21861.324 |           |       |          |                        |          |       |      |        |
| XIBLK04 | 24-dinitrotoluene         | 182 > 152 |          |           | 21861.324 |           |       |          |                        |          |       |      |        |
| XIBLK04 | 26-dinitrotoluene-d3      | 185 > 155 | 17.71    | 21861.324 | 21861.324 | 21861.324 | bb    |          |                        | 592.1371 | 118.4 | 18.4 | 2394.8 |
| XIBLK04 | 2-Nitrotoluene            | 137 > 46  |          |           | 21861.324 |           |       |          |                        |          |       |      |        |
| XIBLK04 | 4-Nitrotoluene            | 137 > 46  |          |           | 21861.324 |           |       |          |                        |          |       |      |        |
| XIBLK04 | 3-Nitrotoluene            | 137 > 46  |          |           | 21861.324 |           |       |          |                        |          |       |      |        |
| XIBLK04 | PETN                      | 361 > 62  |          |           | 21861.324 |           |       |          |                        |          |       |      |        |

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1324

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 09-FEB-10 08:26

GEL Data File: EXP0208037a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found (ug/L) |
|----------------------------|------|--------------|
| 3,4-Dinitrotoluene         | 0    | 0            |
| 1,3,5-Trinitrobenzene      | 0    | 0            |
| 1,3-Dinitrobenzene-d4      | 500  | 592.976      |
| 2,4,6-Trinitrotoluene      | 0    | 0            |
| 2,4-Dinitrotoluene         | 0    | 0            |
| 2,6-Dinitrotoluene         | 0    | 0            |
| 2,6-Dinitrotoluene-d3      | 500  | 568.449      |
| 2-Amino-4,6-dinitrotoluene | 0    | 0            |
| 4-Amino-2,6-dinitrotoluene | 0    | 0            |
| HMX                        | 0    | 0            |
| Nitrobenzene               | 0    | 0            |
| PETN                       | 0    | 0            |
| RDX                        | 0    | 0            |
| Tetryl                     | 0    | 0            |
| m-Dinitrobenzene           | 0    | 0            |
| m-Nitrotoluene             | 0    | 0            |
| o-Nitrotoluene             | 0    | 0            |
| p-Nitrotoluene             | 0    | 0            |

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208037a

Date: 09-Feb-2010

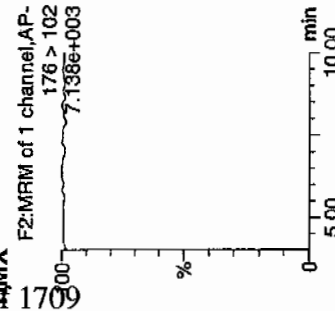
Time: 08:26:48

ID: XIBLK05

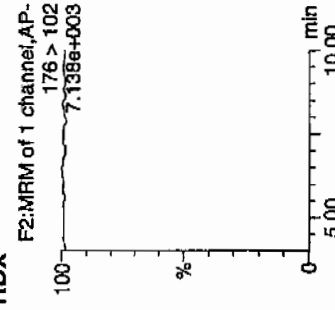
Vial: 1:1,A

10.17  
172 > 142  
1.604e+004

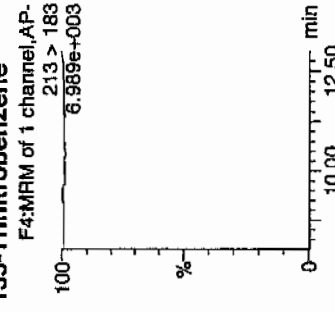
RMX



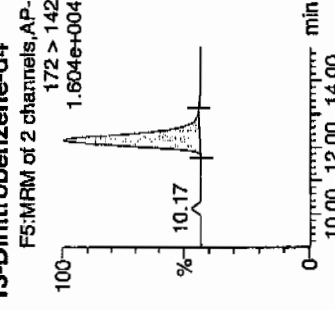
RDX



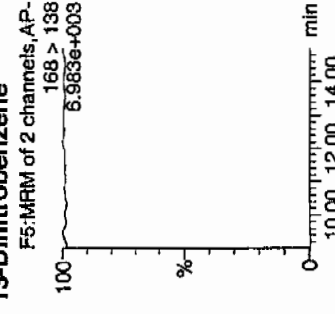
135-Trinitrobenzene



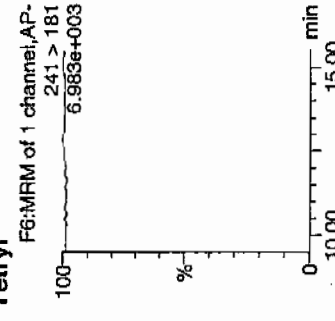
13-Dinitrobenzene-d4



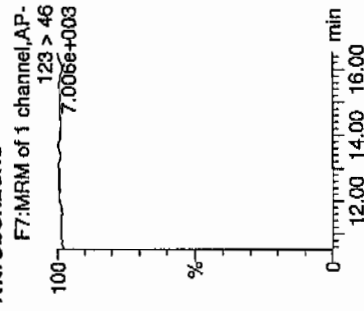
13-Dinitrobenzene



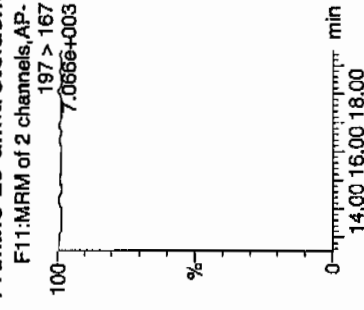
Tetryl



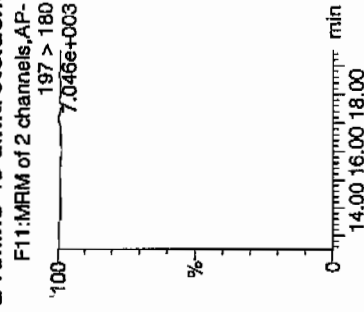
Nitrobenzene



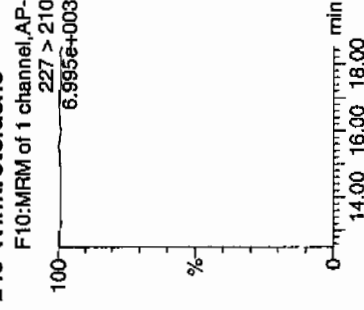
4-Amino-26-dinitrotoluene



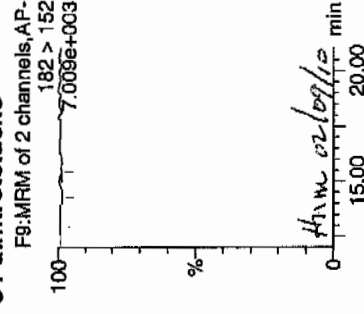
2-Amino-46-dinitrotoluene



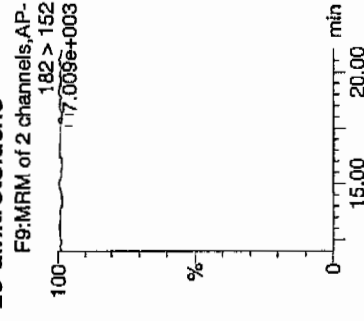
246-Trinitrotoluene



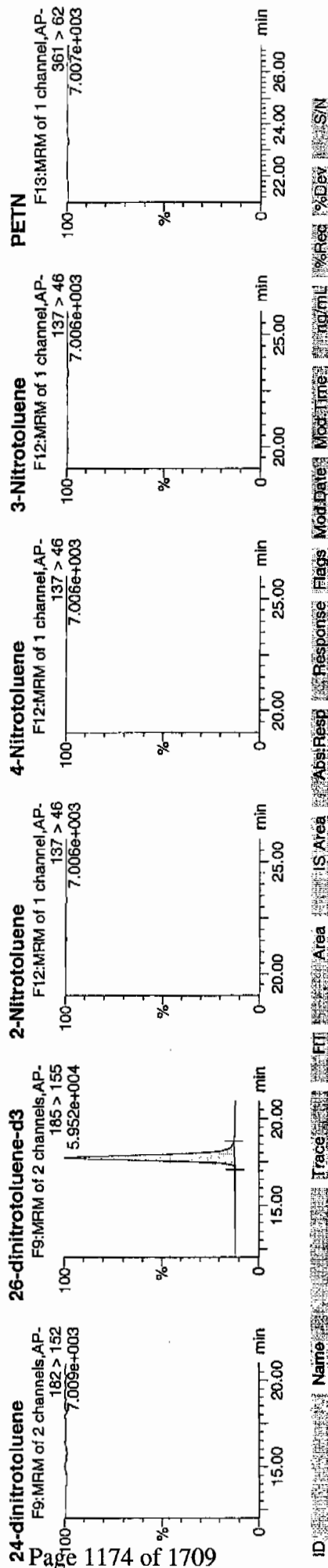
34-dinitrotoluene



26-dinitrotoluene



Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



| ID      | Name                      | Trace     | RT    | Area      | IS Area   | Response | Flags | Mod Date | Mod Time           | ng/mL    | %Rec  | %Dev | S/N    |
|---------|---------------------------|-----------|-------|-----------|-----------|----------|-------|----------|--------------------|----------|-------|------|--------|
| XIBLK05 | HMX                       | 176 > 102 |       |           | 3812.331  |          |       |          |                    |          |       |      |        |
| XIBLK05 | RDX                       | 176 > 102 |       |           | 3812.331  |          |       |          |                    |          |       |      |        |
| XIBLK05 | 135-Trinitrobenzene       | 213 > 183 |       |           | 3812.331  |          |       |          |                    |          |       |      |        |
| XIBLK05 | 13-Dinitrobenzene-d4      | 172 > 142 | 12.20 | 3812.331  |           |          | bb    |          |                    | 592.9761 | 118.6 | 18.6 | 397.2  |
| XIBLK05 | 13-Dinitrobenzene         | 168 > 138 |       |           |           |          |       |          |                    |          |       |      |        |
| XIBLK05 | Tetryl                    | 241 > 181 |       |           | 3812.331  |          |       |          |                    |          |       |      |        |
| XIBLK05 | Nitrobenzene              | 123 > 46  |       |           | 3812.331  |          |       |          |                    |          |       |      |        |
| XIBLK05 | 4-Amino-26-dinitrotoluene | 197 > 167 |       |           | 20986.781 |          |       |          |                    |          |       |      |        |
| XIBLK05 | 2-Amino-46-dinitrotoluene | 197 > 180 |       |           | 20986.781 |          |       |          |                    |          |       |      |        |
| XIBLK05 | 246-Trinitrotoluene       | 227 > 210 |       |           | 20986.781 |          |       |          |                    |          |       |      |        |
| XIBLK05 | 34-dinitrotoluene         | 182 > 152 |       |           | 20986.781 |          |       | MM-      | 09-Feb-10 10:09:37 |          |       |      |        |
| XIBLK05 | 26-dinitrotoluene         | 182 > 152 |       |           | 20986.781 |          |       | MM-      | 09-Feb-10 10:15:23 |          |       |      |        |
| XIBLK05 | 24-dinitrotoluene         | 182 > 152 |       |           | 20986.781 |          |       |          |                    |          |       |      |        |
| XIBLK05 | 26-dinitrotoluene-d3      | 185 > 155 | 17.71 | 20986.781 |           |          | bb    |          |                    | 568.4492 | 113.7 | 13.7 | 1868.8 |
| XIBLK05 | 2-Nitrotoluene            | 137 > 46  |       |           | 20986.781 |          |       |          |                    |          |       |      |        |
| XIBLK05 | 4-Nitrotoluene            | 137 > 46  |       |           | 20986.781 |          |       |          |                    |          |       |      |        |
| XIBLK05 | 3-Nitrotoluene            | 137 > 46  |       |           | 20986.781 |          |       |          |                    |          |       |      |        |
| XIBLK05 | PETN                      | 361 > 62  |       |           | 20986.781 |          |       |          |                    |          |       |      |        |

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1324

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 09-FEB-10 14:50

GEL Data File: EXP0208050a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found (ug/L) |
|----------------------------|------|--------------|
| 3,4-Dinitrotoluene         | 0    | 0            |
| 1,3,5-Trinitrobenzene      | 0    | 0            |
| 1,3-Dinitrobenzene-d4      | 500  | 619.031      |
| 2,4,6-Trinitrotoluene      | 0    | 0            |
| 2,4-Dinitrotoluene         | 0    | 0            |
| 2,6-Dinitrotoluene         | 0    | 0            |
| 2,6-Dinitrotoluene-d3      | 500  | 615.609      |
| 2-Amino-4,6-dinitrotoluene | 0    | 0            |
| 4-Amino-2,6-dinitrotoluene | 0    | 0            |
| HMX                        | 0    | 0            |
| Nitrobenzene               | 0    | 0            |
| PETN                       | 0    | 0            |
| RDX                        | 0    | 0            |
| Tetryl                     | 0    | 0            |
| m-Dinitrobenzene           | 0    | 0            |
| m-Nitrotoluene             | 0    | 0            |
| o-Nitrotoluene             | 0    | 0            |
| p-Nitrotoluene             | 0    | 0            |

Dataset: C:\MASSLYNX\New\_Exp\_PRO\020810expA1.qtd, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0208050a

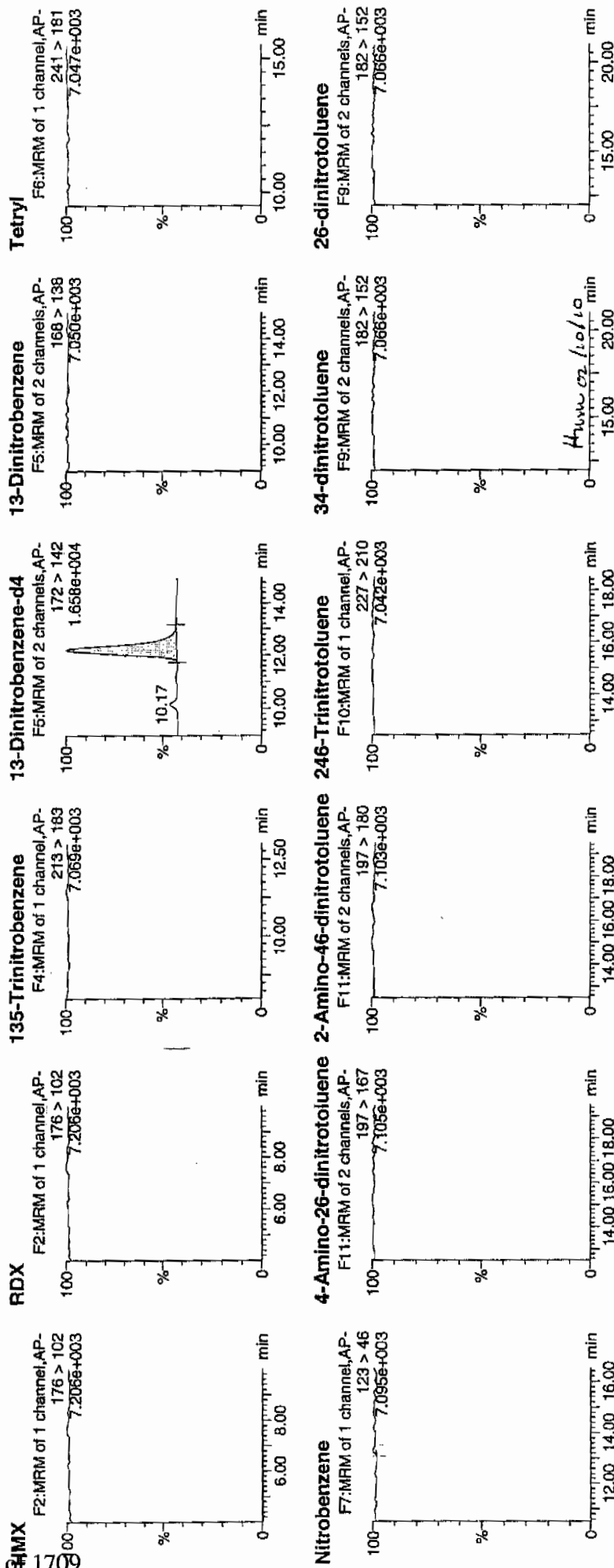
Date: 09-Feb-2010

Time: 14:50:17

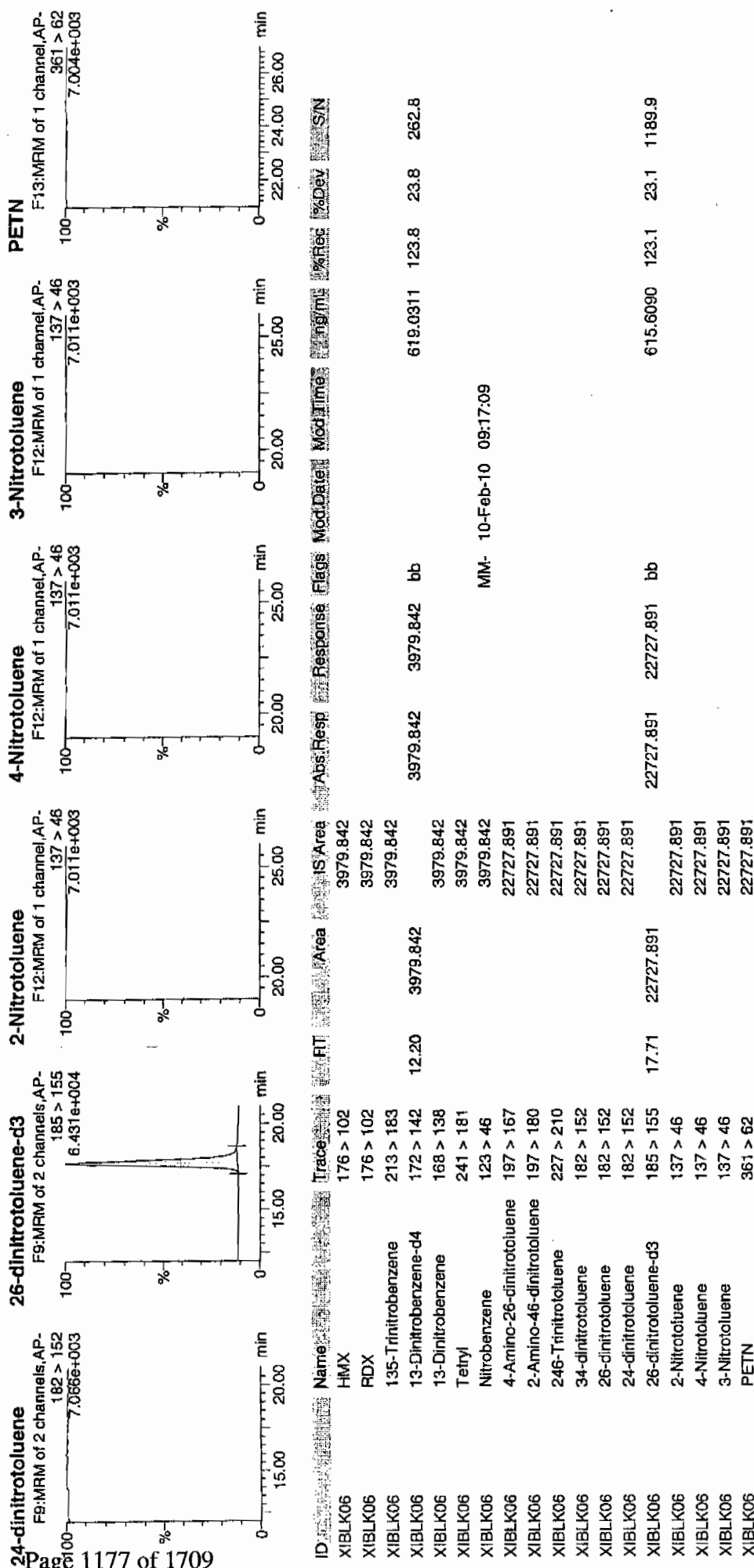
ID: XIBLK06

Vial: 1:1,A

2/10/10  
MMP



Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1324

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 09-FEB-10 21:13

GEL Data File: EXP0208063a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found (ug/L) |
|----------------------------|------|--------------|
| 3,4-Dinitrotoluene         | 0    | 0            |
| 1,3,5-Trinitrobenzene      | 0    | 0            |
| 1,3-Dinitrobenzene-d4      | 500  | 602.957      |
| 2,4,6-Trinitrotoluene      | 0    | 0            |
| 2,4-Dinitrotoluene         | 0    | 0            |
| 2,6-Dinitrotoluene         | 0    | 0            |
| 2,6-Dinitrotoluene-d3      | 500  | 577.242      |
| 2-Amino-4,6-dinitrotoluene | 0    | 0            |
| 4-Amino-2,6-dinitrotoluene | 0    | 0            |
| HMX                        | 0    | 0            |
| Nitrobenzene               | 0    | 0            |
| PETN                       | 0    | 0            |
| RDX                        | 0    | 0            |
| Tetryl                     | 0    | 0            |
| m-Dinitrobenzene           | 0    | 0            |
| m-Nitrotoluene             | 0    | 0            |
| o-Nitrotoluene             | 0    | 0            |
| p-Nitrotoluene             | 0    | 0            |



Dataset: C:\MASSLYNX\New\_Exp\PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\Data\EXP0208063a

Date: 09-Feb-2010

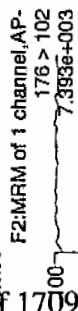
Time: 21:13:58

ID: XIBLK07

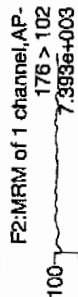
Vial: 1:1,A

10.15  
2/10/10

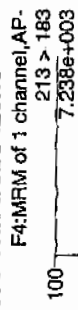
RMX



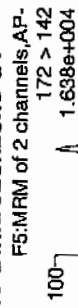
**RDX**



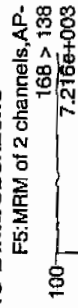
**135-Trinitrobenzene**



**13-Dinitrobenzene-d4**



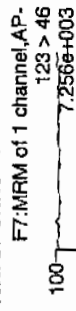
**13-Dinitrobenzene**



**Tetryl**



**Nitrobenzene**



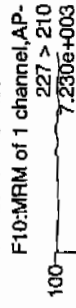
**4-Amino-26-dinitrotoluene**



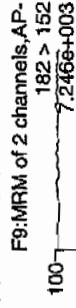
**2-Amino-46-dinitrotoluene**



**246-Trinitrotoluene**



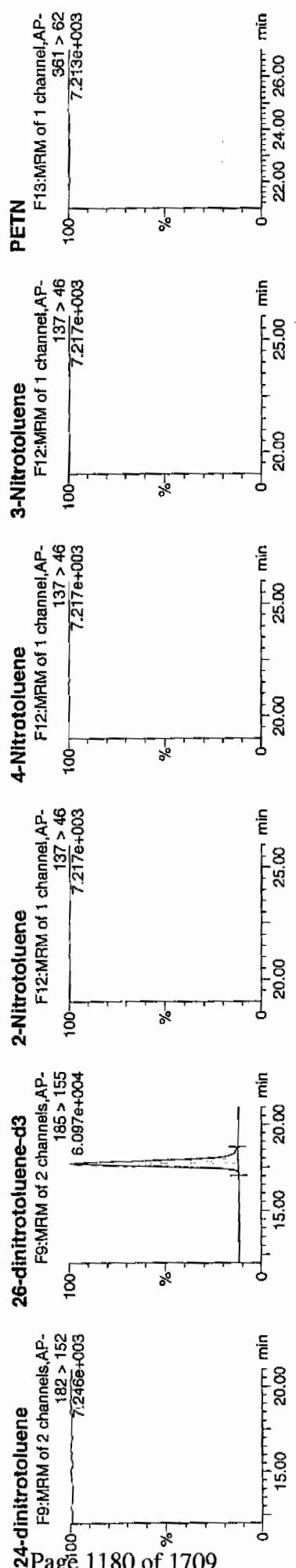
**34-dinitrotoluene**



**26-dinitrotoluene**



Dataset: C:\MASSLYN\New\_Exp\PROV020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



| ID      | Name                      | Trace     | Area  | IS Area   | Abs Resp | Response | Flags | Mod Date | Mod Time               | Conc (ng/ml) | % Rec | % Dev | S/N    |
|---------|---------------------------|-----------|-------|-----------|----------|----------|-------|----------|------------------------|--------------|-------|-------|--------|
| XIBLK07 | HMX                       | 176 > 102 |       | 3876.500  |          |          |       |          |                        |              |       |       |        |
| XIBLK07 | RDX                       | 176 > 102 |       | 3876.500  |          |          |       |          |                        |              |       |       |        |
| XIBLK07 | 135-Trinitrobenzene       | 213 > 183 |       | 3876.500  |          |          |       |          |                        |              |       |       |        |
| XIBLK07 | 13-Dinitrobenzene-d4      | 172 > 142 | 12.20 | 3876.500  |          |          |       |          |                        | 602.9571     | 120.6 | 20.6  | 383.4  |
| XIBLK07 | 13-Dinitrobenzene         | 168 > 138 |       |           |          |          |       |          |                        |              |       |       |        |
| XIBLK07 | Tetryl                    | 241 > 181 |       | 3876.500  |          |          |       |          |                        |              |       |       |        |
| XIBLK07 | Nitrobenzene              | 123 > 46  |       | 3876.500  |          |          |       |          |                        |              |       |       |        |
| XIBLK07 | 4-Amino-26-dinitrotoluene | 197 > 167 |       | 21311.416 |          |          |       |          |                        |              |       |       |        |
| XIBLK07 | 2-Amino-46-dinitrotoluene | 197 > 180 |       | 21311.416 |          |          |       |          |                        |              |       |       |        |
| XIBLK07 | 246-Trinitrotoluene       | 227 > 210 |       | 21311.416 |          |          |       |          |                        |              |       |       |        |
| XIBLK07 | 34-dinitrotoluene         | 182 > 152 |       | 21311.416 |          |          |       |          |                        |              |       |       |        |
| XIBLK07 | 26-dinitrotoluene         | 182 > 152 |       | 21311.416 |          |          |       |          |                        |              |       |       |        |
| XIBLK07 | 24-dinitrotoluene         | 182 > 152 |       | 21311.416 |          |          |       |          |                        |              |       |       |        |
| XIBLK07 | 26-dinitrotoluene-d3      | 185 > 155 | 17.71 | 21311.416 |          |          |       |          | MM- 10-Feb-10 09:08:37 | 577.2423     | 115.4 | 15.4  | 1930.8 |
| XIBLK07 | 2-Nitrotoluene            | 137 > 46  |       | 21311.416 |          |          |       |          |                        |              |       |       |        |
| XIBLK07 | 4-Nitrotoluene            | 137 > 46  |       | 21311.416 |          |          |       |          |                        |              |       |       |        |
| XIBLK07 | 3-Nitrotoluene            | 137 > 46  |       | 21311.416 |          |          |       |          |                        |              |       |       |        |
| XIBLK07 | PETN                      | 361 > 62  |       | 21311.416 |          |          |       |          |                        |              |       |       |        |

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1324

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 10-FEB-10 10:48

GEL Data File: EXS02100010.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found (ug/L) |
|----------------------------|------|--------------|
| 3,4-Dinitrotoluene         | 0    | 5.77         |
| tris(o-cresyl) phosphate   | 0    | 8.78         |
| TATB                       | 0    | 0            |
| 3,5-Dinitroaniline         | 0    | 0            |
| 2,4-Diamino-6-nitrotoluene | 0    | 0            |
| 2,6-Diamino-4-nitrotoluene | 0    | 0            |

San 21110

Sample Name: "XBLK02" Sample ID: "TILER" File: "EXS02100010.wif"

Peak Name: "ATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

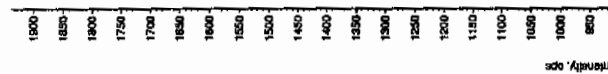
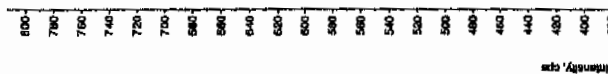
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 2/10/2010

Acq. Time: 10:48:52 AM

Modified: No



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

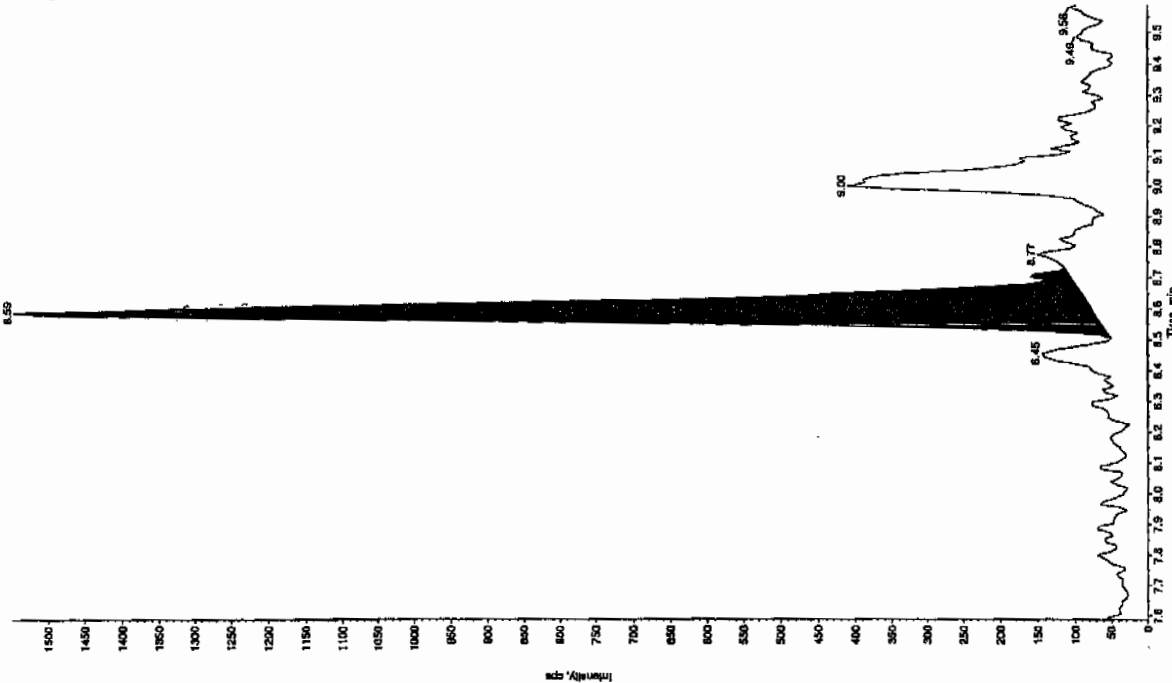
San 21110

Sample Name: "XBLK02" Sample ID: "11LER" File: "EX502100010.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.17/151.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 10:48:52 AM

Modified: No  
 PG Algorithm: IntelliQuan - IQA  
 MS Peak Height: 1460.00 cps  
 MS Peak Width: 0.00 points  
 Scan Rate: 15.0 cps  
 RT Window: 8.59 min  
 Expected RT: 8.59 min  
 Use Relative RT: No

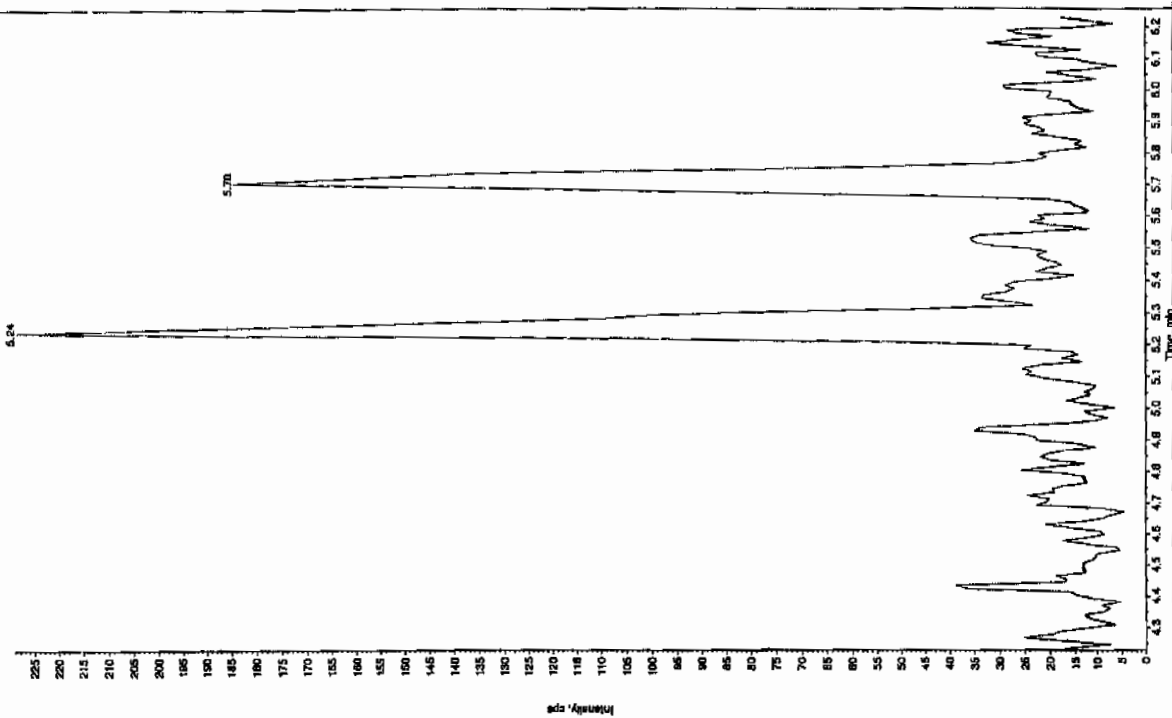
IO Type: Valley  
 Retention Time: 8.59 min  
 Area: 6.62e+003 counts  
 Height: 1.48e+001 cps  
 Start Time: 8.51 min  
 End Time: 8.73 min

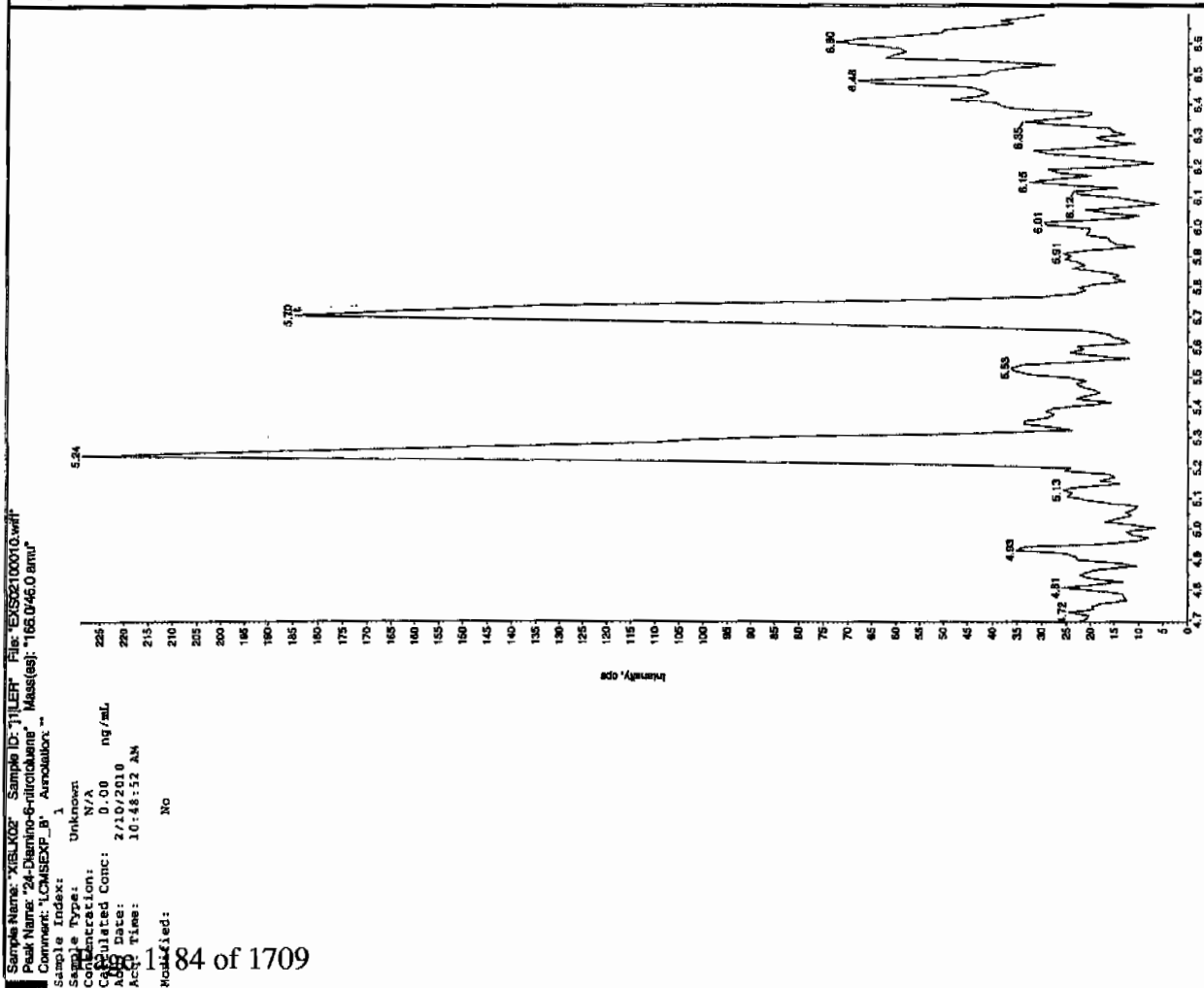
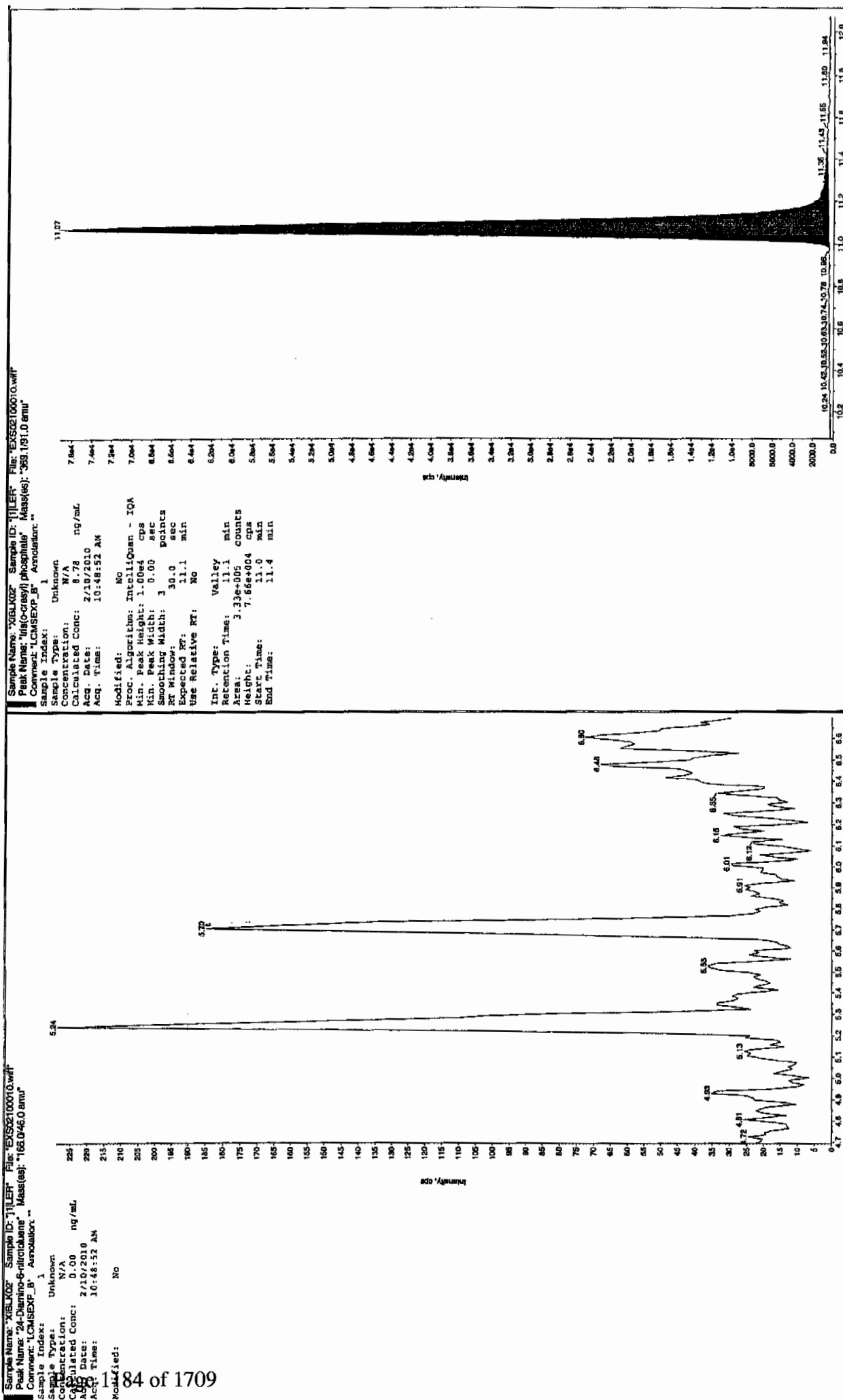


Sample Name: "XBLK02" Sample ID: "11LER" File: "EX502100010.wif"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.04/65.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 10:48:52 AM

Modified: No





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1324

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 10-FEB-10 11:20

GEL Data File: EXS02100012.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found (ug/L) |
|----------------------------|------|--------------|
| 3,4-Dinitrotoluene         | 0    | 0            |
| tris(o-cresyl) phosphate   | 0    | 0            |
| TATB                       | 0    | 0            |
| 3,5-Dinitroaniline         | 0    | 0            |
| 2,4-Diamino-6-nitrotoluene | 0    | 0            |
| 2,6-Diamino-4-nitrotoluene | 0    | 0            |

See 21110

Sample Name: "XIBLK03" Sample ID: "11111" File: "EXSD2100012.wif"

Peak Name: "TATB" Mass(es): "267.2/204.9 amu"

Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

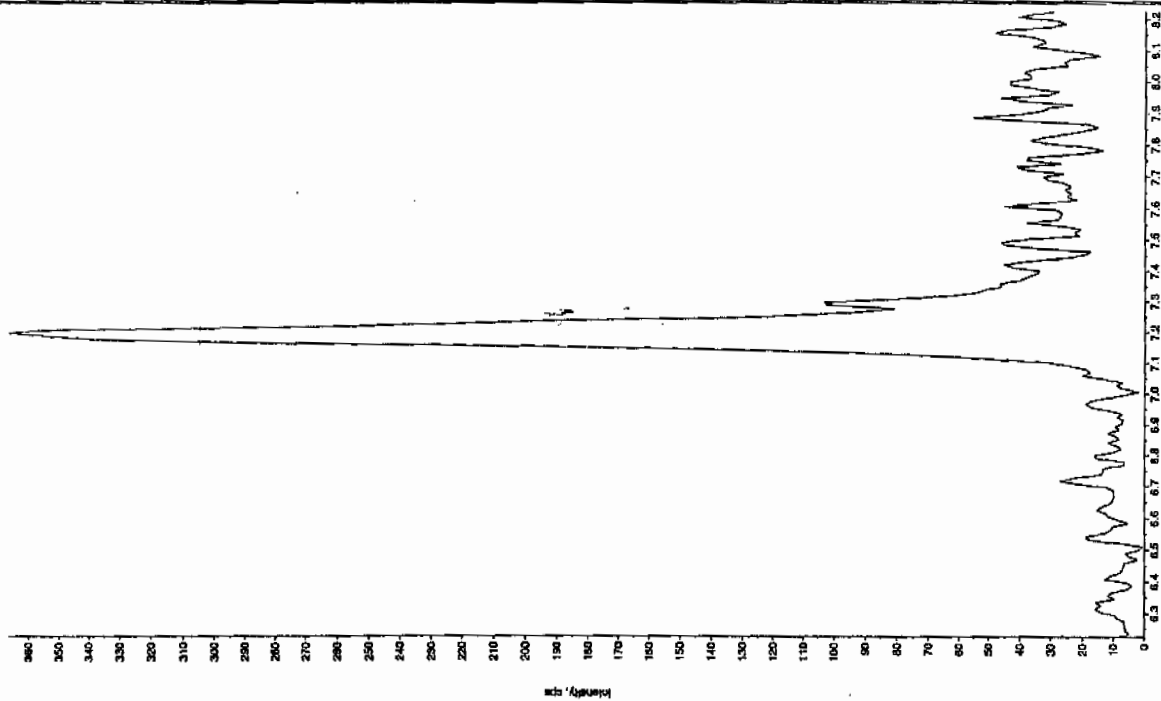
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 2/10/2010

Acq. Time: 11:20:18 AM

Modified: No



GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLK03" Sample ID: "11111" File: "EXSD2100012.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"

Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

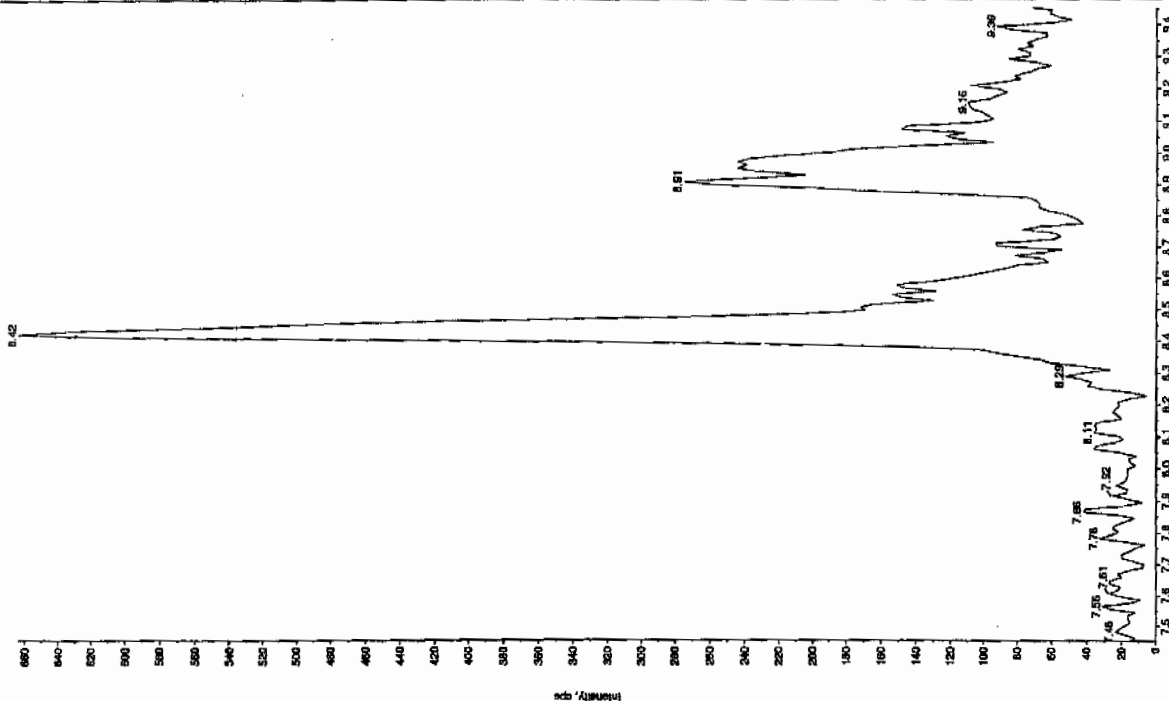
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 2/10/2010

Acq. Time: 11:20:18 AM

Modified: No

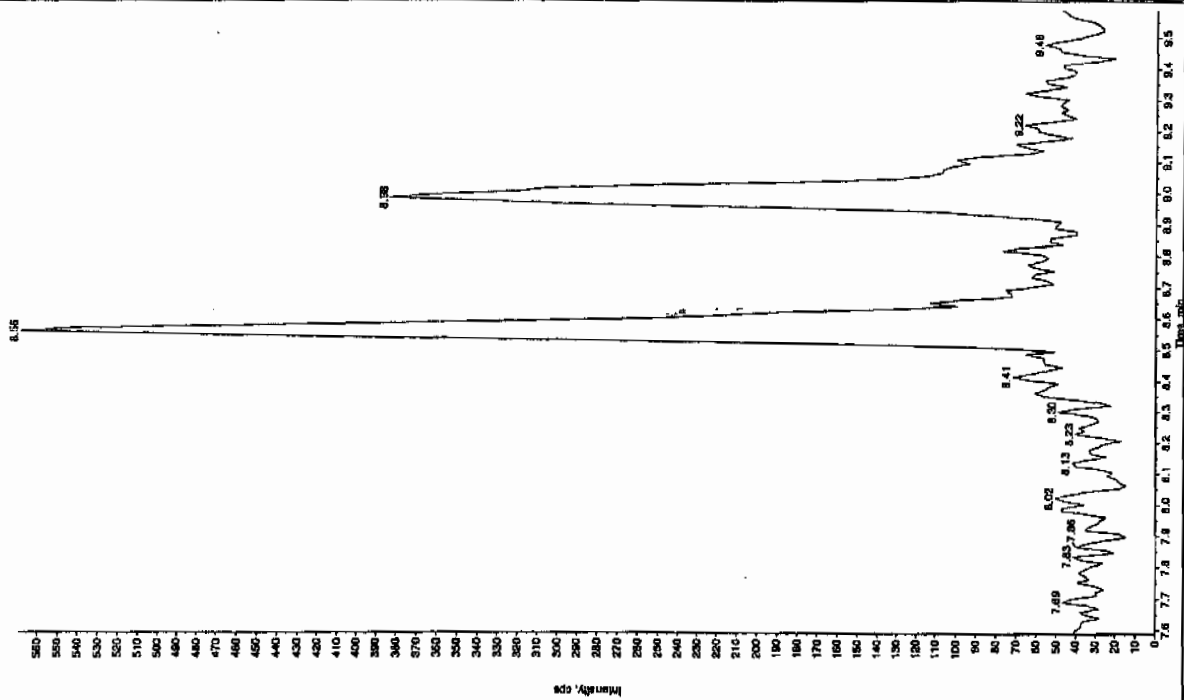


Ammonia



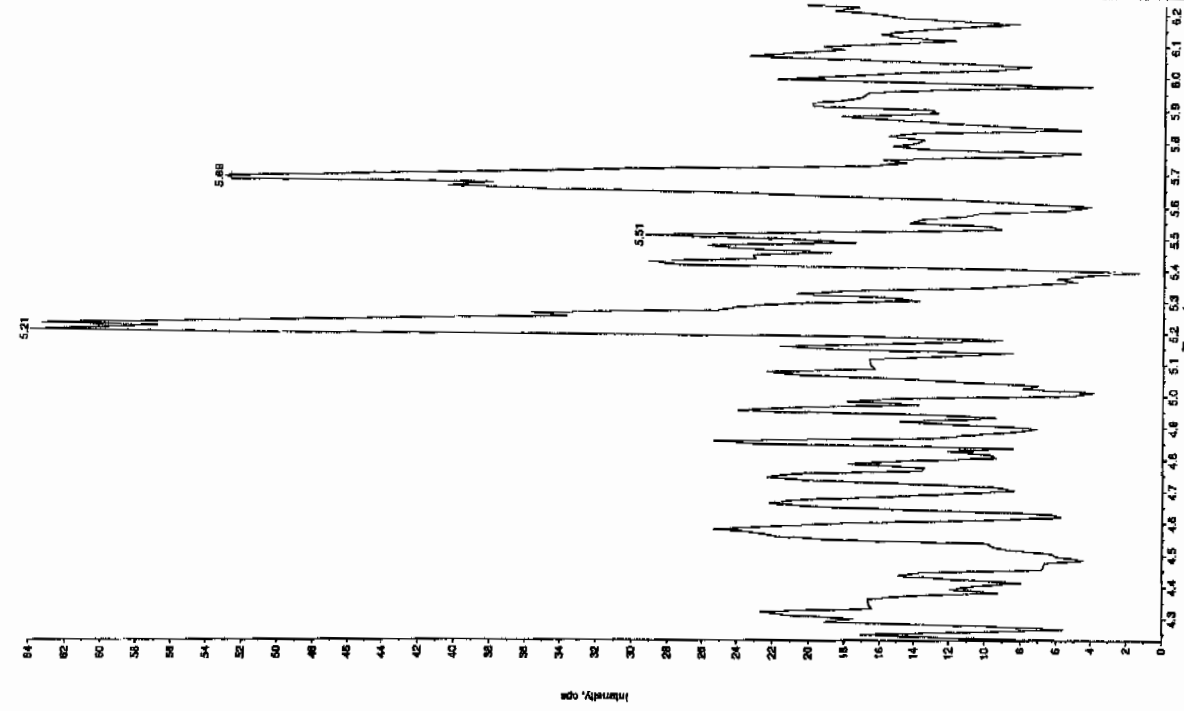
Sample Name: "XIBLK03" Sample ID: "TILER" File: "EX502100012.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.17151.9 amu"  
 Comment: "LCMSXPF.g" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 11:20:18 AM  
 Modified: No



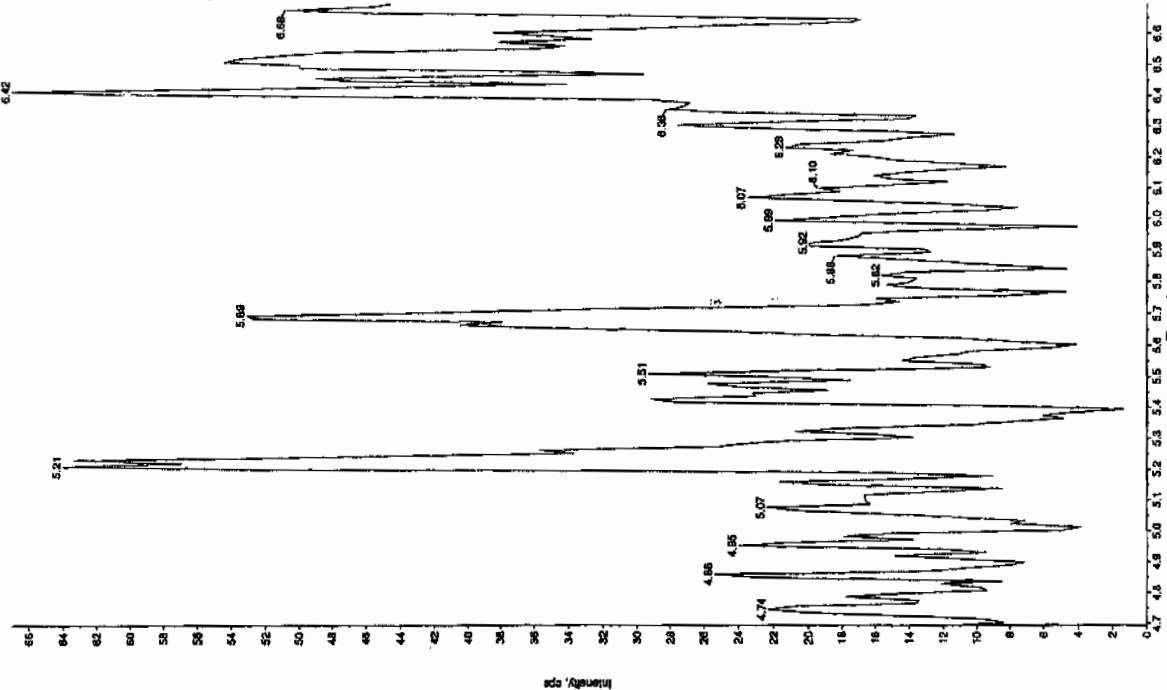
Sample Name: "XIBLK03" Sample ID: "TILER" File: "EX502100012.wif"  
 Peak Name: "26-Dinitro-4-substituted" Mass(es): "186.046.0 amu"  
 Comment: "LCMSXPF.g" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 11:20:18 AM  
 Modified: No



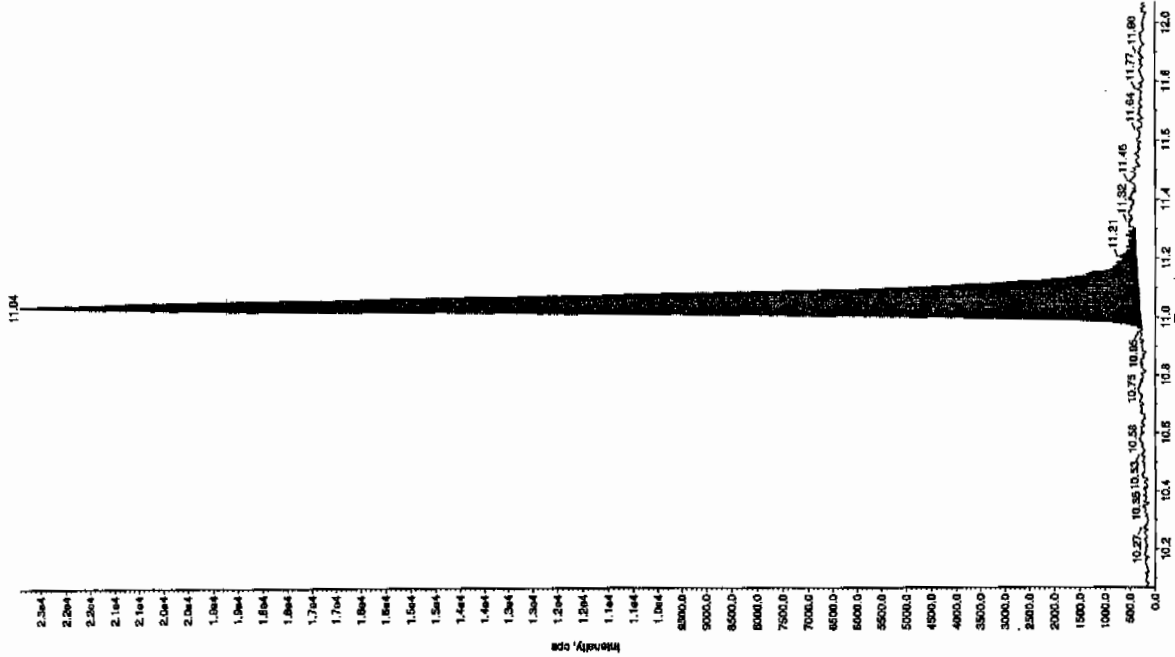
Sample Name: 'XBL003' Sample ID: 'TJLER' File: 'EX502100012.wif'  
 Peak Name: '24-Dieno-6-retinoidene' Mass(es): '166.046.0 amu'  
 Comment: 'LCMS-EXP\_B' Annotation: ''

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 11:20:18 AM  
 Modified: No



Sample Name: 'XBL003' Sample ID: 'TJLER' File: 'EX502100012.wif'  
 Peak Name: 'tris(cresyl) phosphate' Mass(es): '389.191.0 amu'  
 Comment: 'LCMS-EXP\_B' Annotation: ''

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: No Intercept  
 Acq. Date: 2/10/2010  
 Acq. Time: 11:20:18 AM  
 Modified: No  
 Proc Algorithm: 'IntelliQuan - IQA'  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 3.00 sec  
 Smoothing Width: 30.0 points  
 RT Window: 30.0 sec  
 Expected RT: 11.1 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 11.0 min  
 Area: 9.81e+004 counts  
 Height: 2.36e+004 cps  
 Start Time: 11.0 min  
 End Time: 11.3 min



4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1324

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 10-FEB-10 14:44

GEL Data File: EXS02100025.wiff

Instrument ID: LCMSMS

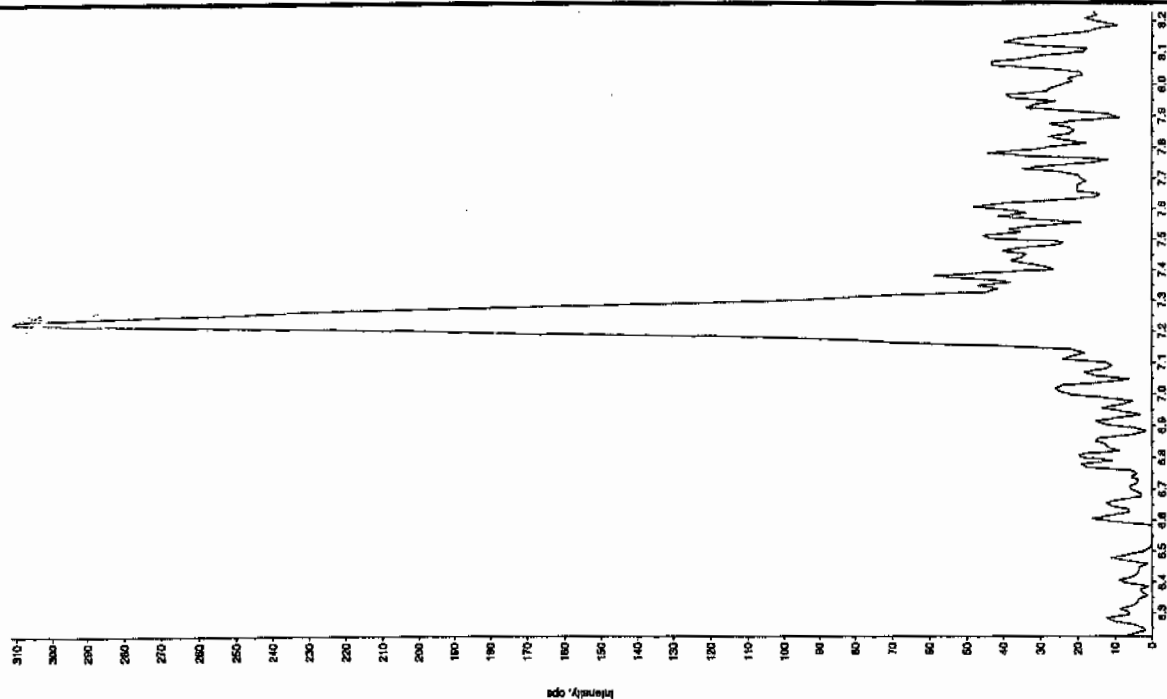
Column: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found (ug/L) |
|----------------------------|------|--------------|
| 3,4-Dinitrotoluene         | 0    | 0            |
| tris(o-cresyl) phosphate   | 0    | 0            |
| TATB                       | 0    | 0            |
| 3,5-Dinitroaniline         | 0    | 0            |
| 2,4-Diamino-6-nitrotoluene | 0    | 0            |
| 2,6-Diamino-4-nitrotoluene | 0    | 0            |

for 21410

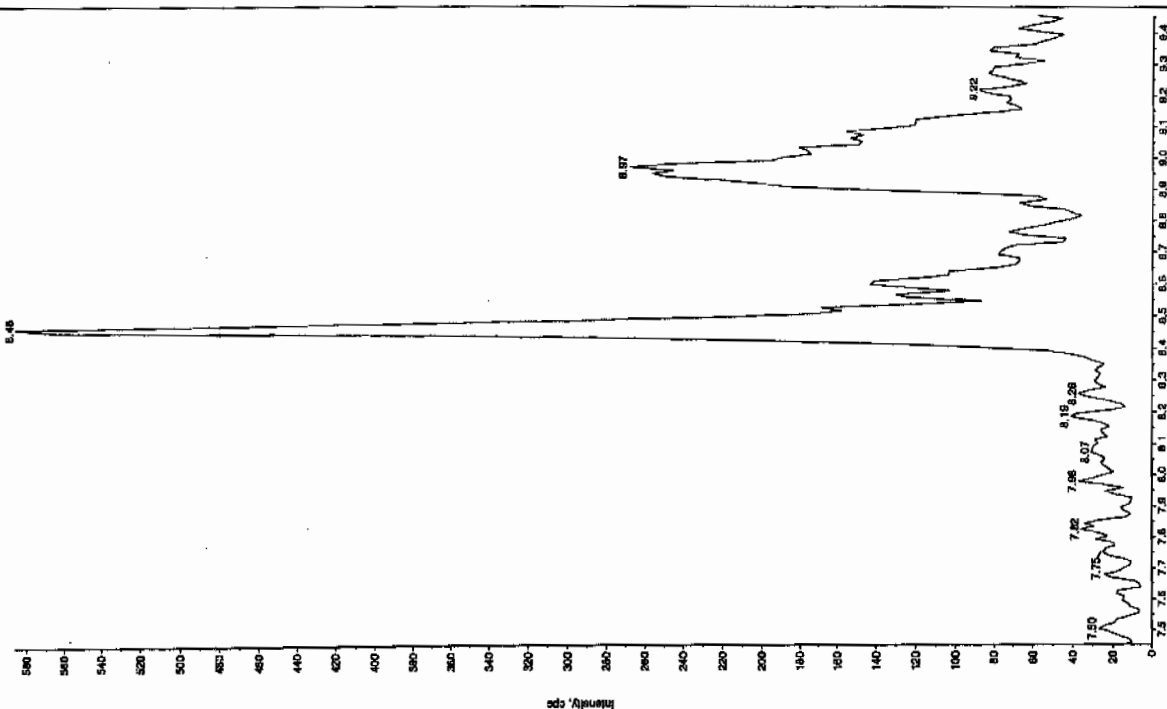
Sample Name: "XBLK04" Sample ID: "11LEP" File: "EXS0210025.wif"  
Peak Name: "XBLK" Mass(es): 257.224.9 amu  
Comment: "LMSXP\_B" Annotation: "

Sample Index: 1  
Sample Type: Unknown  
Concentration: 0.00 ng/mL  
Calculated Conc: 2/10/2010  
Acq. Date: 2/10/2010  
Acq. Time: 2:44:22 PM  
Modified: No



Sample Name: "XBLK04" Sample ID: "11LEP" File: "EXS0210025.wif"  
Peak Name: "35-Dichloroethane" Mass(es): 182.046.0 amu  
Comment: "LMSXP\_B" Annotation: "

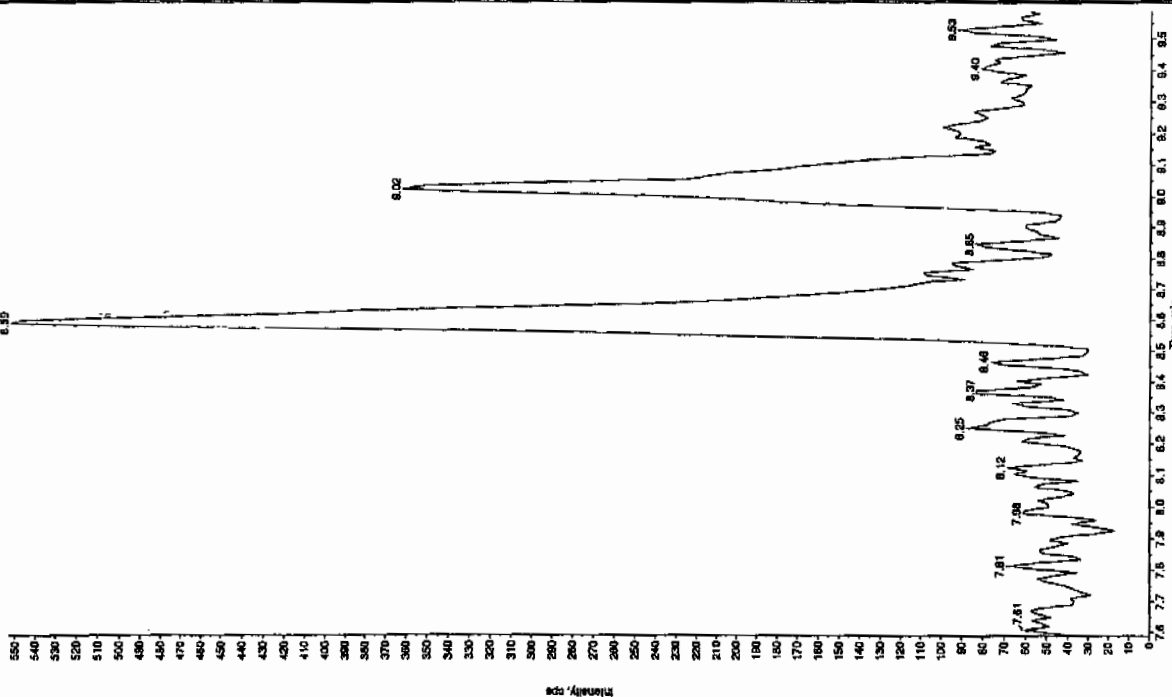
Sample Index: 1  
Sample Type: Unknown  
Concentration: 0.00 ng/mL  
Calculated Conc: 2/10/2010  
Acq. Date: 2/10/2010  
Acq. Time: 2:44:22 PM  
Modified: No



for 21410

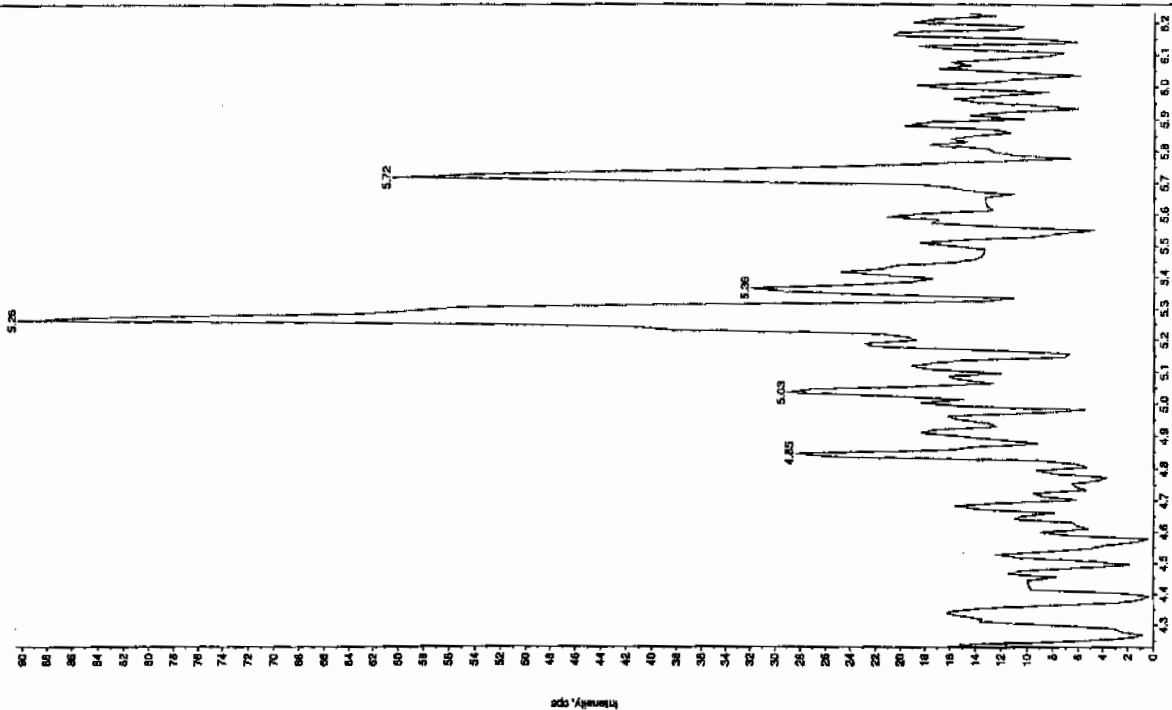
Sample Name: "XBLK04" Sample ID: "HILLER" File: "EXS0210025.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182/151.9 amu"  
 Comment: "LOMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 2:44:22 PM  
 Modified: No



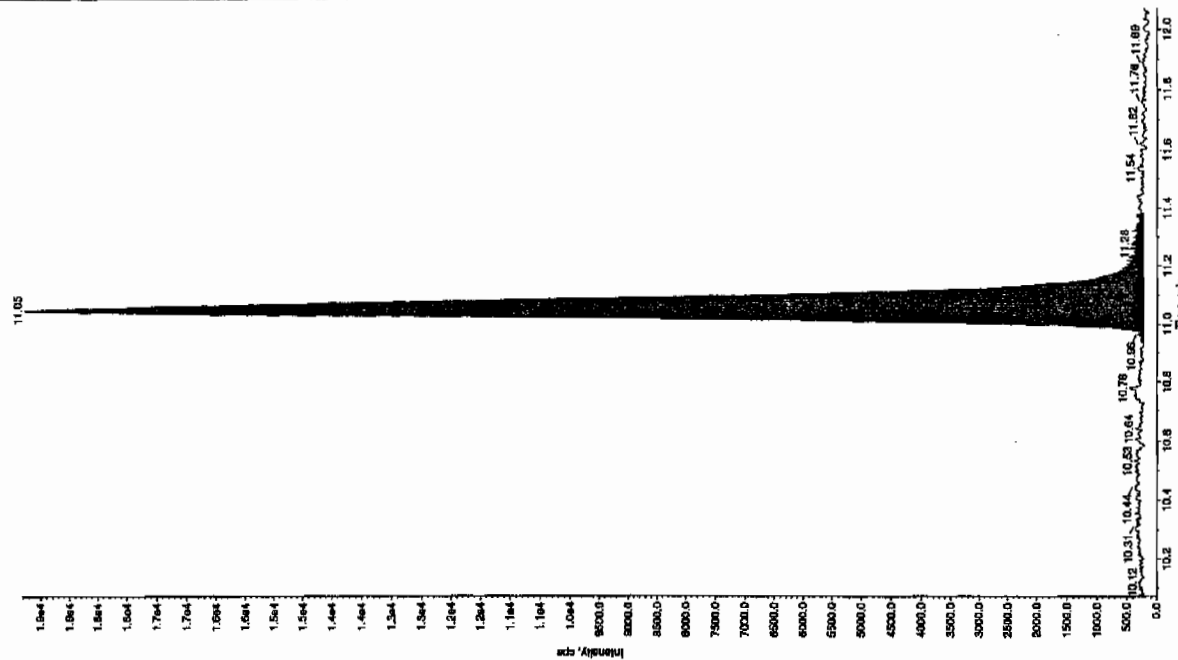
Sample Name: "XBLK04" Sample ID: "HILLER" File: "EXS0210025.wif"  
 Peak Name: "26-Dinitro-4-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LOMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 2:44:22 PM  
 Modified: No



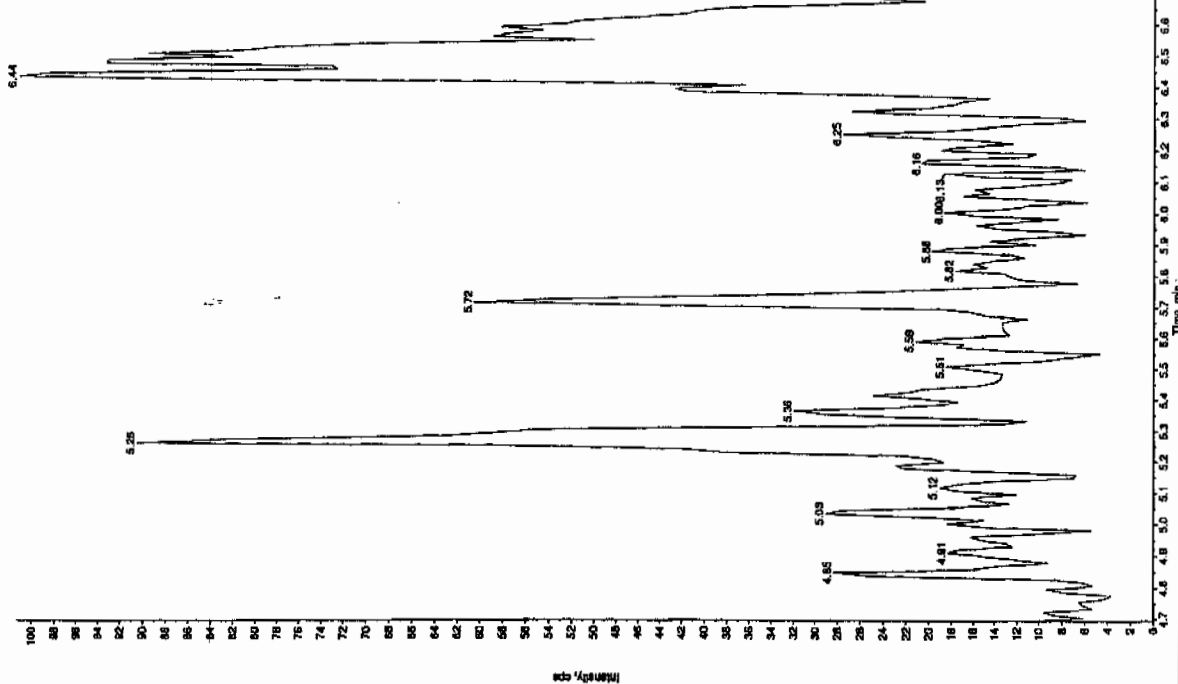
Sample Name: "XBLK04" Sample ID: "11.1" File: "EXS02100025.wif"  
 Peak Name: "bis(o-cresyl) phosphite" Mass(es): "353.191.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: No Trace  
 Acq. Date: 2/10/2010  
 Acq. Time: 2:44:22 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 11.1 min  
 Use Relative RT: No  
 IDT Type: Valley  
 Retention Time: 11.0 min  
 Area: 8.71e+004 counts  
 Height: 1.91e+004 cps  
 Start Time: 10.9 min  
 End Time: 11.4 min



Sample Name: "XBLK04" Sample ID: "11.1" File: "EXS02100025.wif"  
 Peak Name: "24-Dinitro-6-nitrotoluene" Mass(es): "186.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 2:44:22 PM  
 Modified: No



4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1324

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 10-FEB-10 17:37

GEL Data File: EXS02100036.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found (ug/L) |
|----------------------------|------|--------------|
| 3,4-Dinitrotoluene         | 0    | 0            |
| tris(o-cresyl) phosphate   | 0    | 0            |
| TATB                       | 0    | 0            |
| 3,5-Dinitroaniline         | 0    | 0            |
| 2,4-Diamino-6-nitrotoluene | 0    | 0            |
| 2,6-Diamino-4-nitrotoluene | 0    | 0            |

See 2/11/10

Sample Name: "XIBLK05" Sample ID: "HILF" File: "EXS02100035.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

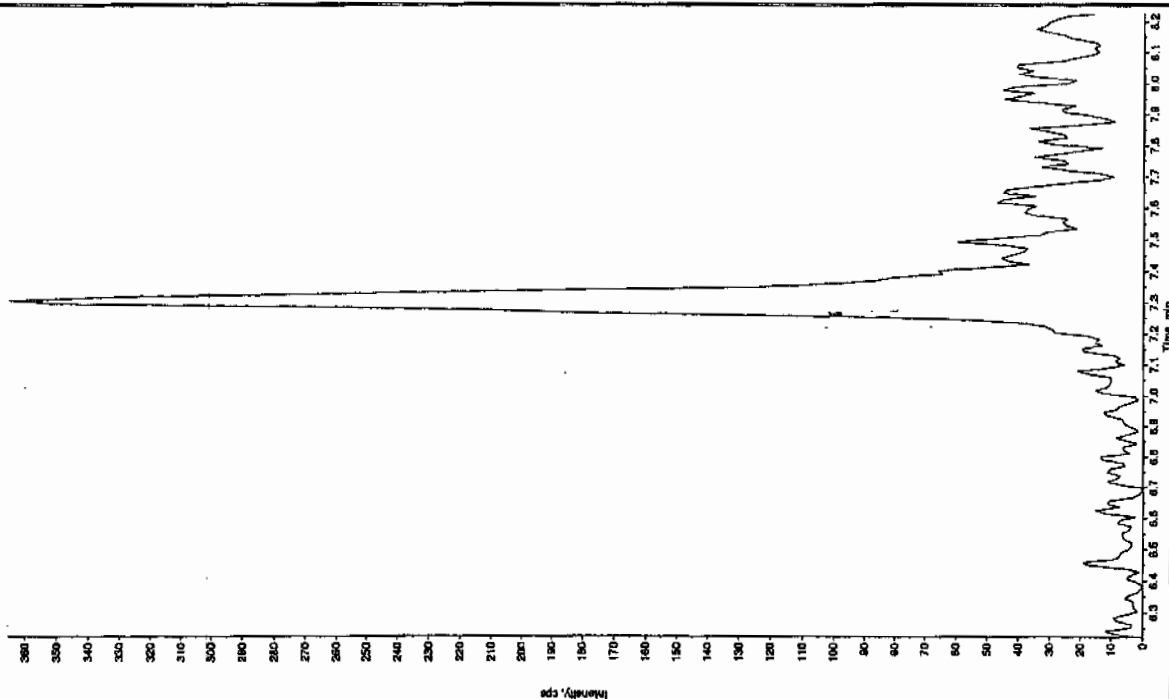
Concentration: N/A

Calculated Conc: 0.85 ng/mL

Acq. Date: 2/10/2010

Acq. Time: 5:37:16 PM

Modified: No



Sample Name: "XIBLK05" Sample ID: "HILF" File: "EXS02100035.wif"

Peak Name: "35-Diethylamine" Mass(es): "182.045.0 amu"

Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

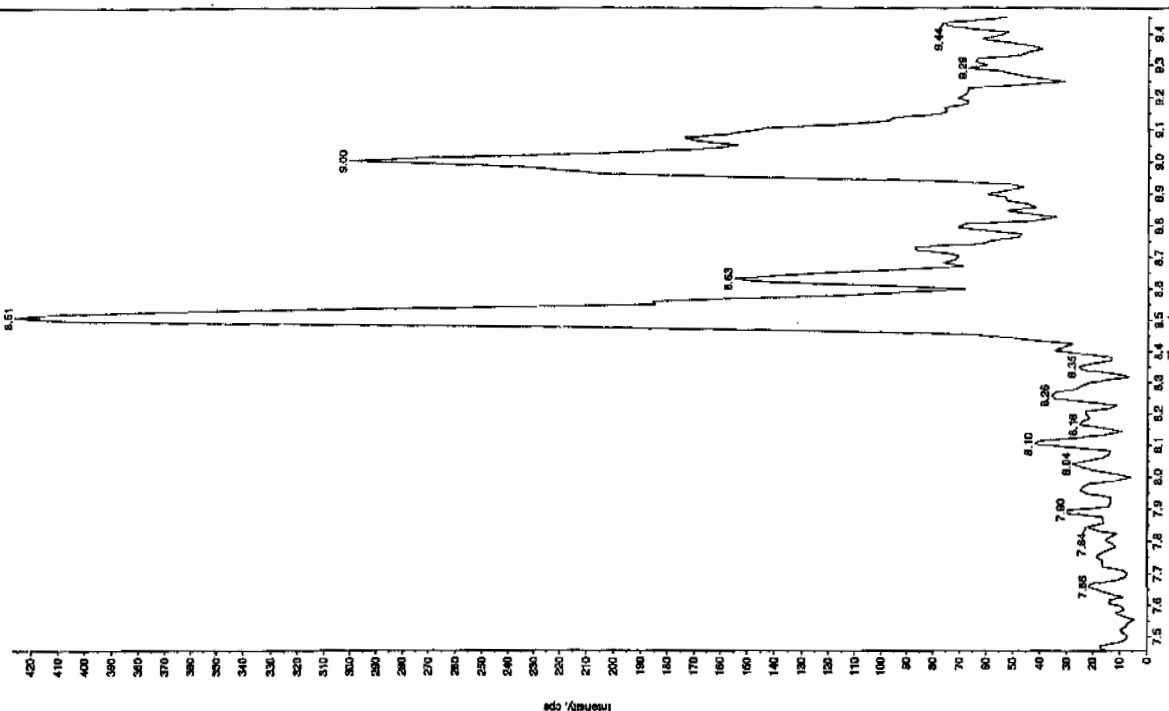
Concentration: N/A

Calculated Conc: 0.80 ng/mL

Acq. Date: 2/10/2010

Acq. Time: 5:37:16 PM

Modified: No

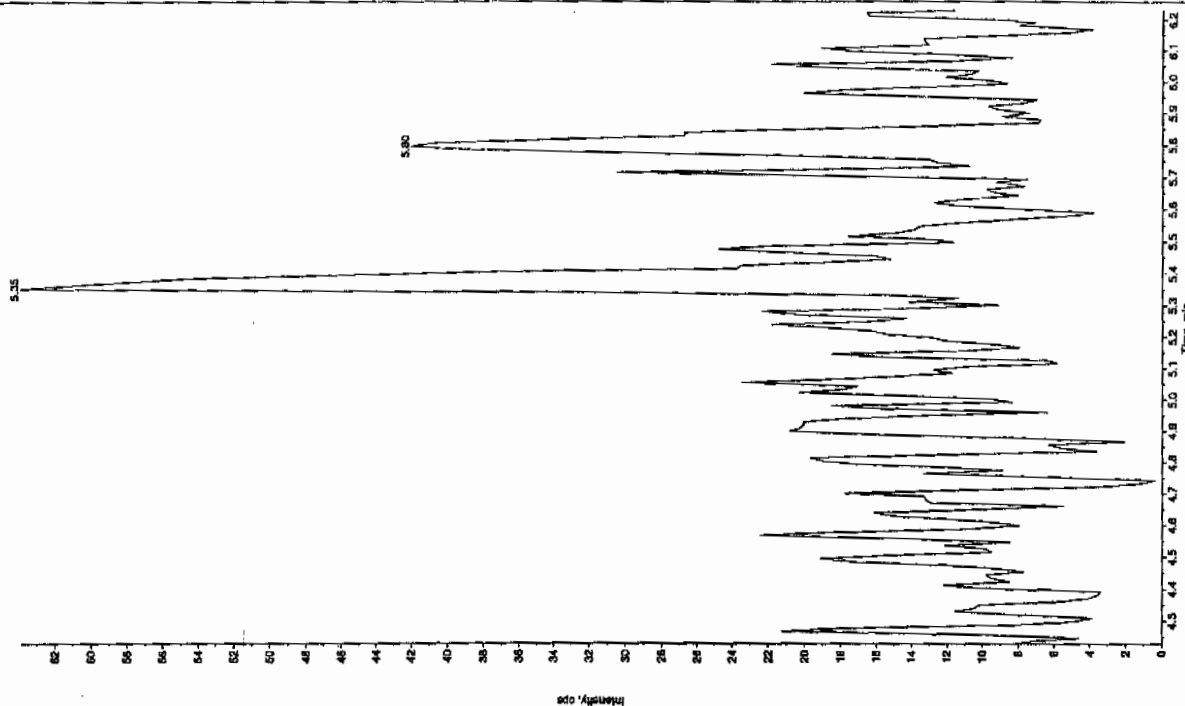


See 2/11/10



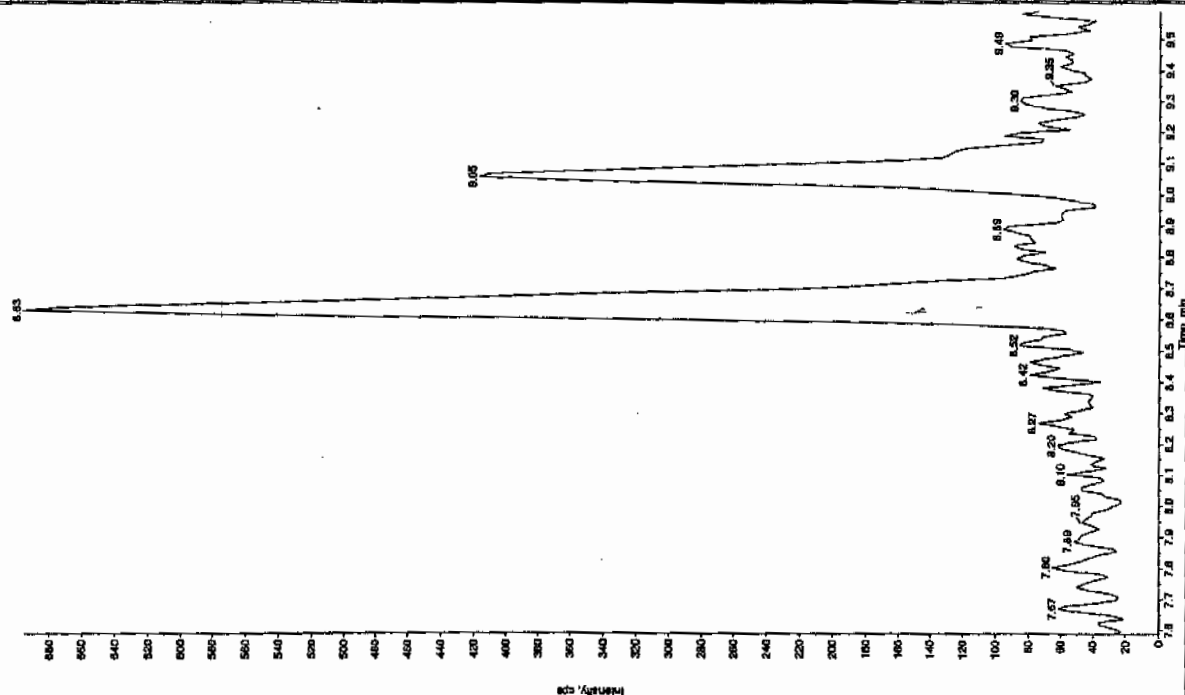
Sample Name: YBLK05 Sample ID: T1LER File: EXS02100038.wif  
 Peak Name: 26-Diamino-4-nitrofluorene Mass(es): 182.0460 amu  
 Comment: LCMSEXP\_B Annotation: 1

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 5:37:16 PM  
 Modified: No



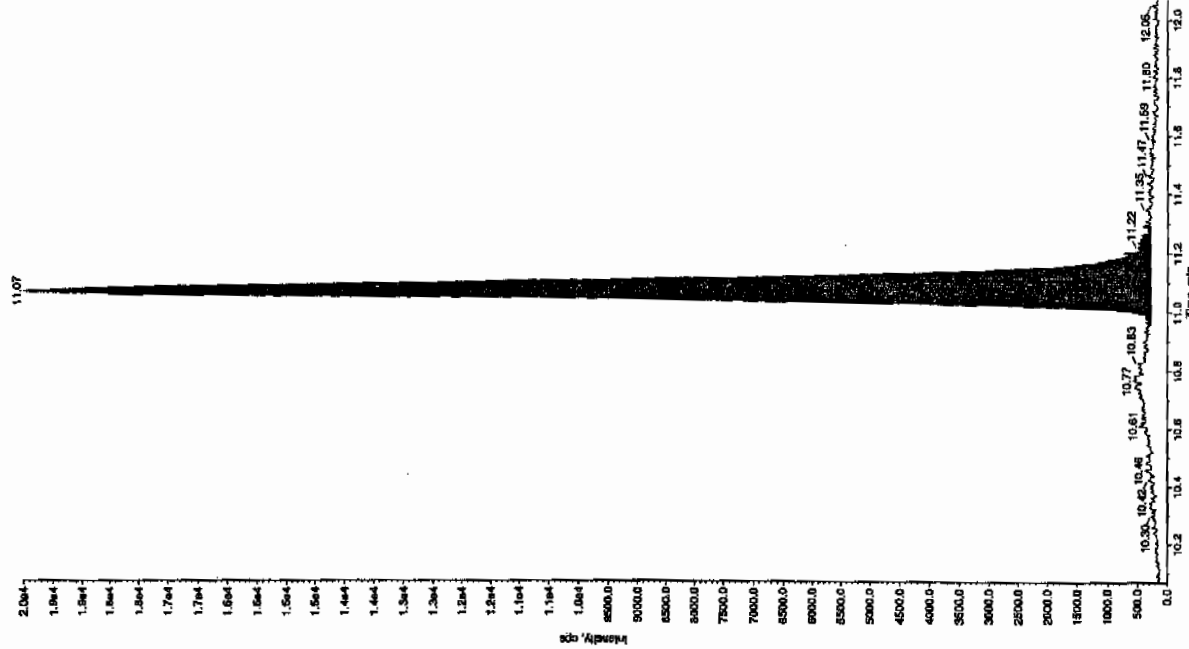
Sample Name: YBLK05 Sample ID: T1LER File: EXS02100038.wif  
 Peak Name: 34-Dinitrofluorene Mass(es): 182.1151 amu  
 Comment: LCMSEXP\_B Annotation: 1

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 5:37:16 PM  
 Modified: No



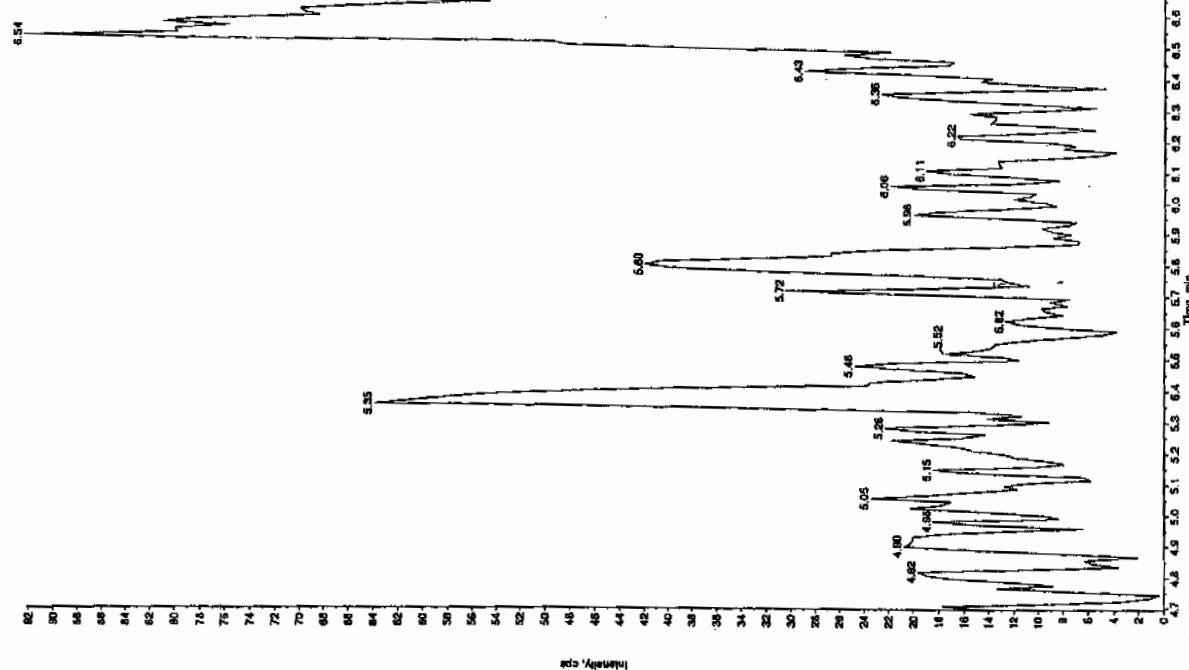
Sample Name: "XBLK05" Sample ID: "11LEF" File: "EX25210036.wil"  
 Peak Name: "tris(o-cresyl) phosphates" Mass(es): "369.191.0 amu"  
 Comment: "LONSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: No Intercept  
 Acq. Date: 2/10/2010  
 Acq. Time: 5:37:15 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 11.1 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 11.1 min  
 Area: 8.53e+004 counts  
 Height: 1.92e+004 cps  
 Start Time: 11.0 min  
 End Time: 11.3 min



Sample Name: "XBLK05" Sample ID: "11LEF" File: "EX25210036.wil"  
 Peak Name: "24-Dinitro-6-nitroobenzene" Mass(es): "160.046.0 amu"  
 Comment: "LONSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 5:37:16 PM  
 Modified: No



Nairb.ref

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

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

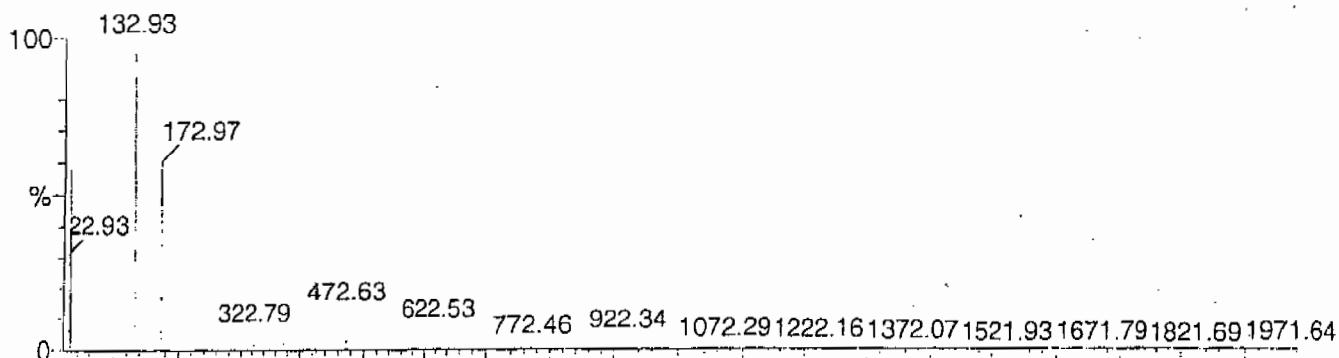
Calibration Report - MS1 Static

Page 1 of 1

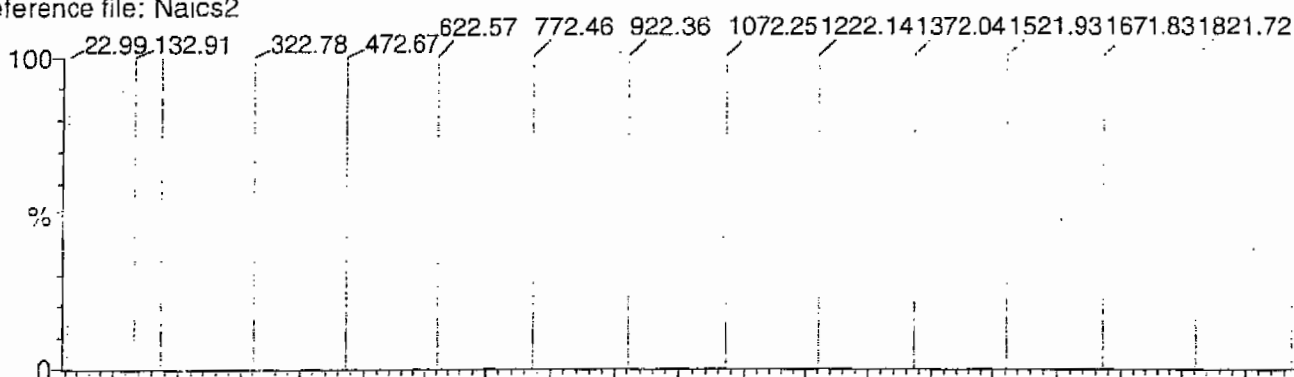
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

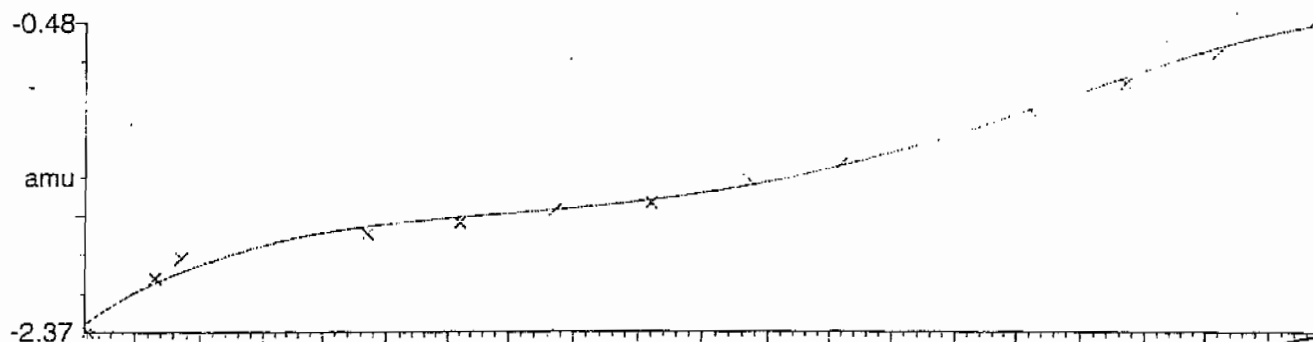
15 matches of 15 tested references



Reference file: Naics2

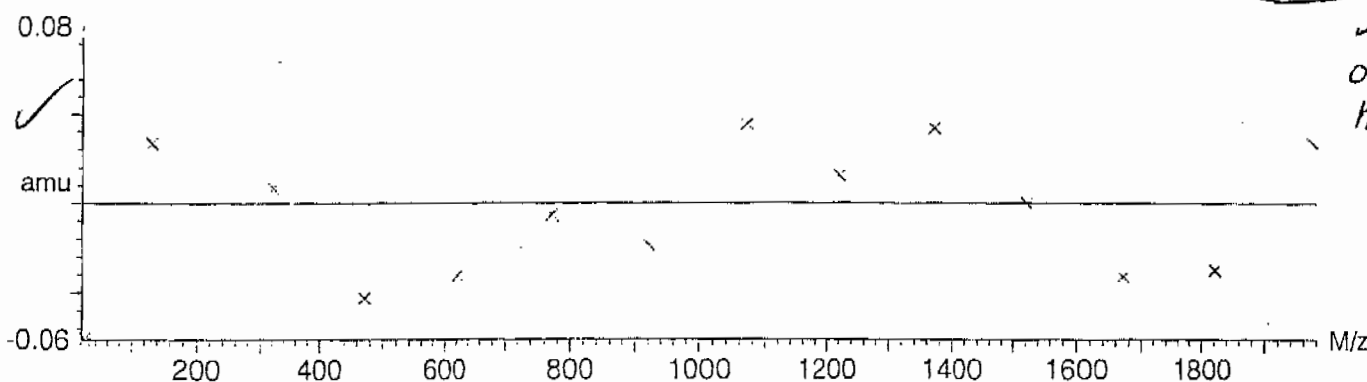


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-1.673470 \times 10^{-9} \pm 0.036953$



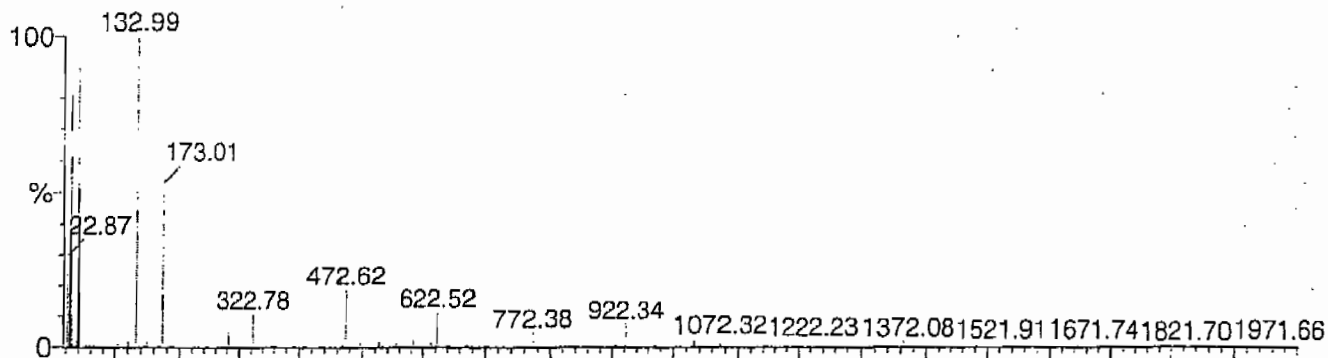
Calibration Report - MS1 Scanning

Page 1 of 1

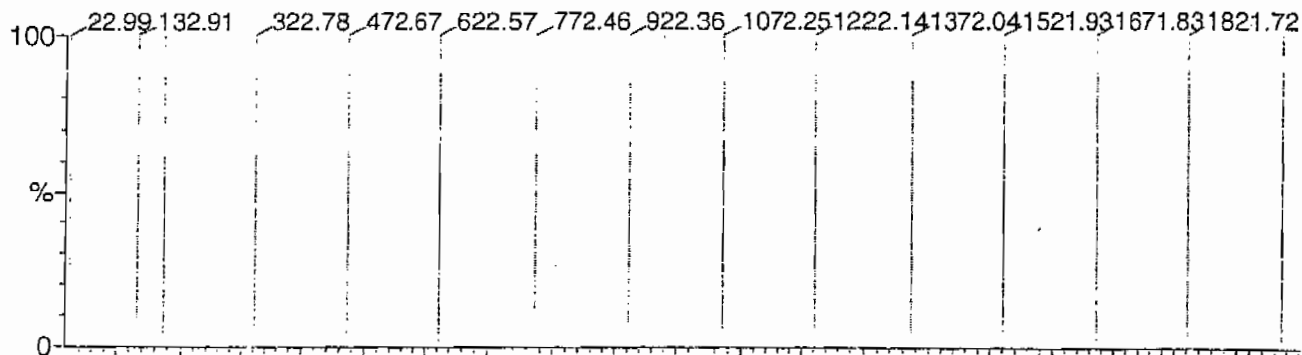
Printed: Fri Aug 25 10:51:06 2006

Data file: SCNMS1 - Calibrated

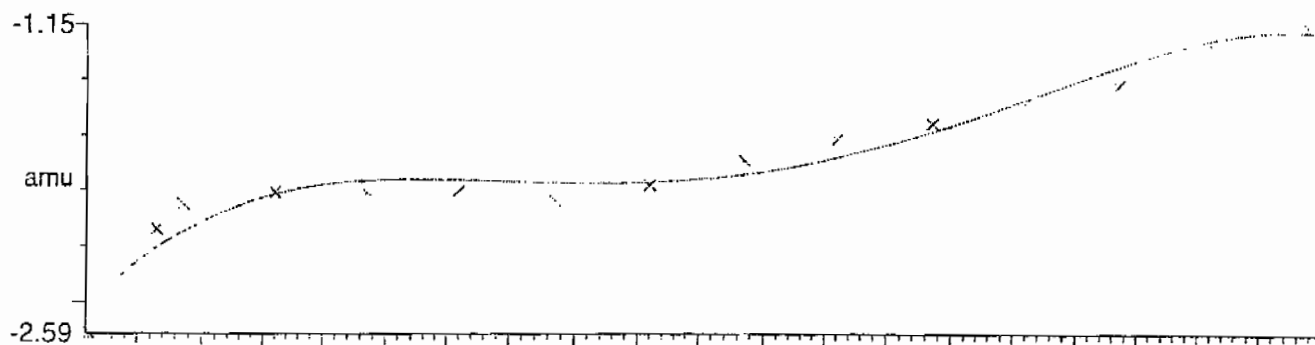
15 matches of 15 tested references



Reference file: Naics2

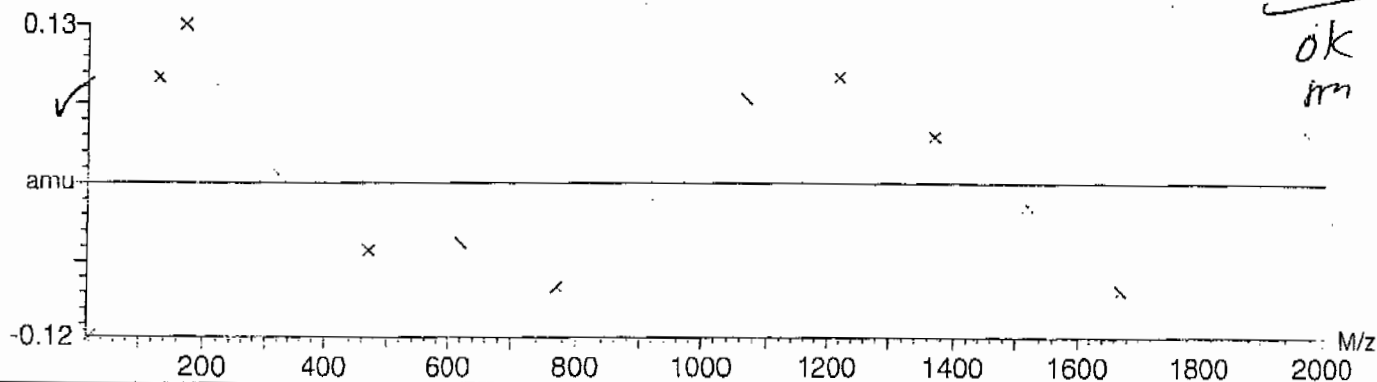


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-5.432715 \times 10^{-9} \pm 0.069858$



ok  
mm

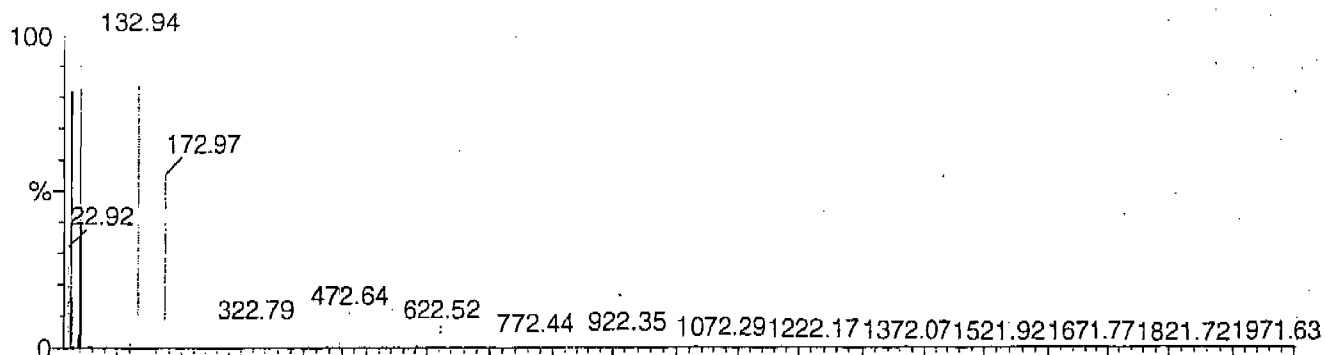
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

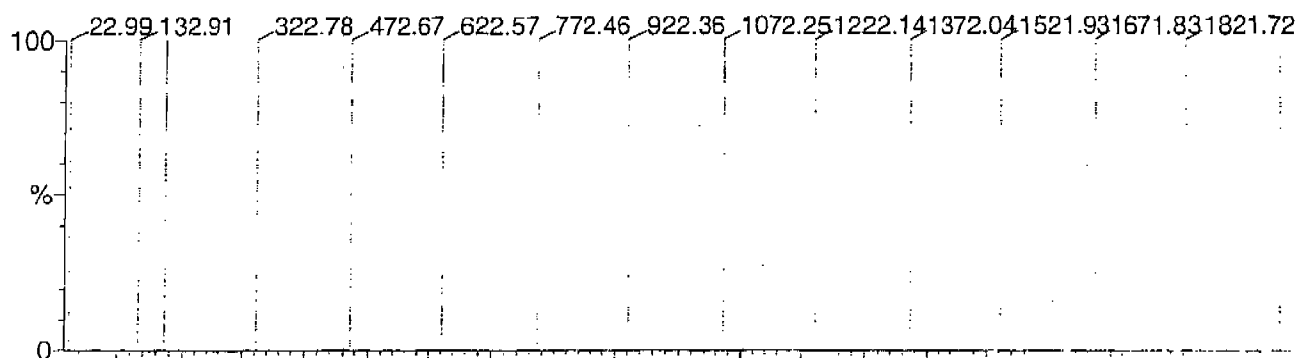
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

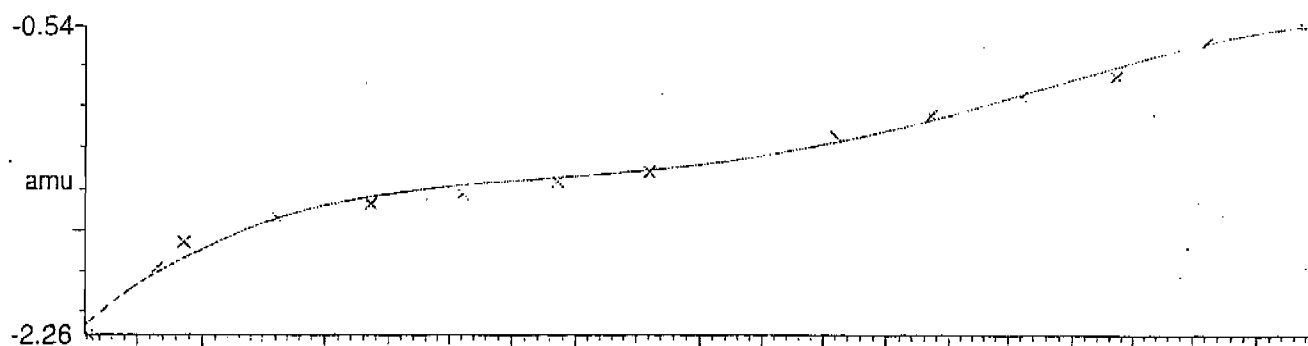
15 matches of 15 tested references



Reference file: Naics2

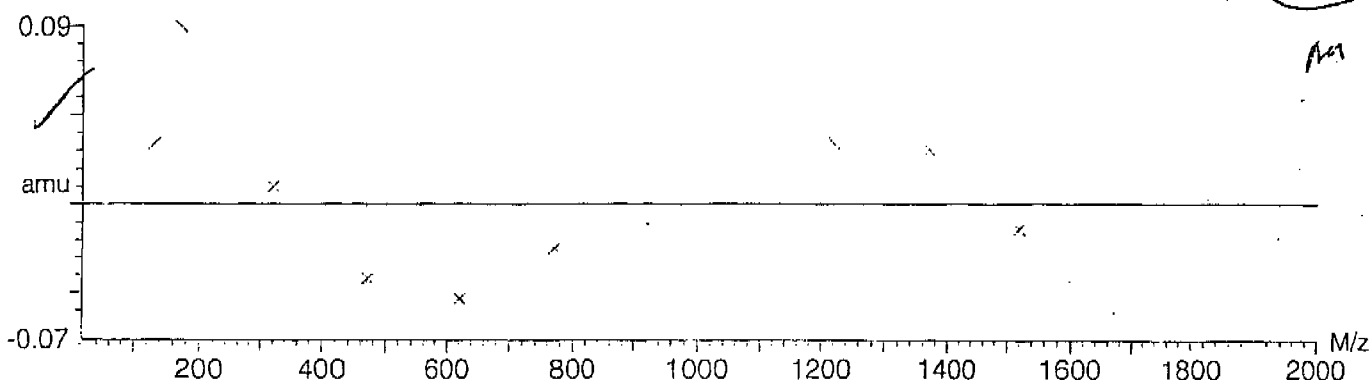


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $3.486639 \times 10^{-9} \pm 0.040487$



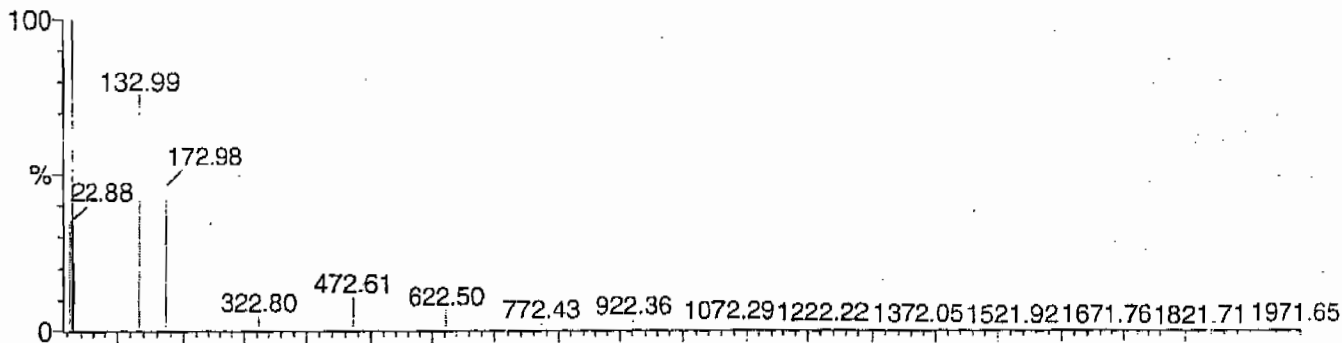
Calibration Report - MS2 Static

Page 1 of 1

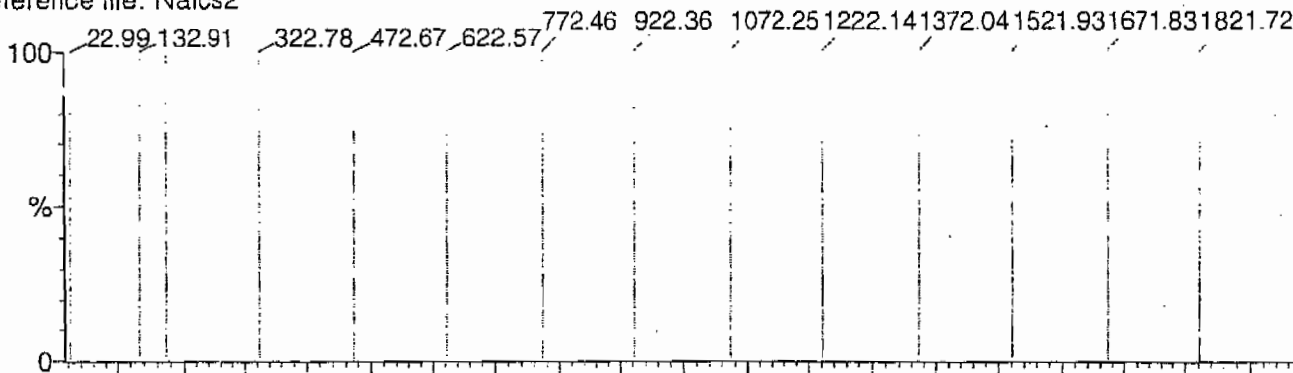
Printed: Fri Aug 25 10:52:54 2006

Data file: STATMS2 - Calibrated

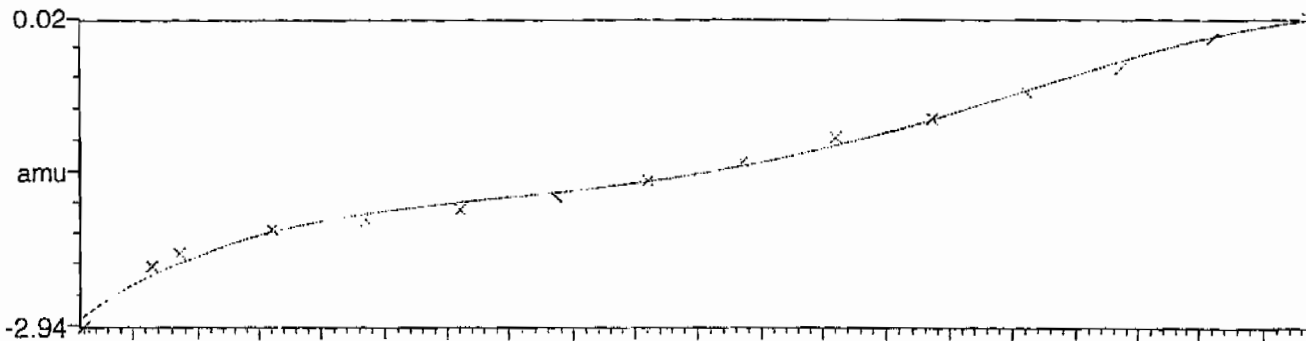
15 matches of 15 tested references



Reference file: Naics2

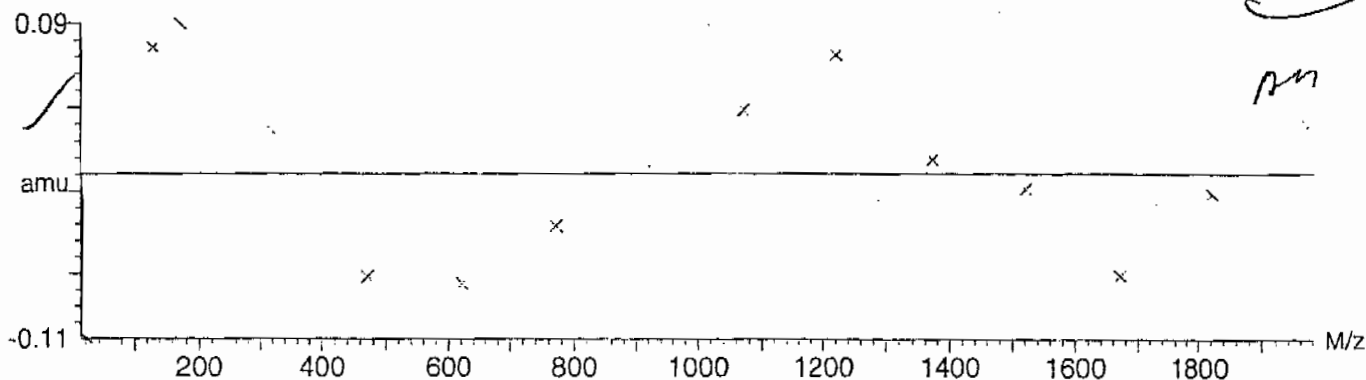


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $2.048910 \times 10^{-9} \pm 0.057803$



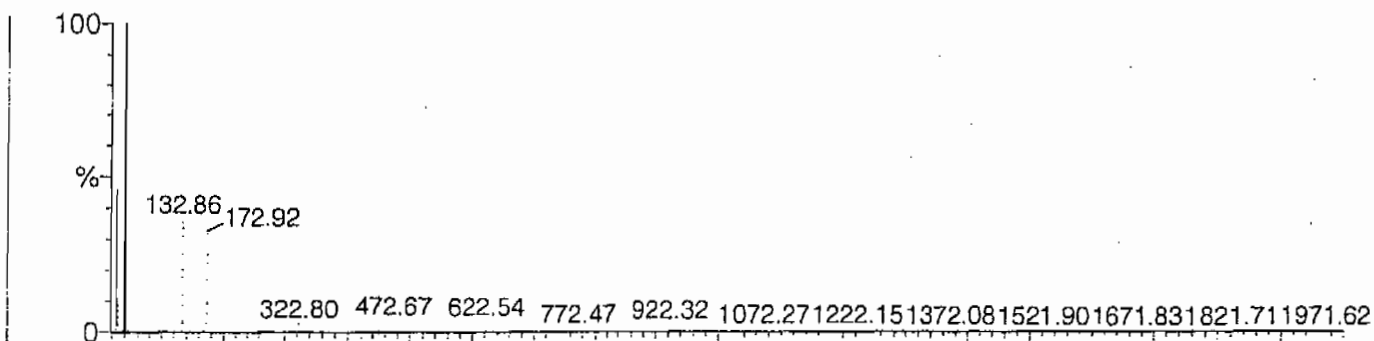
Calibration Report - MS2 Scanning

Page 1 of 1

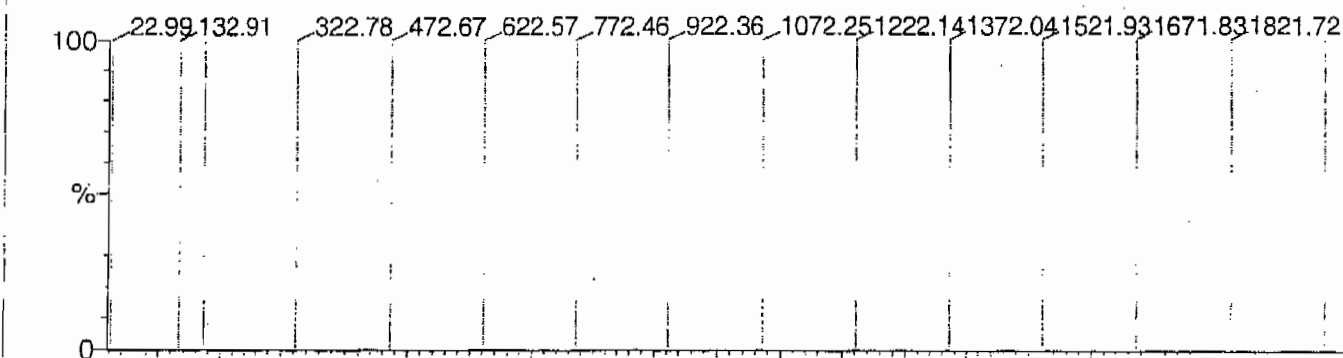
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

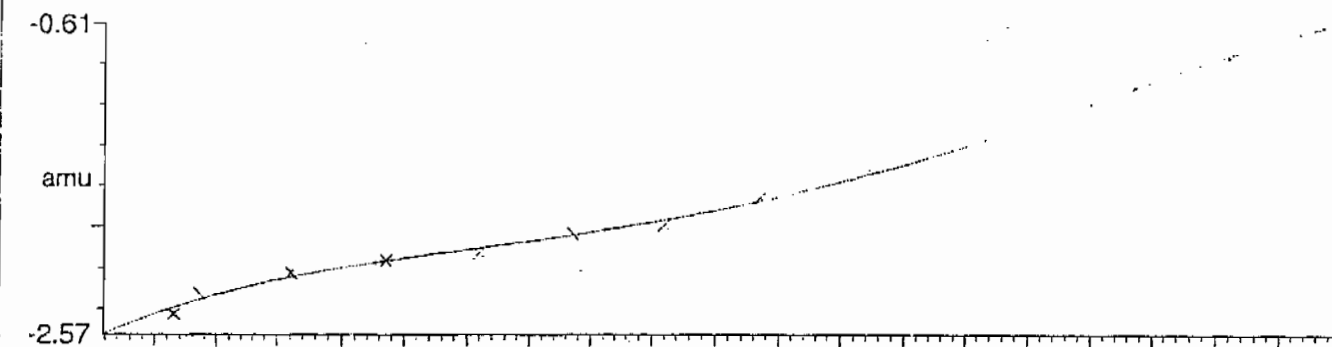
14 matches of 15 tested references



Reference file: Naics2

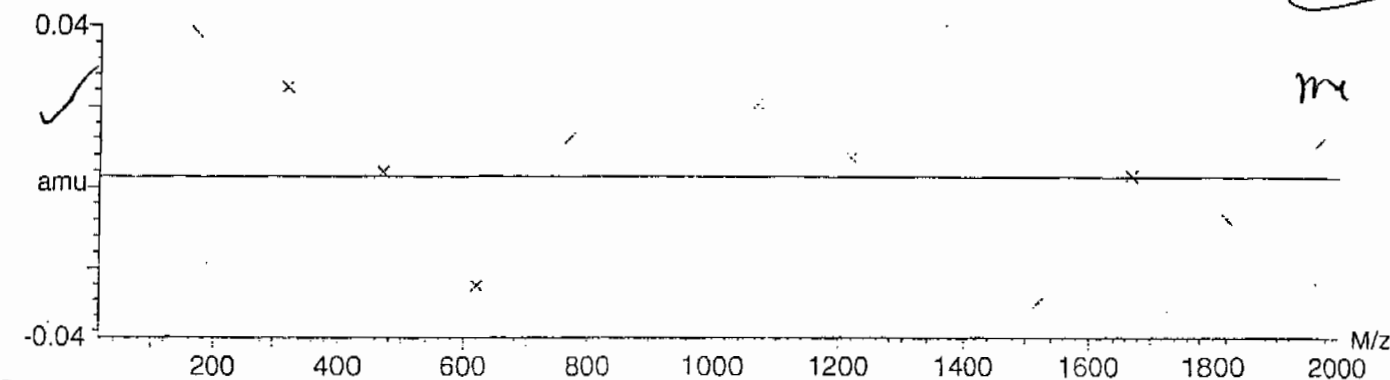


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-2.623502 \times 10^{-9} \pm 0.025622$





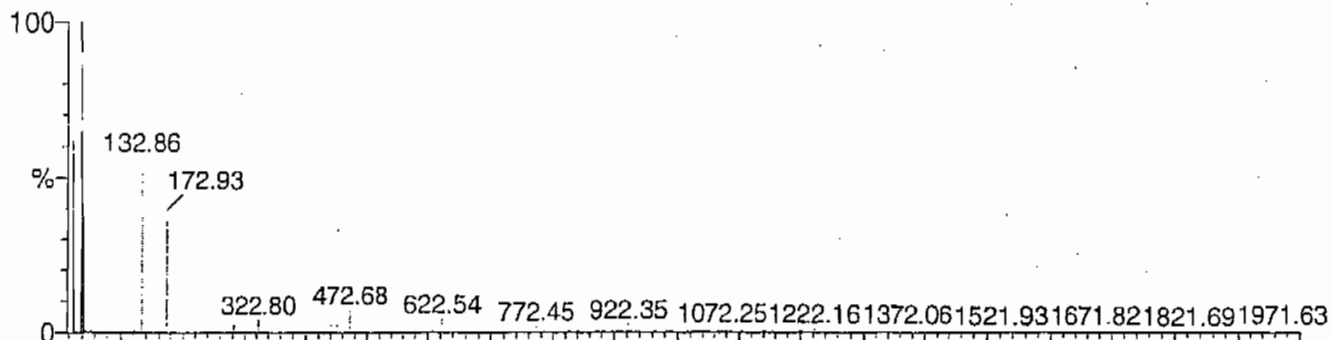
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

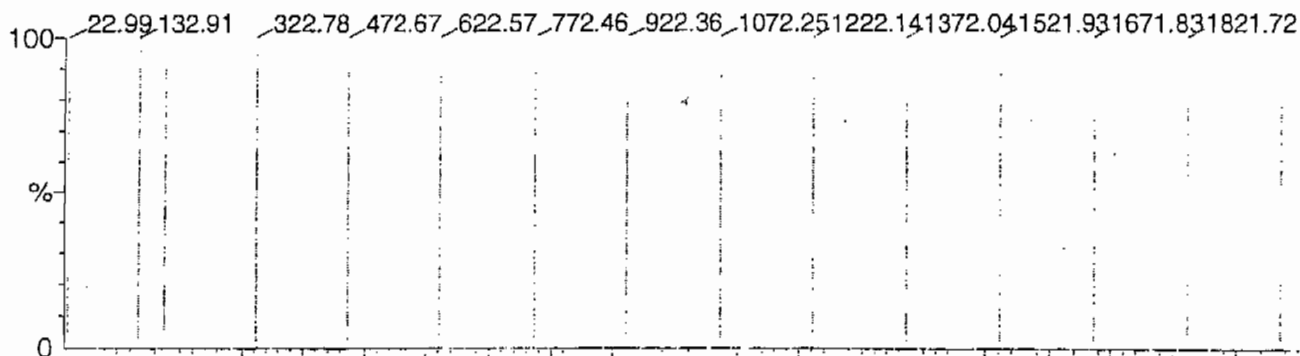
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

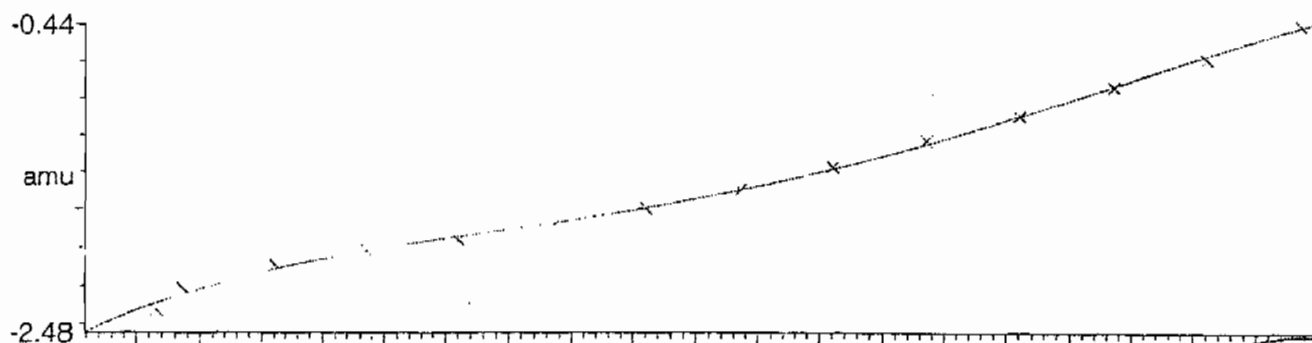
14 matches of 15 tested references



Reference file: Naics2

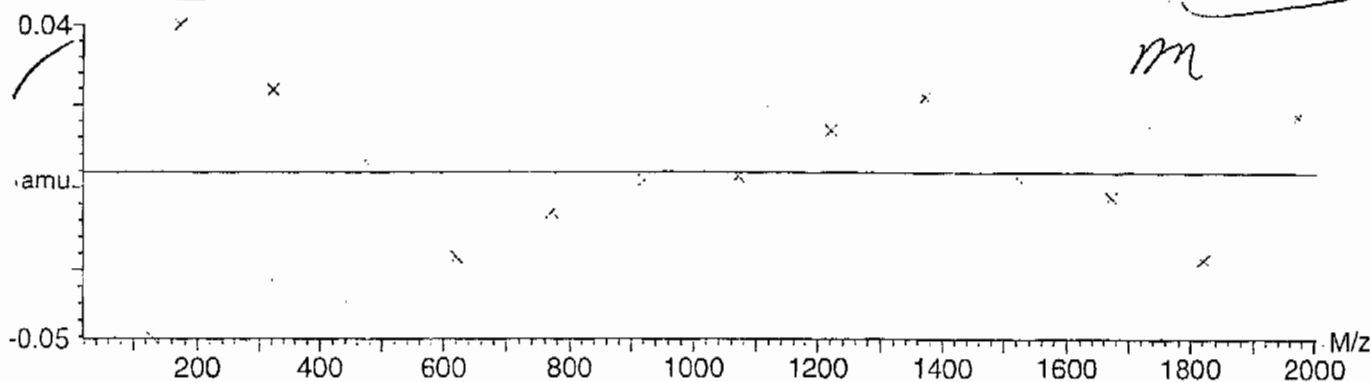


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-6.785350 \times 10^{-9} \pm 0.023134$

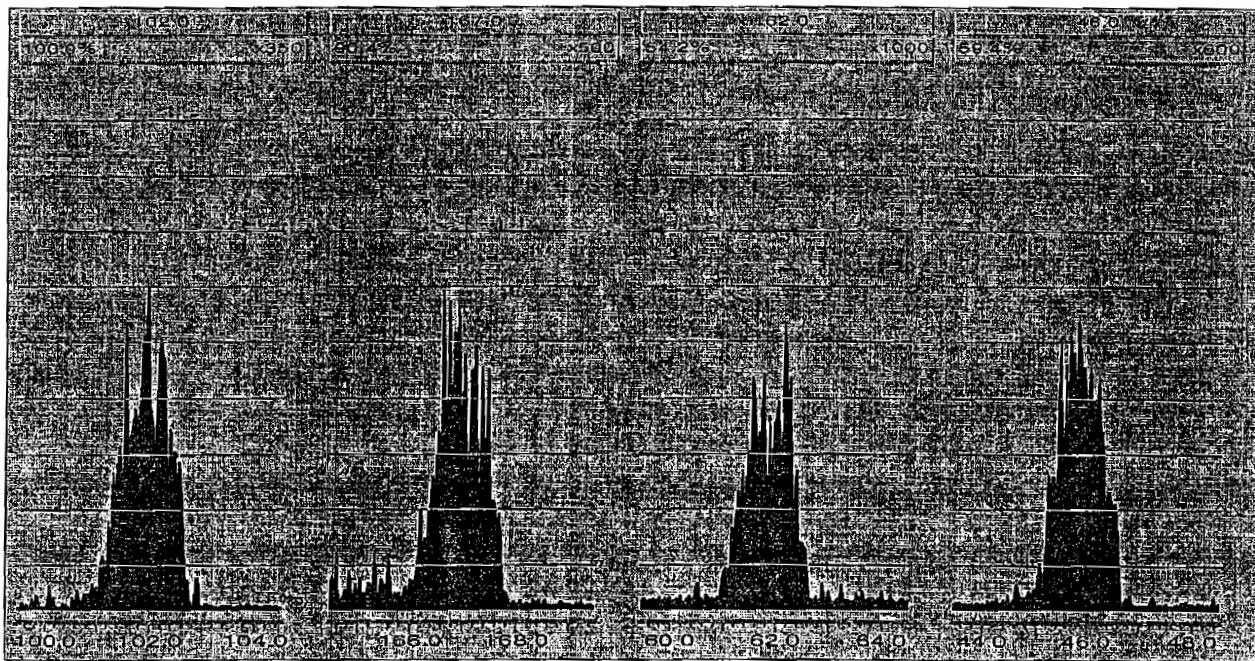


# Quattro Micro Tune Parameters

Page 1

Parameter File: C:\MASSLYNX\NEW\_EXP.PROVACQUDB\explosives04.ipr

Printed : Mon Feb 08 14:05:58 2010



8

# High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1324

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Instrument ID: LCMSMS

|                            | Analysis<br>Date/Time | GEL<br>Data File | IS1 (DNB)<br>(Area) # | RT<br>(min) # | IS2 (DNT)<br>(Area) # | RT2<br>(min) # |
|----------------------------|-----------------------|------------------|-----------------------|---------------|-----------------------|----------------|
|                            |                       |                  | 3214.577              | 12.205        | 18459.667             | 17.697         |
| Upper Limit                |                       |                  | 4178.9501             | 12.705        | 23997.5671            | 18.197         |
| Lower Limit                |                       |                  | 2250.2039             | 11.705        | 12921.7669            | 17.197         |
| MB for batch 944249        | 09-feb-10 09:25       | EXP0208039a      | 3576.74               | 12.205        | 20361.7               | 17.706         |
| LCS for batch 944249       | 09-feb-10 09:55       | EXP0208040a      | 3717.33               | 12.202        | 23347.2               | 17.717         |
| RE15-10-8410               | 09-feb-10 10:24       | EXP0208041a      | 3497.06               | 12.205        | 20273                 | 17.706         |
| RE15-10-8410(245114002MS)  | 09-feb-10 10:54       | EXP0208042a      | 4756.01 *             | 12.205        | 27564.2 *             | 17.706         |
| RE15-10-8410(245114002MSD) | 09-feb-10 11:23       | EXP0208043a      | 4614.41 *             | 12.205        | 25042.5 *             | 17.706         |
| RE15-10-8411               | 09-feb-10 11:53       | EXP0208044a      | 4103.93               | 12.205        | 22050                 | 17.706         |
| RE15-10-8412               | 09-feb-10 12:22       | EXP0208045a      | 3932.85               | 12.202        | 21830.5               | 17.695         |
| RE15-10-8441               | 09-feb-10 12:52       | EXP0208046a      | 4016.62               | 12.202        | 22101.3               | 17.717         |
| RE15-10-8413               | 09-feb-10 13:21       | EXP0208047a      | 3904.76               | 12.202        | 21222.3               | 17.717         |
| RE15-10-8425               | 09-feb-10 13:51       | EXP0208048a      | 3957.25               | 12.205        | 20840.5               | 17.706         |
| RE15-10-8422               | 09-feb-10 15:49       | EXP0208052a      | 3919.9                | 12.205        | 21293.3               | 17.707         |
| RE15-10-8417               | 09-feb-10 16:18       | EXP0208053a      | 4045.13               | 12.204        | 22834.5               | 17.706         |
| RE15-10-8423               | 09-feb-10 16:48       | EXP0208054a      | 4154.24               | 12.205        | 22640.5               | 17.707         |
| RE15-10-8416               | 09-feb-10 17:17       | EXP0208055a      | 3921.24               | 12.205        | 21227.7               | 17.706         |
| RE15-10-8418               | 09-feb-10 17:47       | EXP0208056a      | 3756.64               | 12.204        | 21138.5               | 17.706         |
| RE15-10-8424               | 09-feb-10 18:16       | EXP0208057a      | 3900.65               | 12.205        | 22495.6               | 17.706         |
| RE15-10-8421               | 09-feb-10 18:46       | EXP0208058a      | 3931.5                | 12.205        | 22310.4               | 17.706         |
| RE15-10-8420               | 09-feb-10 19:15       | EXP0208059a      | 3971.96               | 12.205        | 21998.7               | 17.707         |

IS1 (DNB) = 1,3-Dinitrobenzene-d4

IS2 (DNT) = 2,6-Dinitrotoluene-d2

Area Upper Limit = + 30% of average IS area from multipoint calibration

Area Lower Limit = - 30% of average IS area from multipoint calibration

RT Upper Limit = +0.5 of average multipoint RT

RT Lower Limit = -0.5 of average multipoint RT

# Column used to flag values outside QC limits with an asterisk

\* Values outside of QC limits

# SAMPLE DATA

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8410

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114002

Sample Amount 2

Moisture: 24.9

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208041a

Date Analyzed: 09-FEB-10 10:24

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

|            |   |                                    |   |          |
|------------|---|------------------------------------|---|----------|
| Instrument | X | <u>Concentrated Extract Volume</u> | X | Dilution |
| Value      |   | <u>Sample Amount</u>               |   | Factor   |

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208041a

Date: 09-Feb-2010

Time: 10:24:49

ID: 245114002

Vol: 2:1,C

μg/g

2/10/10

LAW 944250 / Souza 21

## RMX

F2:MRM of 1 channel,AP-  
176 > 102  
6.247e+003

## RDX

F2:MRM of 1 channel,AP-  
176 > 102  
6.247e+003

## 135-Trinitrobenzene

F4:MRM of 1 channel,AP-  
213 > 183  
6.103e+003

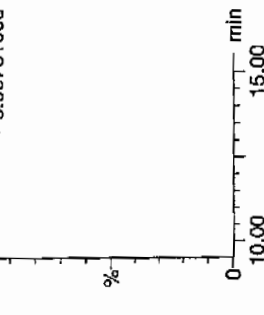
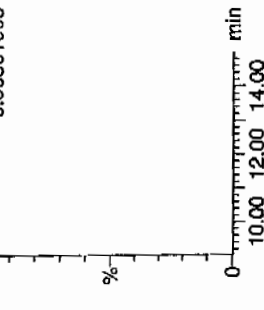
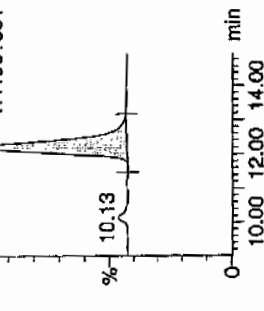
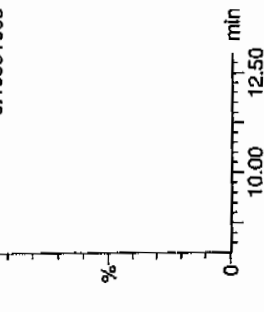
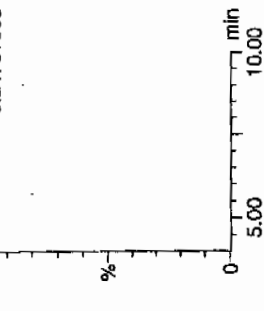
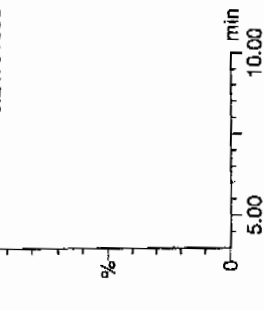
## 13-Dinitrobenzene-d4

F5:MRM of 2 channels,AP-  
172 > 142  
1.419e+004

## 13-Dinitrobenzene

F5:MRM of 2 channels,AP-  
168 > 138  
6.093e+003

## Tetryl

F6:MRM of 1 channel,AP-  
241 > 181  
6.087e+003

## Nitrobenzene

F7:MRM of 1 channel,AP-  
123 > 46  
6.095e+003

## 4-Amino-26-dinitrotoluene

F11:MRM of 2 channels,AP-  
197 > 167  
6.157e+003

## 2-Amino-46-dinitrotoluene

F11:MRM of 2 channels,AP-  
197 > 180  
6.183e+003

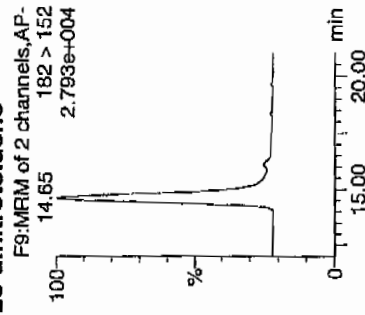
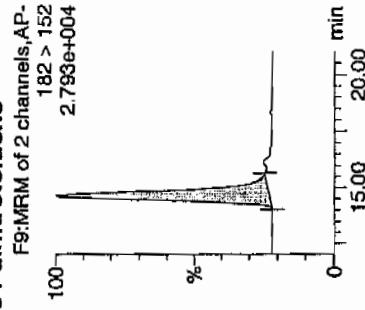
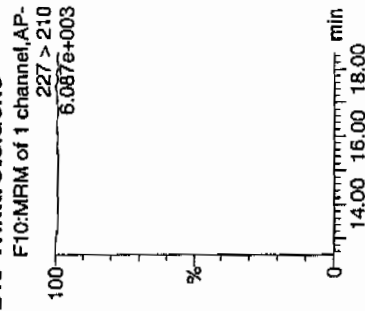
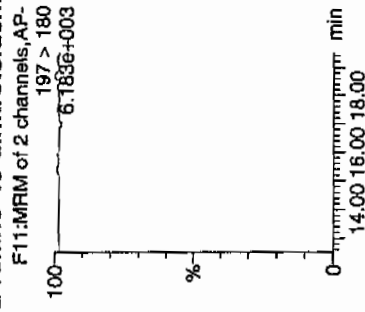
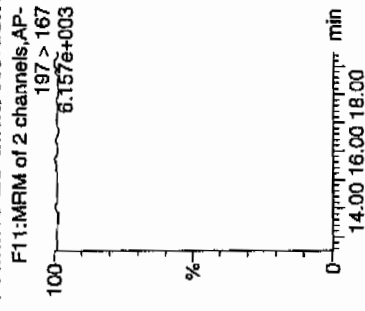
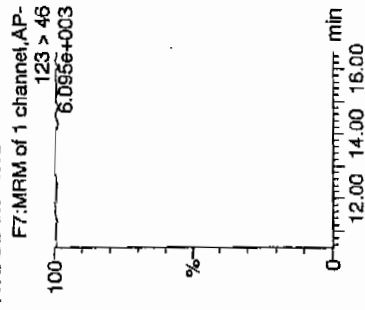
## 246-Trinitrotoluene

F10:MRM of 1 channel,AP-  
227 > 210  
6.087e+003

## 34-dinitrotoluene

F9:MRM of 2 channels,AP-  
182 > 152  
2.793e+004

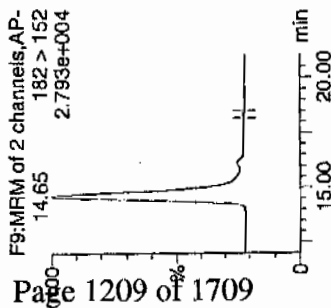
## 26-dinitrotoluene

F9:MRM of 2 channels,AP-  
182 > 152  
2.793e+004

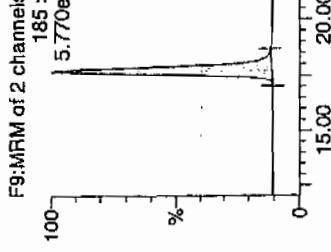
HPLC 02/10/10

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

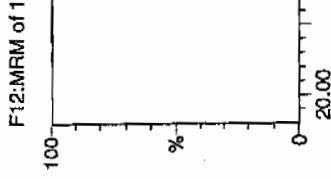
24-dinitrotoluene



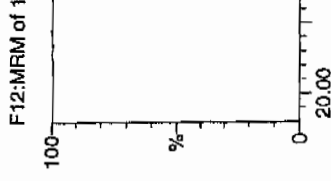
26-dinitrotoluene-d3



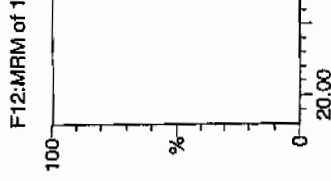
2-Nitrotoluene



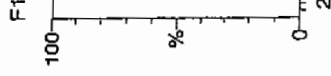
4-Nitrotoluene



3-Nitrotoluene



PETN



| ID        | Name                      | Trace     | RT    | Area      | IS Area   | Abs:Resp  | Response  | Flags | Mod:Date  | Mod:Time  | ng/mL    | %Rec  | %Dev | S/N    |
|-----------|---------------------------|-----------|-------|-----------|-----------|-----------|-----------|-------|-----------|-----------|----------|-------|------|--------|
| 245114002 | HMX                       | 176 > 102 |       |           | 3497.060  |           |           |       |           |           |          |       |      |        |
| 245114002 | RDX                       | 176 > 102 |       |           | 3497.060  |           |           |       |           |           |          |       |      |        |
| 245114002 | 135-Trinitrobenzene       | 213 > 183 |       |           | 3497.060  |           |           |       |           |           |          |       |      |        |
| 245114002 | 13-Dinitrobenzene-d4      | 172 > 142 | 12.20 | 3497.060  |           | 3497.060  | 3497.060  | bb    |           |           | 543.9384 | 108.8 | 8.8  | 240.2  |
| 245114002 | 13-Dinitrobenzene         | 168 > 138 |       |           | 3497.060  |           |           |       |           |           |          |       |      |        |
| 245114002 | Tetryl                    | 241 > 181 |       |           | 3497.060  |           |           |       | MM-       | 10-Feb-10 | 09:18:13 |       |      |        |
| 245114002 | Nitrobenzene              | 123 > 46  |       |           | 3497.060  |           |           |       |           |           |          |       |      |        |
| 245114002 | 4-Amino-26-dinitrotoluene | 197 > 167 |       |           | 20273.018 |           |           |       |           |           |          |       |      |        |
| 245114002 | 2-Amino-46-dinitrotoluene | 197 > 180 |       |           | 20273.018 |           |           |       |           |           |          |       |      |        |
| 245114002 | 246-Trinitrotoluene       | 227 > 210 |       |           | 20273.018 |           |           |       |           |           |          |       |      |        |
| 245114002 | 34-dinitrotoluene         | 182 > 152 | 14.65 | 10321.396 | 20273.018 | 10321.396 | 254.560   | bb    |           |           | 282.8469 | 113.1 | 13.1 | 216.5  |
| 245114002 | 26-dinitrotoluene         | 182 > 152 |       |           | 20273.018 |           |           |       |           |           |          |       |      |        |
| 245114002 | 24-dinitrotoluene         | 182 > 152 |       |           | 20273.018 |           |           |       |           |           |          |       |      |        |
| 245114002 | 26-dinitrotoluene-d3      | 185 > 155 | 17.71 | 20273.018 | 20273.018 | 20273.018 | 20273.018 | MM-   | 10-Feb-10 | 09:10:25  | 549.1161 | 109.8 | 9.8  | 2252.4 |
| 245114002 | 2-Nitrotoluene            | 137 > 46  |       |           | 20273.018 |           |           | bb    |           |           |          |       |      |        |
| 245114002 | 4-Nitrotoluene            | 137 > 46  |       |           | 20273.018 |           |           |       |           |           |          |       |      |        |
| 245114002 | 3-Nitrotoluene            | 137 > 46  |       |           | 20273.018 |           |           |       |           |           |          |       |      |        |
| 245114002 | PETN                      | 361 > 62  |       |           | 20273.018 |           |           |       |           |           |          |       |      |        |

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8410

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114002

Sample Amount 2

Moisture: 24.9

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100016.wiff

Date Analyzed: 10-FEB-10 12:23

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

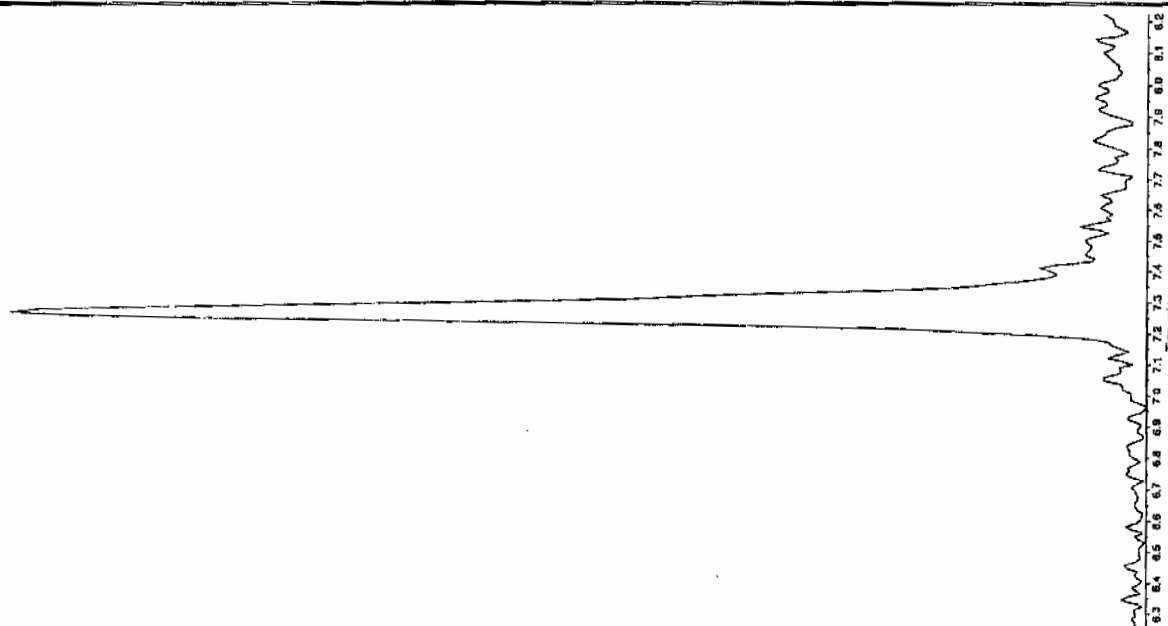


See 2/11/10

Sample Name: "245114002" Sample ID: "94425021" File: "EX552100016.wif"  
 Peak Name: "TATS" Mass(es): "257 293.9 amu"  
 Comment: "LCX83212S" Annotation: "1"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 2/10/2010  
 Acq. Date: 12:23:07 PM  
 Acq. Time: 12:23:07 PM  
 Modified: No

Intensity: cps

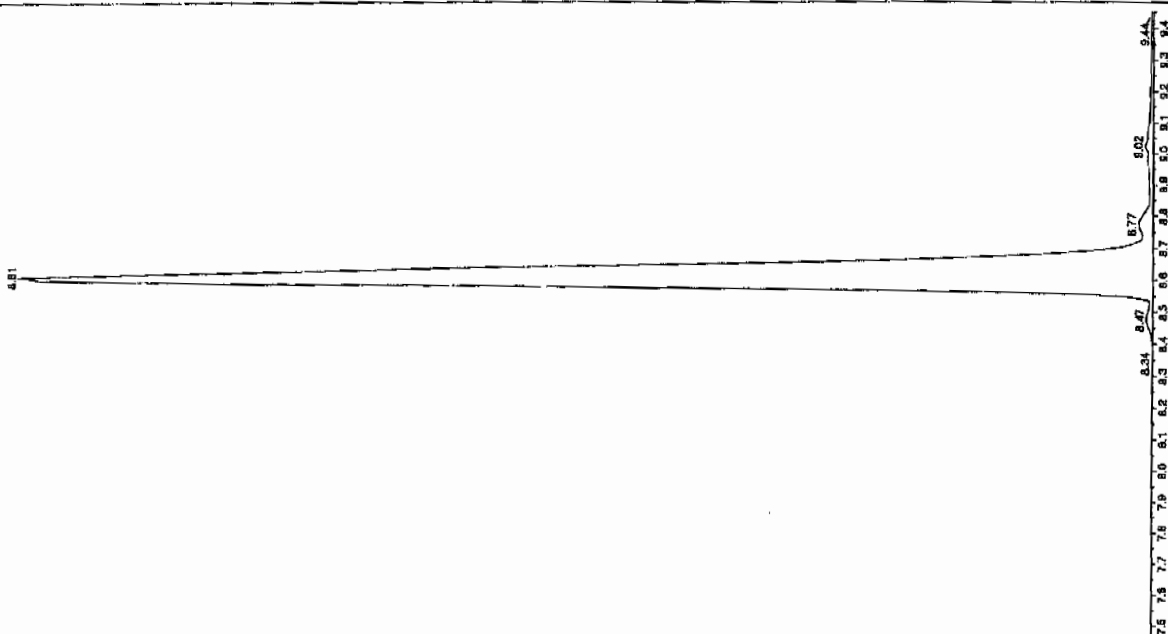


2/11/10

Sample Name: "245114002" Sample ID: "94425021" File: "EX552100016.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCX83212S" Annotation: "1"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 2/10/2010  
 Acq. Date: 12:23:07 PM  
 Acq. Time: 12:23:07 PM  
 Modified: No

Intensity: cps

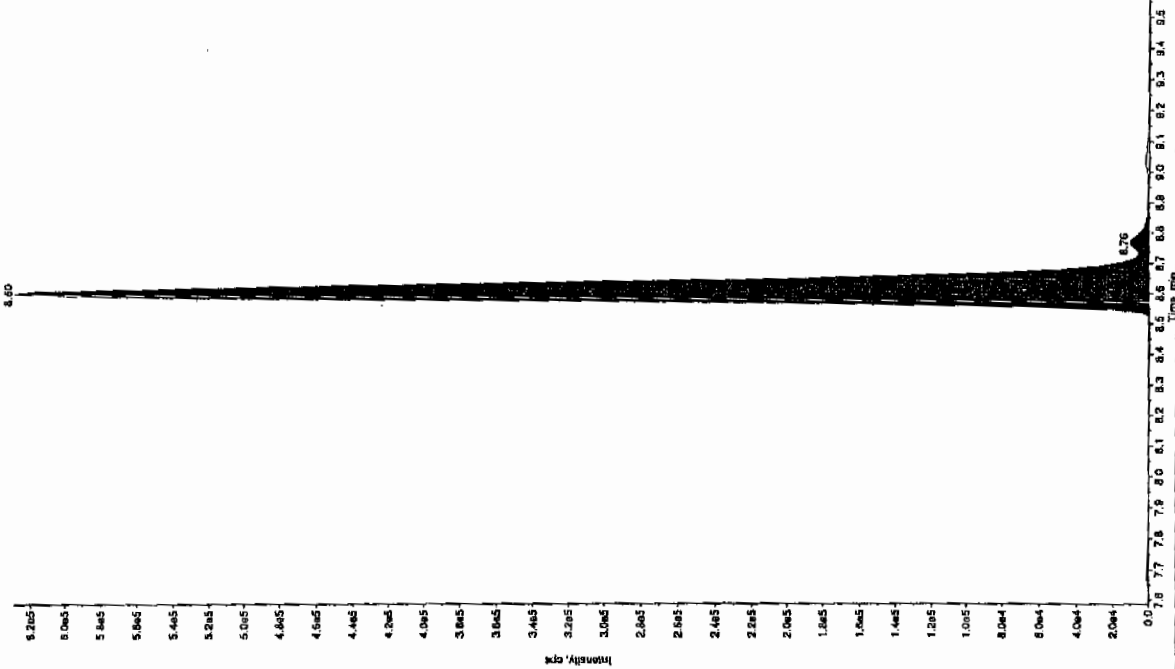


Sample Name: 245114002 Sample ID: 9442502JLER File: EXS02100016.wif  
 Peak Name: 34-Dinitrofluorene Mass(es): 182.1/151.9 amu  
 Comment: LCX832125 Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 12:23:07 PM  
 Modified: No

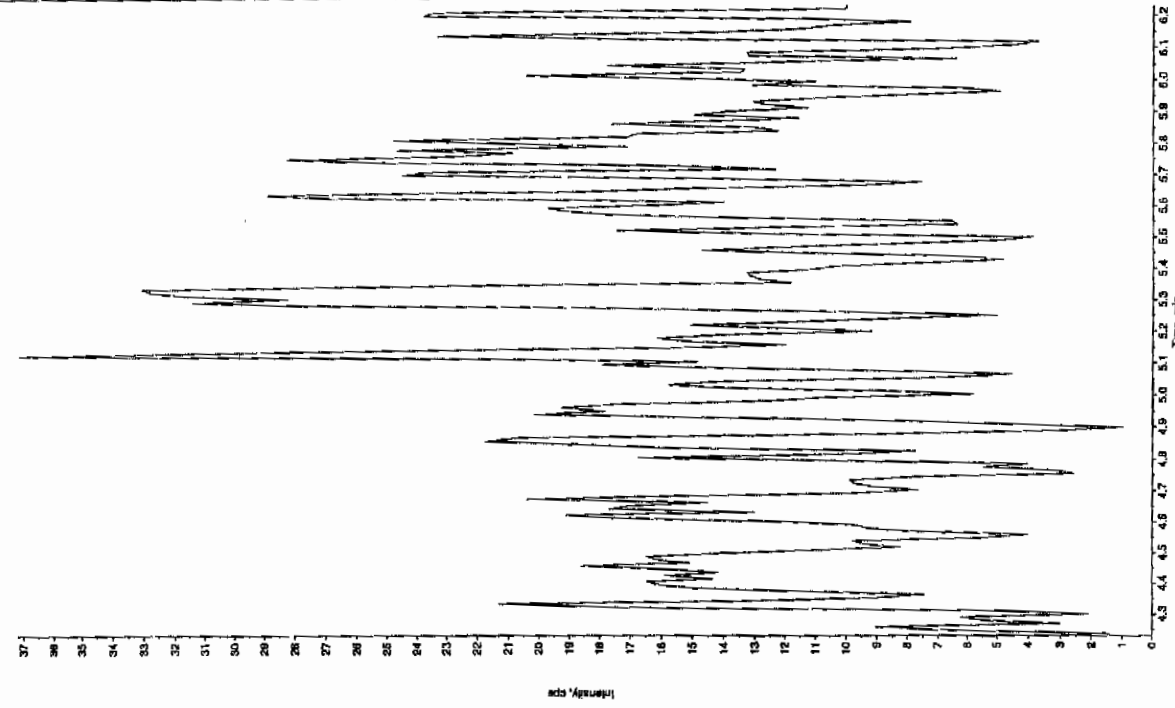
Processing: No  
 rocAlgorithm: IntelliQuan - IOA  
 In Peak Height: 1460.00 cps  
 In Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.59 min  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 8.60 min  
 Area: 2.71e+006 counts  
 Height: 6.30e+005 cps  
 Start Time: 8.48 min  
 End Time: 8.96 min



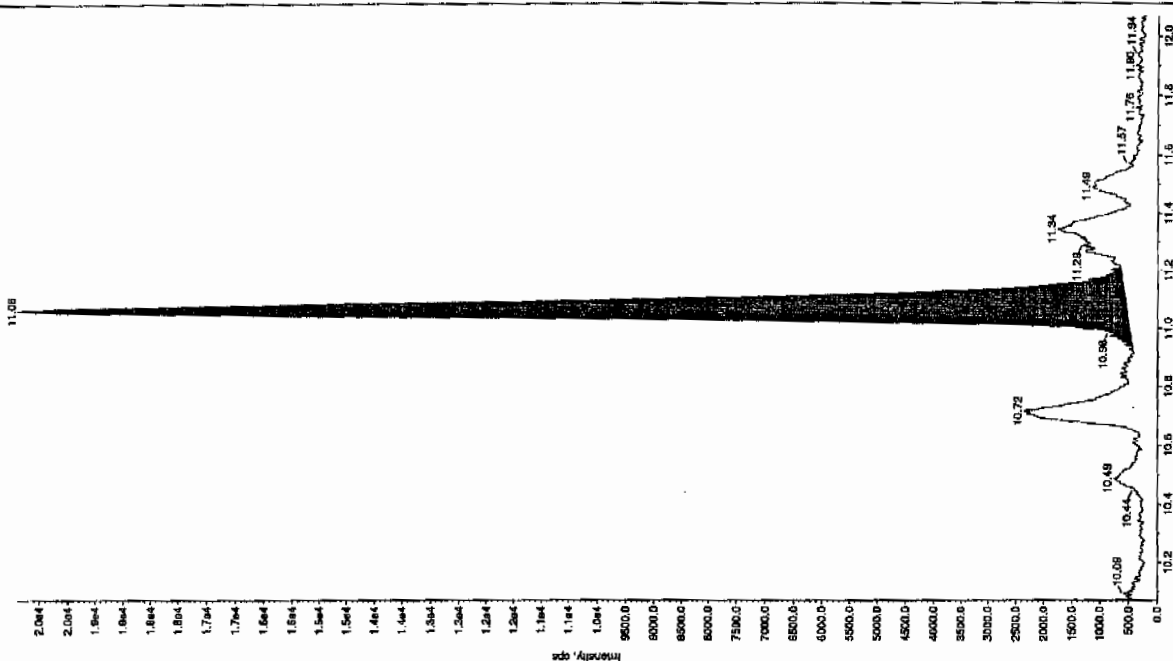
Sample Name: 245114002 Sample ID: 9442502JLER File: EXS02100016.wif  
 Peak Name: 26-Dinitro-4-allyltoluene Mass(es): 186.0/166.0 amu  
 Comment: LCX832125 Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 12:23:07 PM  
 Modified: No



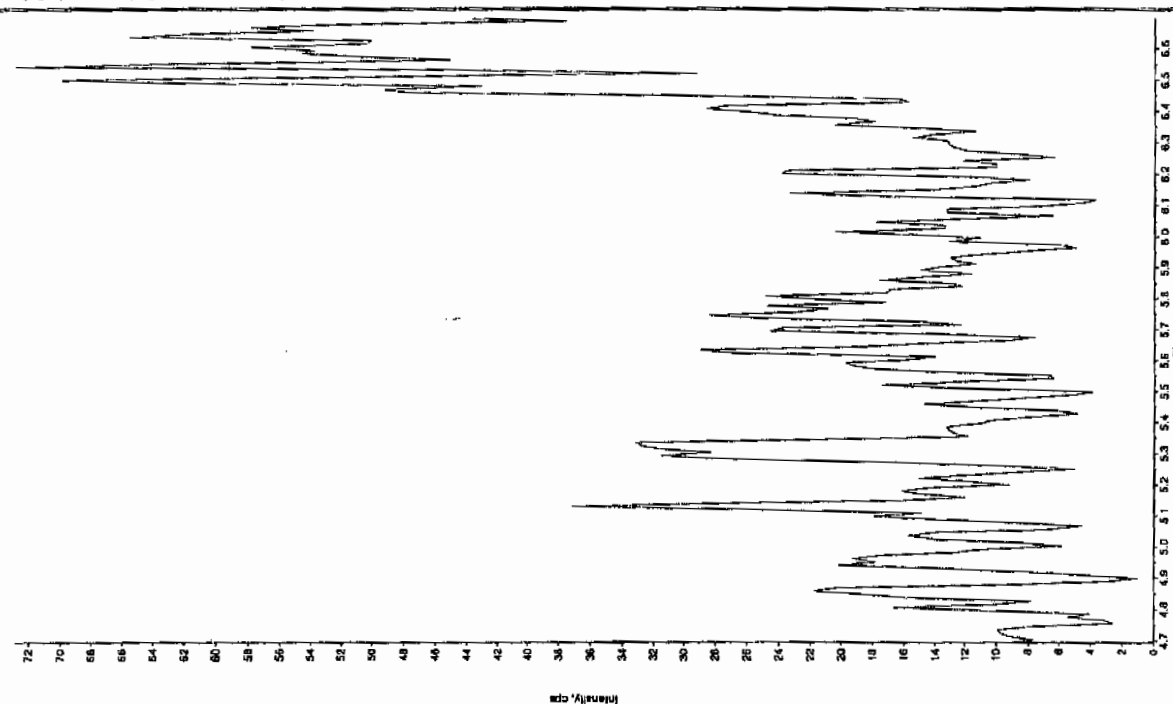
Sample Name: "245114002" Sample ID: "8442502JLER" File: "EXS02100016.wiff"  
 Peak Name: "1,4-bis(2-ethyl-5-phenyl-1H-imidazol-2-yl)phthalate" Mass(es): "369.191.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: No Intercept  
 Acq. Date: 2/10/2010  
 Acq. Time: 12:23:07 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 11.1 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 11.1 min  
 Area: 8.69e+004 counts  
 Height: 1.99e+004 cps  
 Start Time: 10.9 min  
 End Time: 11.2 min



Sample Name: "245114002" Sample ID: "8442502JLER" File: "EXS02100016.wiff"  
 Peak Name: "24-Diamino-5-nitroindole" Mass(es): "166.046.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 12:23:07 PM  
 Modified: No



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8411

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114003

Sample Amount 2

Moisture: 15.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208044a

Date Analyzed: 09-FEB-10 11:53

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

|            |   |                             |   |          |
|------------|---|-----------------------------|---|----------|
| Instrument | X | Concentrated Extract Volume | X | Dilution |
| Value      |   | Sample Amount               |   | Factor   |

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP020804a

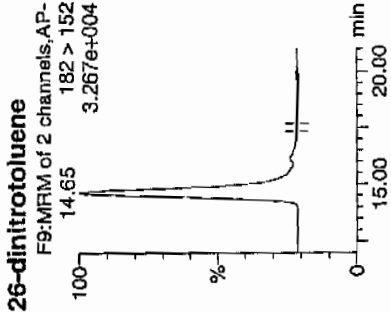
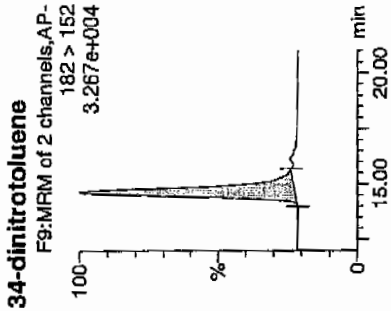
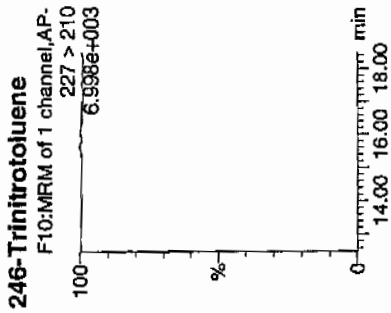
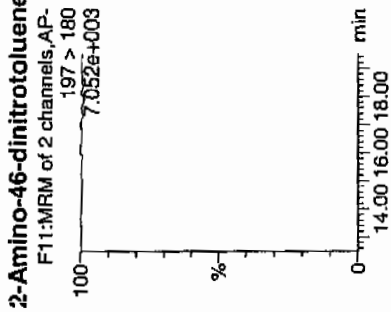
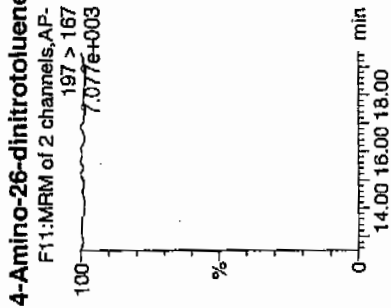
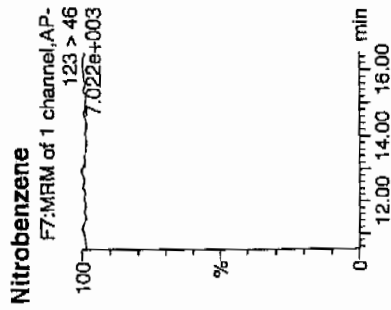
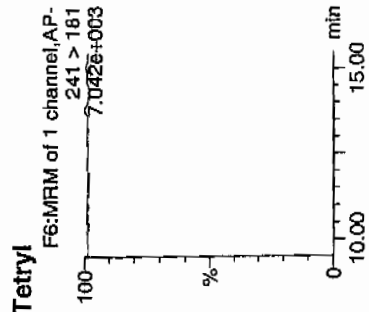
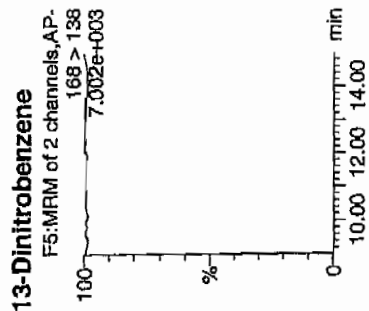
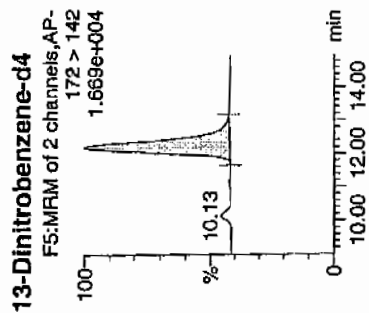
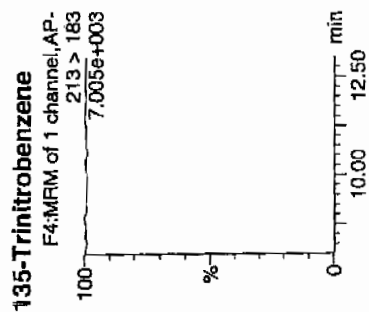
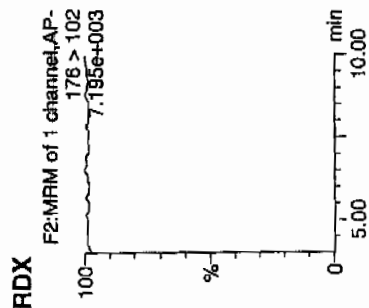
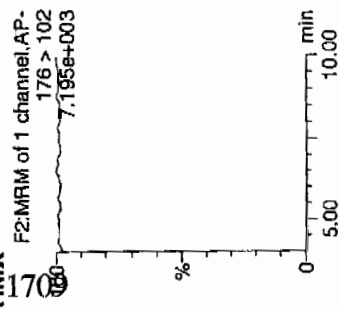
Date: 09-Feb-2010

Time: 11:53:19

**ID# 245114003**

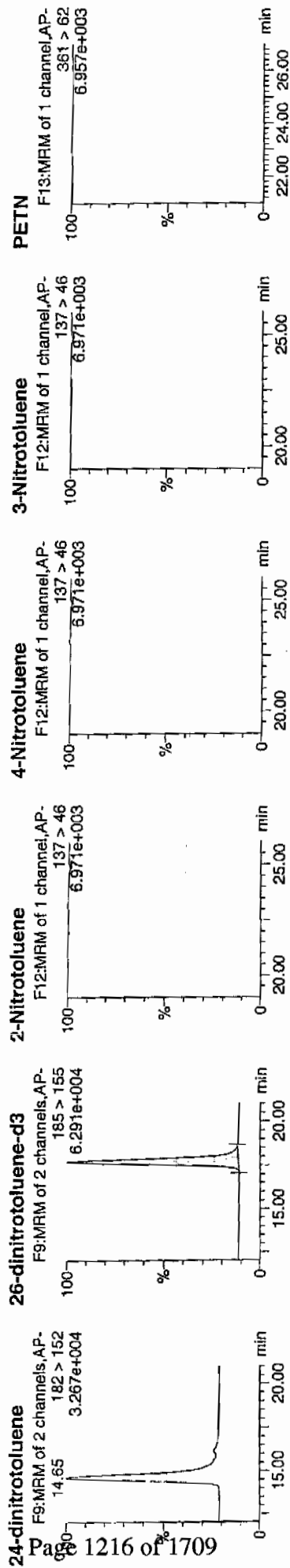
 $2:1:2:1.F$ 

**X**



01/01/20

Dataset: C:\MASSLYNX\New\_Exp\_PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



| ID        | Name                      | RT    | Area      | IS Area   | Abs Resp  | Flags | Mod | Data               | %Rec     | %Dev  | S/N    |
|-----------|---------------------------|-------|-----------|-----------|-----------|-------|-----|--------------------|----------|-------|--------|
| 245114003 | HM/X                      |       |           | 4103.925  |           |       |     |                    |          |       |        |
| 245114003 | RDX                       |       |           | 4103.925  |           |       |     |                    |          |       |        |
| 245114003 | 135-Trinitrobenzene       |       |           | 4103.925  |           |       |     |                    |          |       |        |
| 245114003 | 13-Dinitrobenzene-d4      | 12.20 | 4103.925  |           | 4103.925  | bb    |     |                    | 638.3311 | 127.7 | 512.5  |
| 245114003 | 13-Dinitrobenzene         |       |           | 4103.925  |           |       |     |                    |          |       |        |
| 245114003 | Tetryl                    |       |           | 4103.925  |           |       |     |                    |          |       |        |
| 245114003 | Nitrobenzene              |       |           | 4103.925  |           |       |     |                    |          |       |        |
| 245114003 | 4-Amino-26-dinitrotoluene |       |           | 4103.925  |           |       |     |                    |          |       |        |
| 245114003 | 2-Amino-46-dinitrotoluene |       |           | 22049.959 |           |       |     |                    |          |       |        |
| 245114003 | 246-Trinitrotoluene       |       |           | 22049.959 |           |       |     |                    |          |       |        |
| 245114003 | 34-dinitrotoluene         | 14.65 | 12180.131 | 22049.959 | 276.194   | bb    |     |                    | 306.8849 | 122.8 | 725.0  |
| 245114003 | 26-dinitrotoluene         |       |           | 22049.959 |           |       |     |                    |          |       |        |
| 245114003 | 24-dinitrotoluene         |       |           | 22049.959 |           |       |     |                    |          |       |        |
| 245114003 | 26-dinitrotoluene-d3      | 17.71 | 22049.959 | 22049.959 | 22049.959 | bb    | MM- | 10-Feb-10 09:11:20 | 597.2465 | 119.4 | 2176.2 |
| 245114003 | 2-Nitrotoluene            |       |           | 22049.959 |           |       |     |                    |          |       |        |
| 245114003 | 4-Nitrotoluene            |       |           | 22049.959 |           |       |     |                    |          |       |        |
| 245114003 | 3-Nitrotoluene            |       |           | 22049.959 |           |       |     |                    |          |       |        |
| 245114003 | PETN                      |       |           | 22049.959 |           |       |     |                    |          |       |        |

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8411

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114003

Sample Amount 2

Moisture: 15.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100019.wiff

Date Analyzed: 10-FEB-10 13:10

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

|            |   |                                    |   |          |
|------------|---|------------------------------------|---|----------|
| Instrument | X | <u>Concentrated Extract Volume</u> | X | Dilution |
| Value      |   | <u>Sample Amount</u>               |   | Factor   |

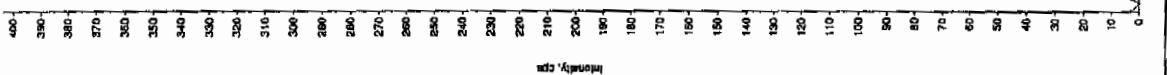
Gen 2/11/10

Sample Name: 245114003 Sample ID: 944250211ER File: EX502100019.will

Peak Name: TATB Mass(es): 257.2204.8 amu

Comment: LCX832125 Annotation: 1

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 2/10/2010  
Acq. Time: 1:10:12 PM  
Modified: No

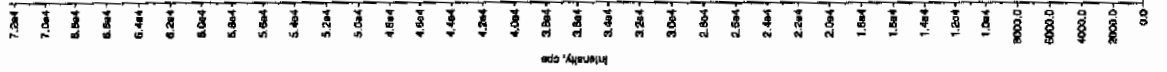


Sample Name: 245114003 Sample ID: 944250211ER File: EX502100019.will

Peak Name: 35-Dinitrobenzyl Mass(es): 182.046.0 amu

Comment: LCX832125 Annotation: 1

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 2/10/2010  
Acq. Time: 1:10:12 PM  
Modified: No

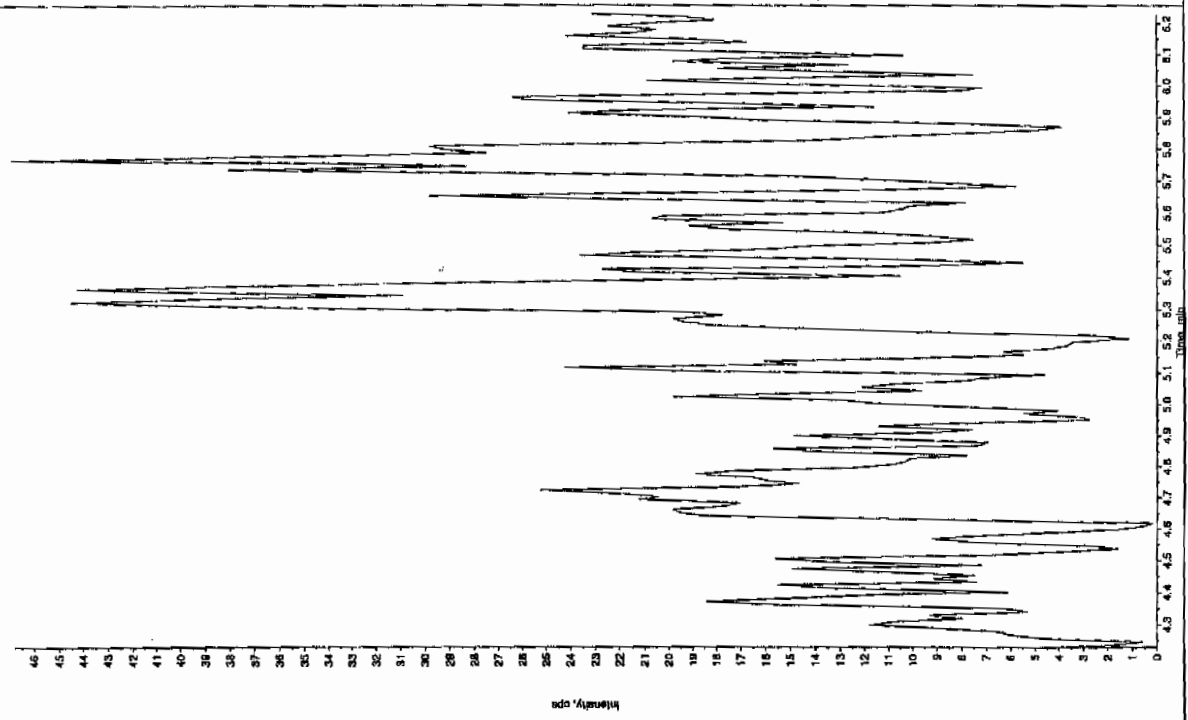


Ann 2/11/10



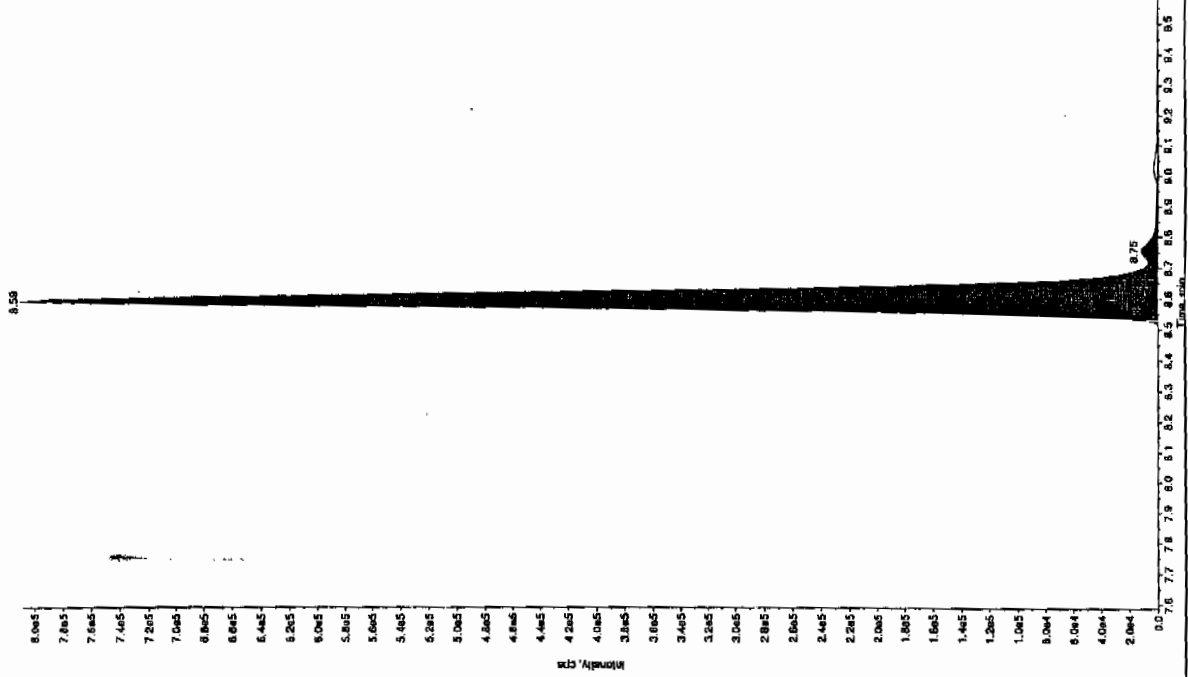
Sample Name: "245116003" Sample ID: "942502125" File: "EX502100019.wif"  
 Peak Name: "24-Dinitrofluorene" Mass(es): "182.1151.9 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 1:10:12 PM  
 Modified: No



Sample Name: "245116003" Sample ID: "942502125" File: "EX502100019.wif"  
 Peak Name: "24-Dinitrofluorene" Mass(es): "182.1151.9 amu"  
 Comment: "LCX832125" Annotation: "

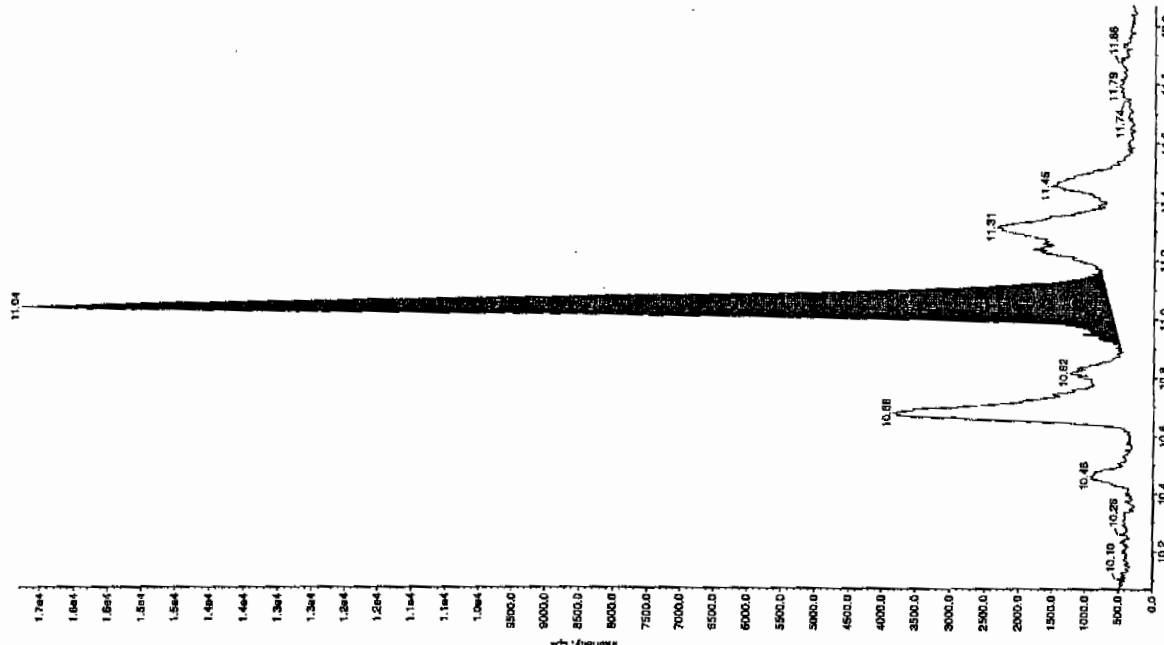
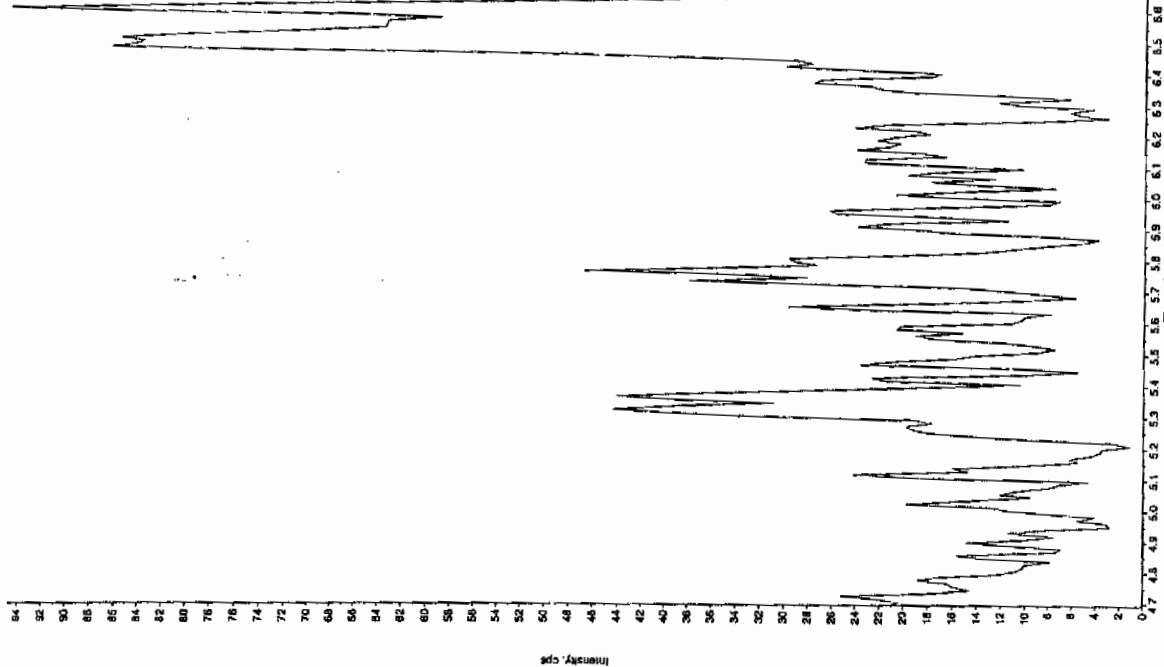
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 1:10:12 PM  
 Modified: No



Peak Name: "24-Dinitrofluorene" Mass(es): "182.1151.9 amu"  
 Peak Height: 1460.00 cps  
 Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 Retention Time: 8.59 min  
 Expected RT: 8.59 min  
 Uag Relative RT: No

Sample Name: "245114003" Sample ID: "94425021.ER" File: "EXS02100019.will"  
 Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "186.046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 1:10:12 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 11.1 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 11.0 min  
 Area: 6.70e+004 counts  
 Height: 1.62e+004 cps  
 Start Time: 10.9 min  
 End Time: 11.2 min



GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8412

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114004

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208045a

Date Analyzed: 09-FEB-10 12:22

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208045a

Date: 08-Feb-2010

Time: 12:22:46

ID: 245114004

Vol: 2:2A

MTD  
2/10/10

170  
160  
150  
140  
130  
120  
110  
100  
90  
80  
70  
60  
50  
40  
30  
20  
10  
0

HM

F2:MRM of 1 channel,AP-  
176 > 102  
6.921e+003

RDX  
F2:MRM of 1 channel,AP-  
176 > 102  
6.921e+003

135-Trinitrobenzene  
F4:MRM of 1 channel,AP-  
213 > 183  
6.774e+003

13-Dinitrobenzene-d4  
F5:MRM of 2 channels,AP-  
172 > 142  
1.608e+004

13-Dinitrobenzene  
F5:MRM of 2 channels,AP-  
168 > 138  
6.782e+003

Tetryl  
F6:MRM of 1 channel,AP-  
241 > 181  
6.789e+003

Nitrobenzene  
F7:MRM of 1 channel,AP-  
123 > 46  
6.794e+003

4-Amino-26-dinitrotoluene  
F11:MRM of 2 channels,AP-  
197 > 167  
6.933e+003

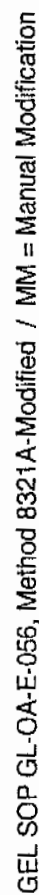
2-Amino-46-dinitrotoluene  
F11:MRM of 2 channels,AP-  
197 > 180  
6.813e+003

246-Trinitrotoluene  
F10:MRM of 1 channel,AP-  
227 > 210  
6.777e+003

34-dinitrotoluene  
F9:MRM of 2 channels,AP-  
182 > 152  
3.070e+004

26-dinitrotoluene  
F9:MRM of 2 channels,AP-  
182 > 152  
3.070e+004

Amme 110/110



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8412

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114004

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100020.wiff

Date Analyzed: 10-FEB-10 13:25

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

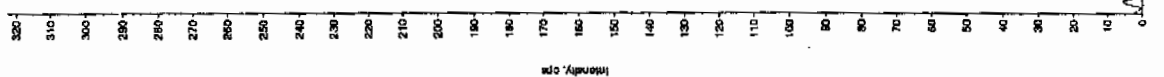
\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Jan 21/11/10

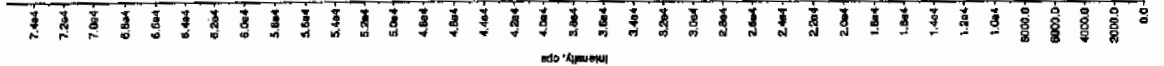
Sample Name: "245114004" Sample ID: "94425021LRF" File: "EX502100020.wif"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 1:25:53 PM  
 Modified: No



Sample Name: "245114004" Sample ID: "94425021LRF" File: "EX502100020.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.04610 amu"  
 Comment: "LCX832125" Annotation: ""

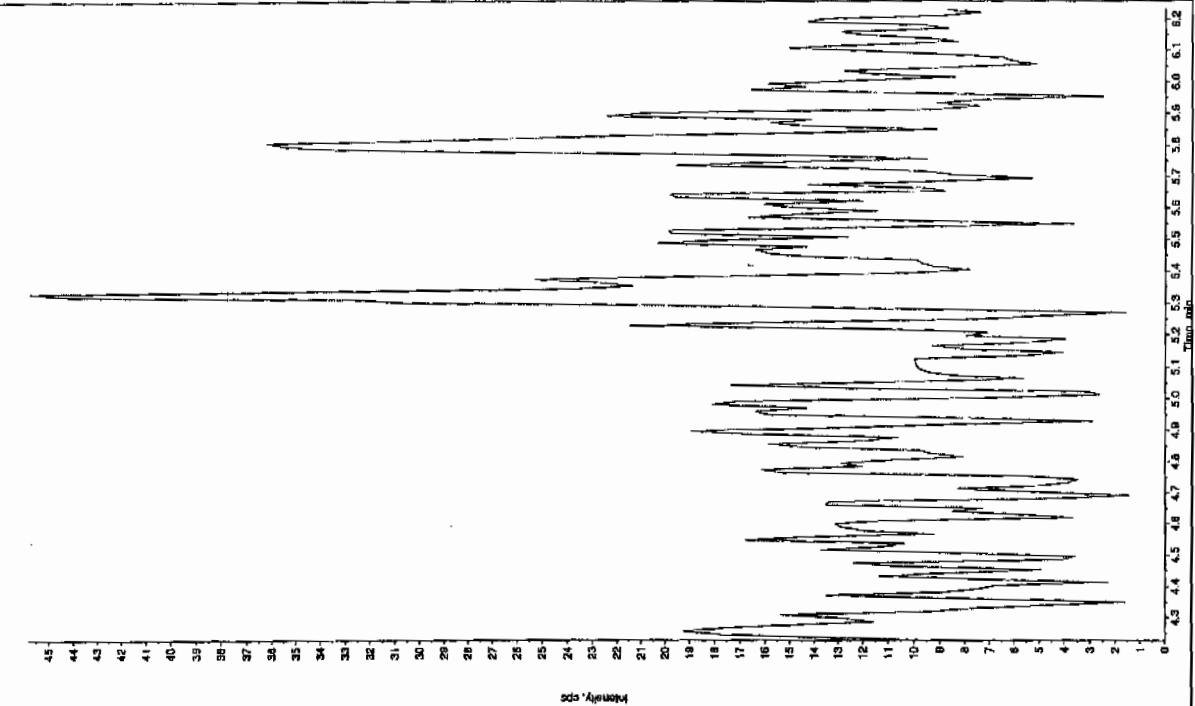
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 1:25:53 PM  
 Modified: No



Jan 02 11/10

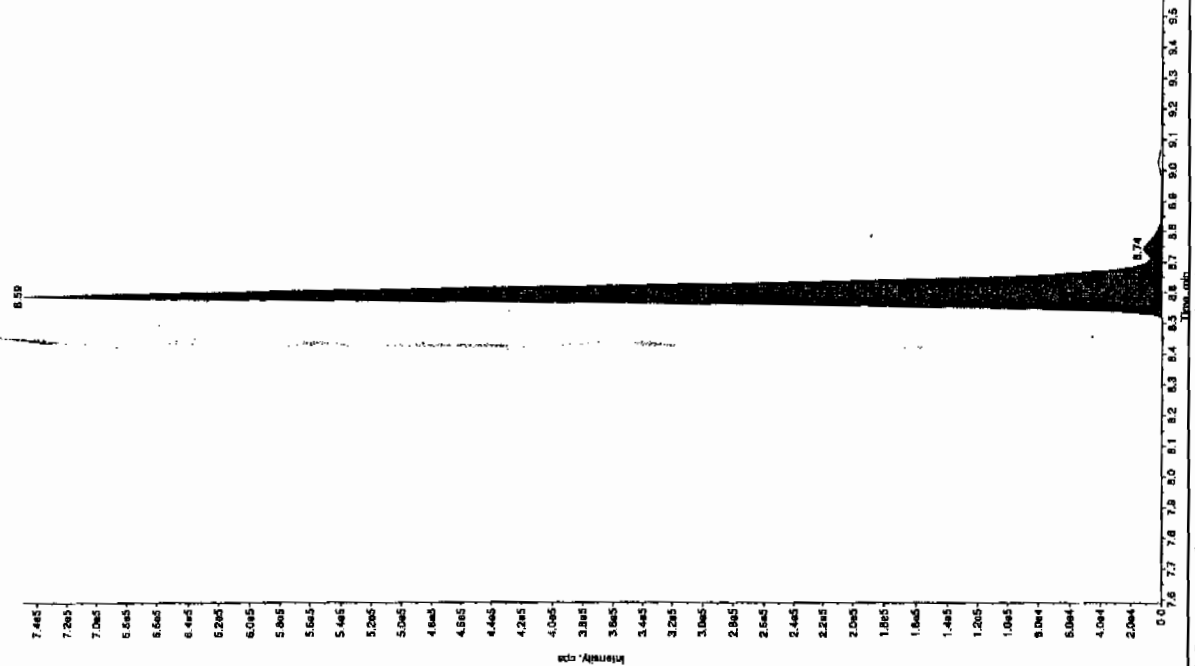
Sample Name: 245114004 Sample ID: 9442502121EP File: EX502100020.will  
 Peak Name: 24-Dinitrofluorene Mass(es): 182.1/151.9 amu  
 Comment: LCX832125 Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 1:25:53 PM  
 Modified: No



Sample Name: 245114004 Sample ID: 9442502121EP File: EX502100020.will  
 Peak Name: 24-Dinitrofluorene Mass(es): 182.1/151.9 amu  
 Comment: LCX832125 Annotation: "

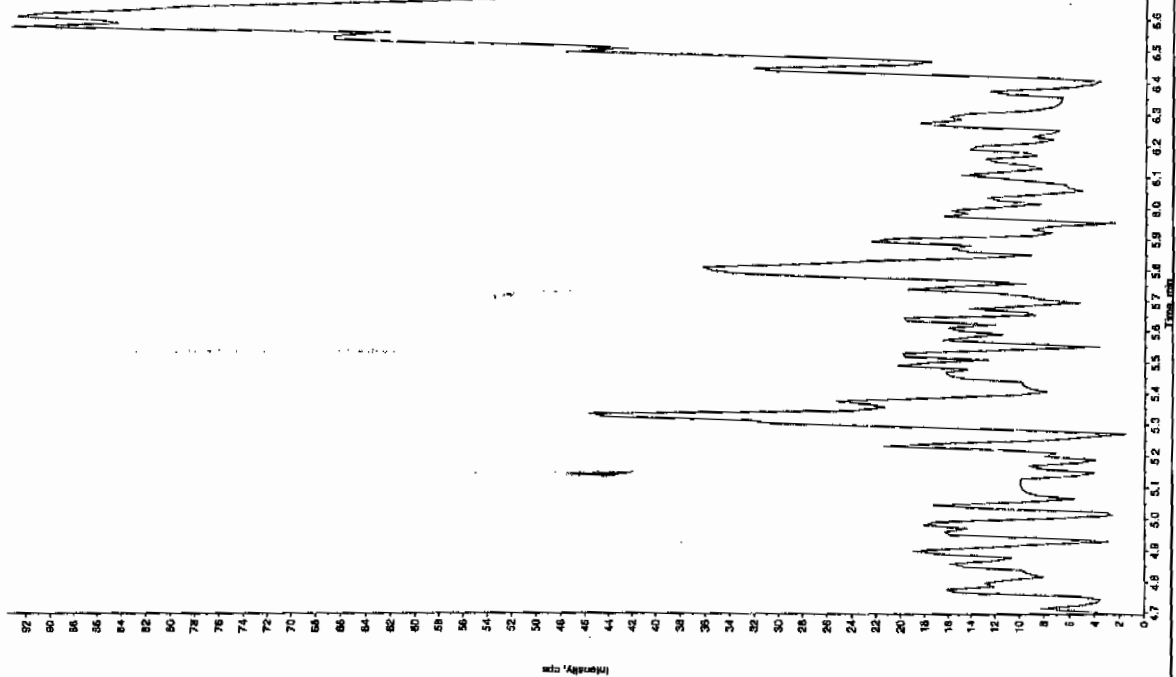
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 1:25:53 PM  
 Modified: No  
 Algorithm: IntelliQuan - IQA  
 Peak Height: 1450.00 cps  
 Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 Window: 15.0 sec  
 Expected RT: 8.55 min  
 Relative RT: No  
 Type: Valley  
 Retention Time: 8.59 min  
 Area: 2.90e+005 counts  
 Height: 7.49e+005 cps  
 Start Time: 2.50 min  
 End Time: 8.94 min





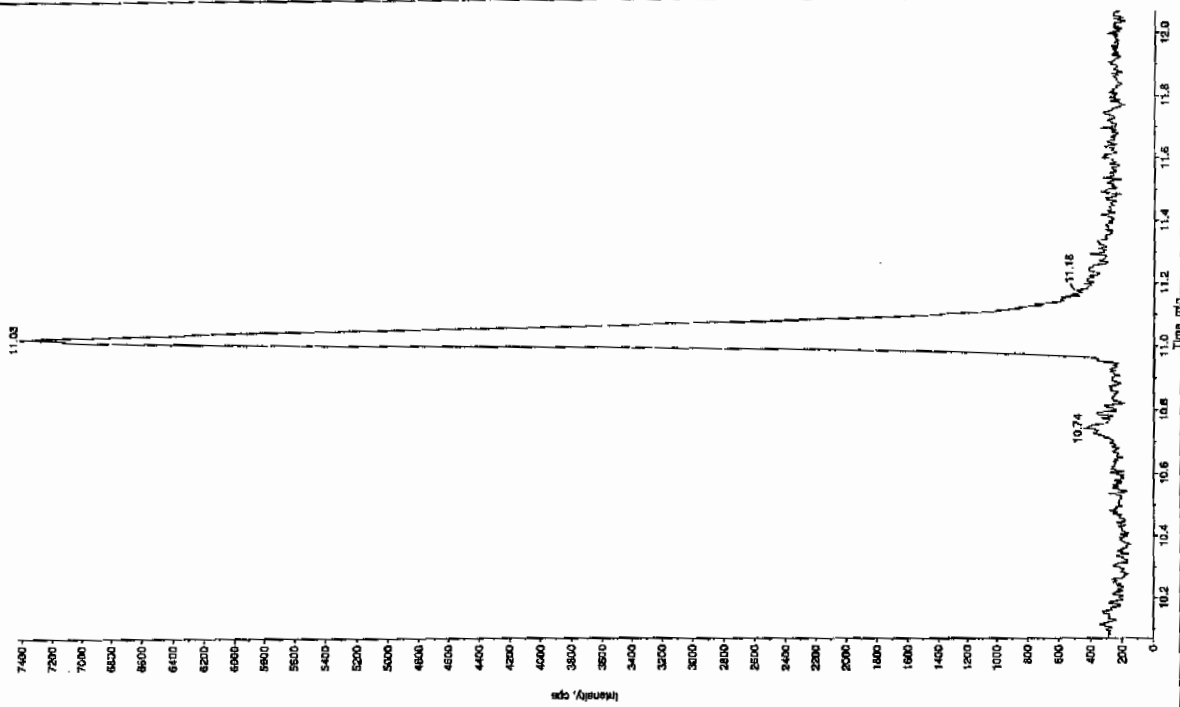
Sample Name: "245114004" Sample ID: "94425021" File: "EXS02100020.wif"  
 Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "156.046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 1:25:53 PM  
 Modified: No



Sample Name: "245114004" Sample ID: "94425021" File: "EXS02100020.wif"  
 Peak Name: "Tria(corazyl) phosphate" Mass(es): "369.191.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 1:25:53 PM  
 Modified: No



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8441

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114005

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208046a

Date Analyzed: 09-FEB-10 12:52

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208046a

Date: 09-Feb-2010

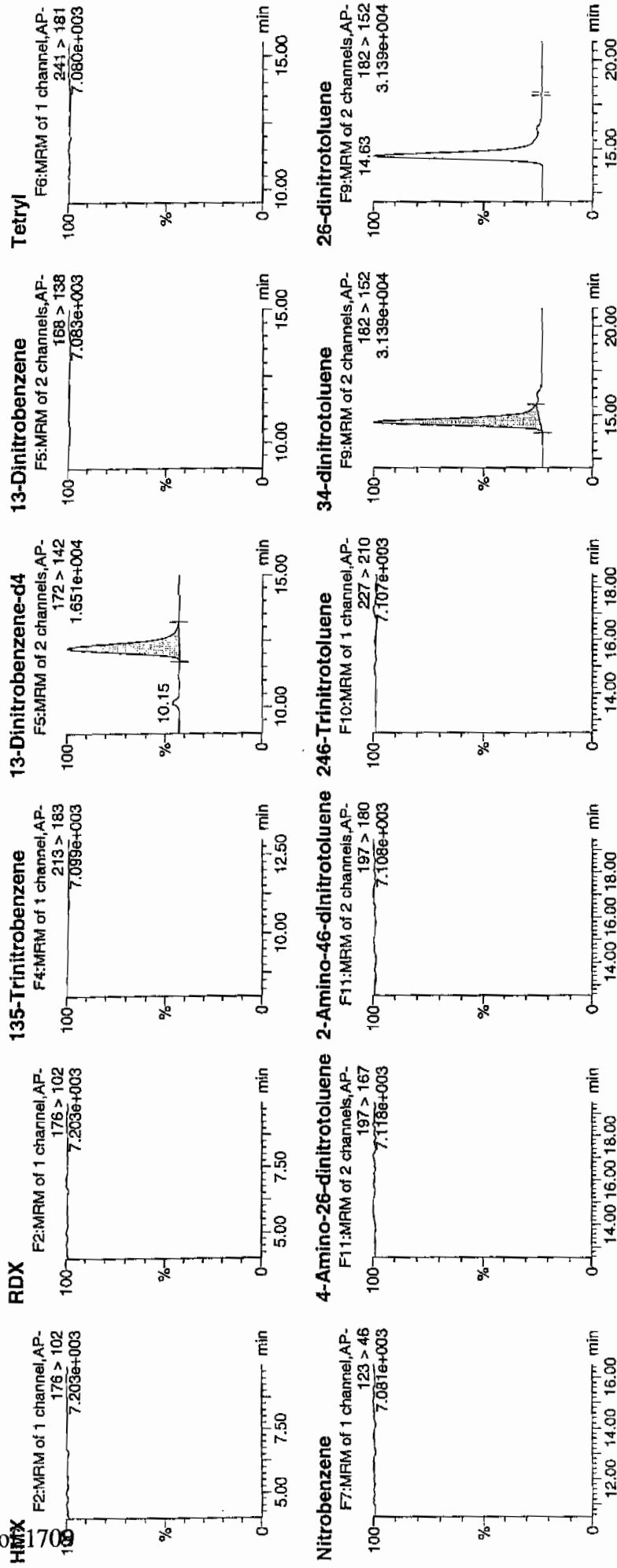
Time: 12:52:15

ID: 245114005

Val: 2:2,B

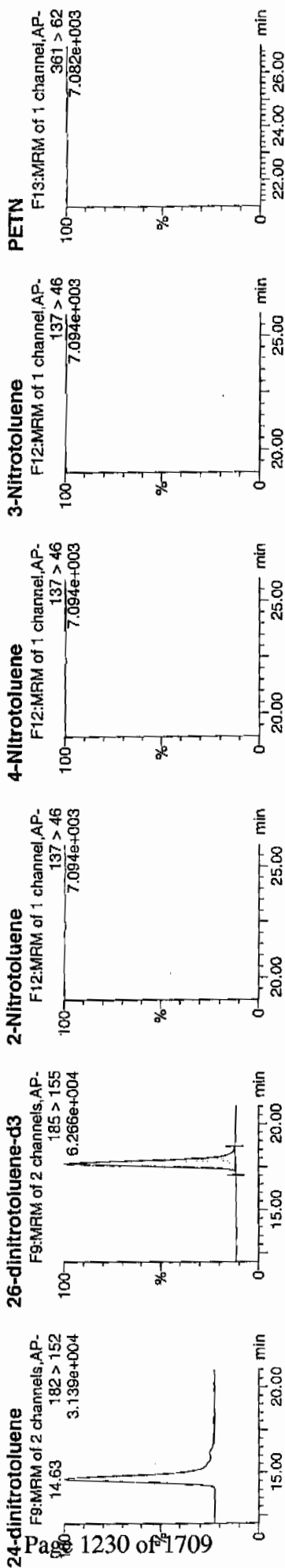
Handwritten: *WAV 944250 / SOL2 / 2*

Handwritten: *μoff 2/10/10*



Handwritten: *amine or nitrile*

Dataset: C:\MASSLYNX\New\_Exp\_PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



| ID        | Name                      | RT        | Area  | IS Area   | Abs. Resp | Response  | Flags | Mod | Time               | np/m     | %Sec  | %Dev | SN     |
|-----------|---------------------------|-----------|-------|-----------|-----------|-----------|-------|-----|--------------------|----------|-------|------|--------|
| 245114005 | HMX                       | 176 > 102 |       | 4016.617  |           |           |       |     |                    |          |       |      |        |
| 245114005 | RDX                       | 176 > 102 |       | 4016.617  |           |           |       |     |                    |          |       |      |        |
| 245114005 | 135-Trinitrobenzene       | 213 > 183 |       | 4016.617  |           |           |       |     |                    |          |       |      |        |
| 245114005 | 13-Dinitrobenzene-d4      | 172 > 142 | 12.20 | 4016.617  | 4016.617  | 4016.617  | bb    |     |                    | 624.7511 | 125.0 | 25.0 | 313.8  |
| 245114005 | 13-Dinitrobenzene         | 168 > 138 |       | 4016.617  |           |           |       |     |                    |          |       |      |        |
| 245114005 | Tetryl                    | 241 > 181 |       | 4016.617  |           |           |       |     |                    |          |       |      |        |
| 245114005 | Nitrobenzene              | 123 > 46  |       | 4016.617  |           |           |       |     |                    |          |       |      |        |
| 245114005 | 4-Amino-26-dinitrotoluene | 197 > 167 |       | 22101.346 |           |           |       |     |                    |          |       |      |        |
| 245114005 | 2-Amino-46-dinitrotoluene | 197 > 180 |       | 22101.346 |           |           |       |     |                    |          |       |      |        |
| 245114005 | 246-Trinitrotoluene       | 227 > 210 |       | 22101.346 |           |           |       |     |                    |          |       |      |        |
| 245114005 | 34-dinitrotoluene         | 182 > 152 | 14.63 | 11276.725 | 11276.725 | 255.114   | bb    |     |                    | 283.4625 | 113.4 | 13.4 | 445.0  |
| 245114005 | 26-dinitrotoluene         | 182 > 152 |       | 22101.346 |           |           |       |     |                    |          |       |      |        |
| 245114005 | 24-dinitrotoluene         | 182 > 152 |       | 22101.346 |           |           |       |     |                    |          |       |      |        |
| 245114005 | 26-dinitrotoluene-d3      | 185 > 155 | 17.72 | 22101.346 | 22101.346 | 22101.346 | bb    | MM- | 10-Feb-10 09:11:24 | 598.6383 | 119.7 | 19.7 | 2486.6 |
| 245114005 | 2-Nitrotoluene            | 137 > 46  |       | 22101.346 |           |           |       |     |                    |          |       |      |        |
| 245114005 | 4-Nitrotoluene            | 137 > 46  |       | 22101.346 |           |           |       |     |                    |          |       |      |        |
| 245114005 | 3-Nitrotoluene            | 137 > 46  |       | 22101.346 |           |           |       |     |                    |          |       |      |        |
| 245114005 | PETN                      | 361 > 62  |       | 22101.346 |           |           |       |     |                    |          |       |      |        |

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8441

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114005

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100021.wiff

Date Analyzed: 10-FEB-10 13:41

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

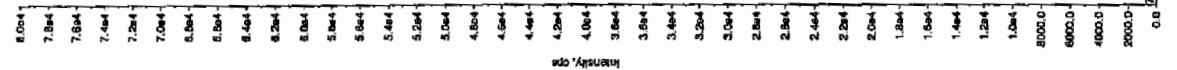
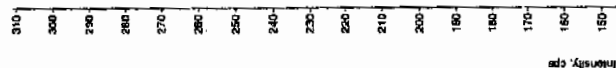
\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

See 21110

Sample Name: "245114005" Sample ID: "94425021LER" File: "EX502100021.will"  
 Peak Name: "TA15" Mass(es): "257204.9 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 1:41:34 PM  
 Modified: No



Ann. 21110

Sample Name: "245114005" Sample ID: "94425021.ERP" File: "EX502100021.will"

Peak Name: "26-Diamino-4-nitrobenzoate" Mass(es): "166.046.0 amu"

Comment: "LCX832125" Annotation: "

Sample Index: 1

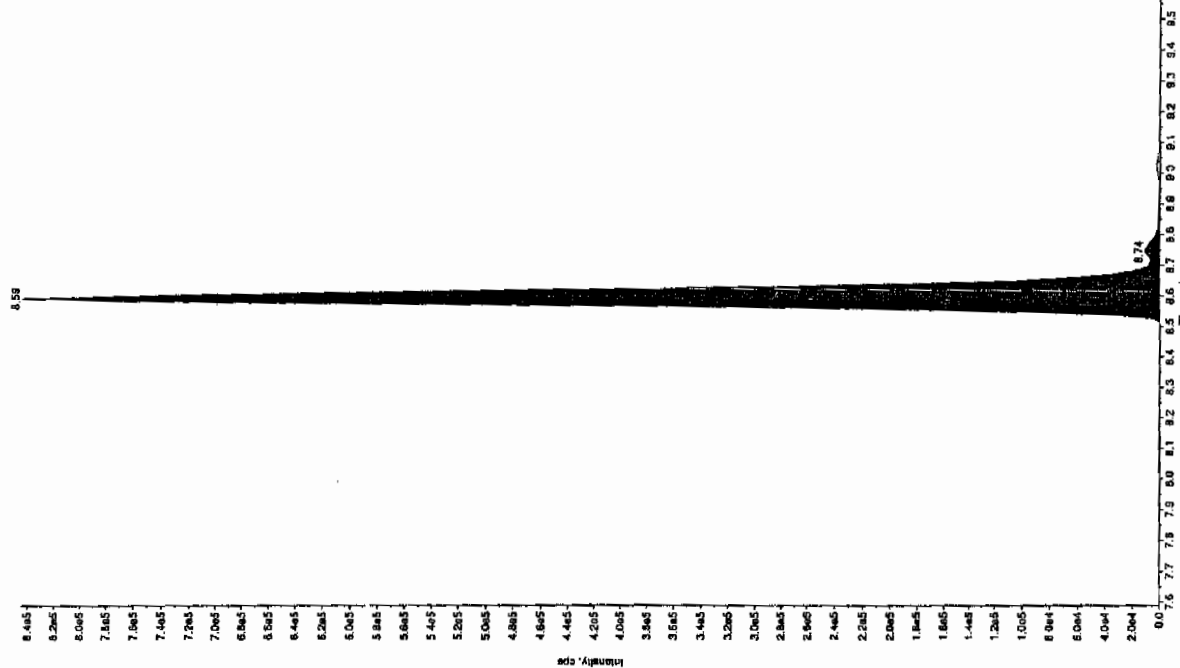
Sample Type: Unknown

Concentration: 0.00 ng/mL

Acq. Date: 2/10/2010

Acq. Time: 1:41:34 PM

Modified: No



Sample Name: "245114005" Sample ID: "94425021.ERP" File: "EX502100021.will"

Peak Name: "34-Dinitrobenzoate" Mass(es): "182.1715.9 amu"

Comment: "LCX832125" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: 332. ng/mL

Acq. Date: 2/10/2010

Acq. Time: 1:41:34 PM

Modified: No

Algorithm: IntelliQuan - IOA

n. Peak Height: 1460.00 cps

n. Peak Width: 9.00 sec

n. Peak Width: 3 points

n. Peak Width: 15.0 sec

n. Peak Width: 8.59 min

n. Peak Width: No

n. Peak Width: Valley

n. Peak Width: 3.17e+002 counts

n. Peak Width: 8.45e+005 cps

n. Peak Width: 8.48 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

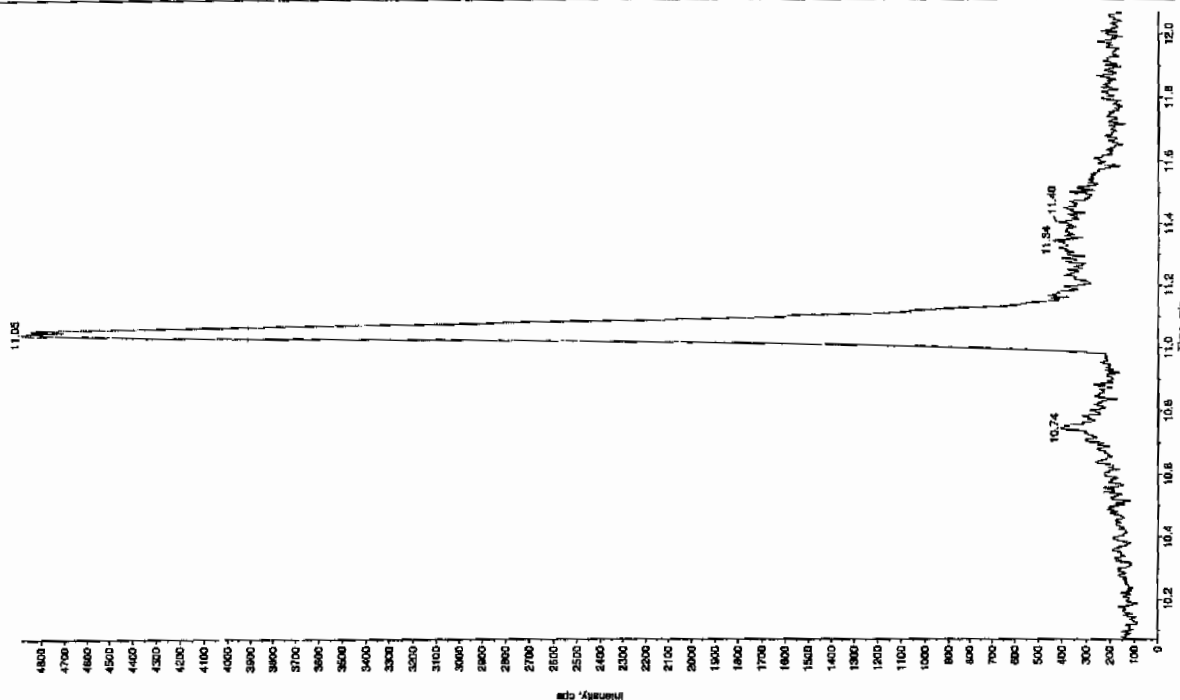
n. Peak Width: 8.95 min

n. Peak Width: 8.95 min

GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

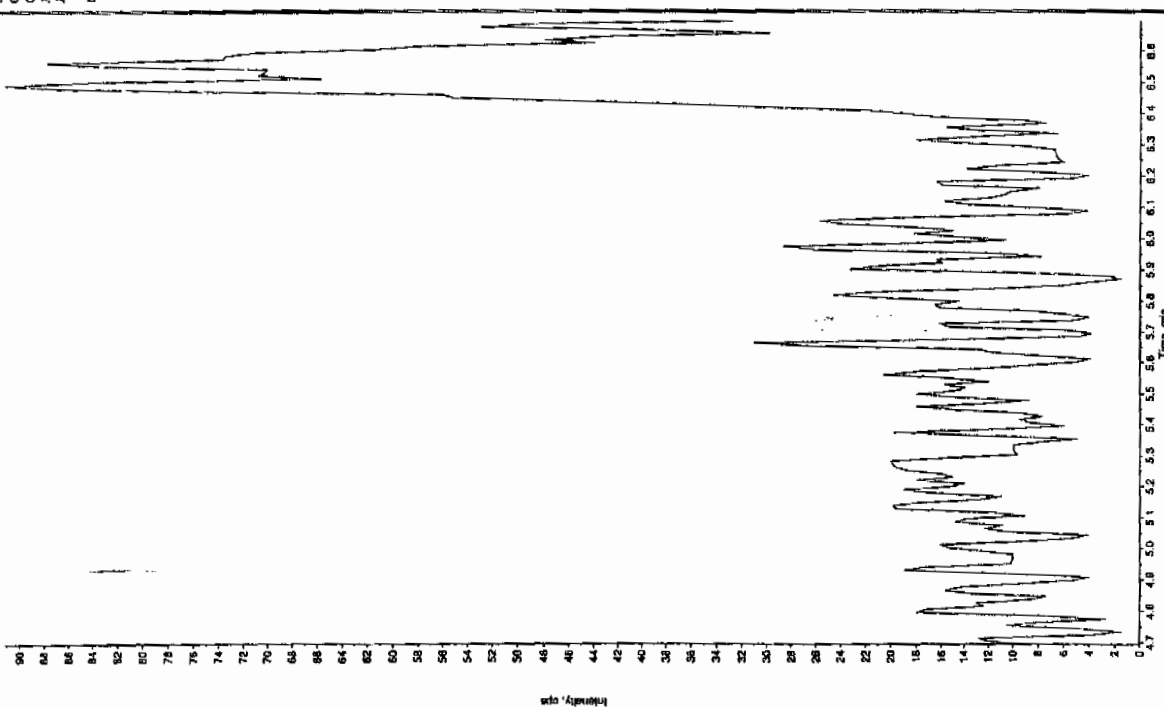
Sample Name: "245114005" Sample ID: "94425021.1" File: "EX502100021.wiff"  
 Peak Name: "Is(o-cresyl) phosphate" Mass(es): "369.191.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 1:41:34 PM  
 Modified: NC



Sample Name: "245114005" Sample ID: "94425021.1" File: "EX502100021.wiff"  
 Peak Name: "24-Dianino-6-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 1:41:34 PM  
 Modified: No





1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8413

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114006

Sample Amount 2

Moisture: 10.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208047a

Date Analyzed: 09-FEB-10 13:21

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

# Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Feb 10 09:25:16 2010, Page 17 of 79

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208047a

Date: 09-Feb-2010

Time: 13:21:44

ID: 245114006

Mat: 2:2,C

*not  
2/10/10*

*WAW 944250 / 21*

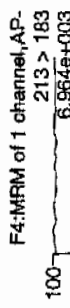
**RMX**



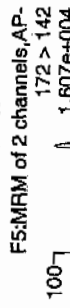
**RDX**



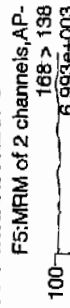
**135-Trinitrobenzene**



**13-Dinitrobenzene-d4**



**13-Dinitrobenzene**



**Tetryl**



**Nitrobenzene**



**4-Amino-26-dinitrotoluene**



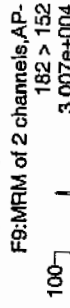
**2-Amino-46-dinitrotoluene**



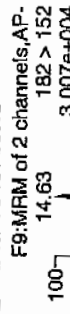
**246-Trinitrotoluene**



**34-dinitrotoluene**



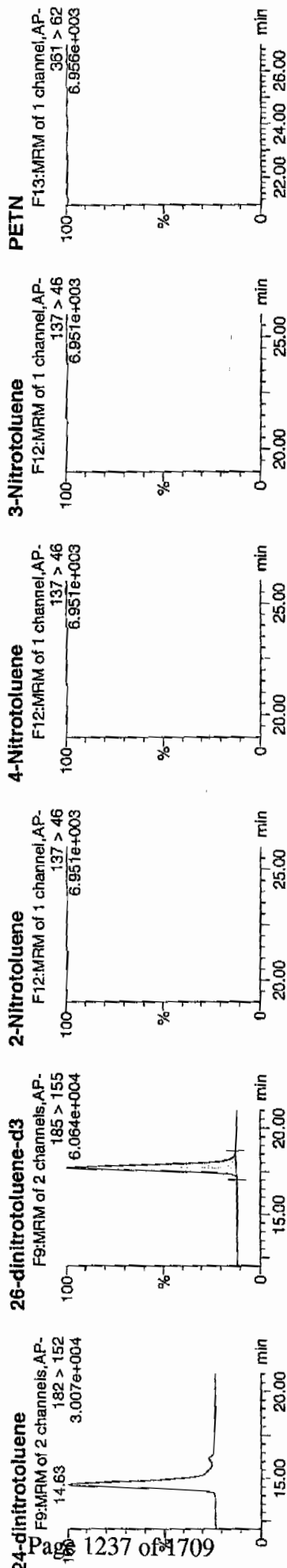
**26-dinitrotoluene**



*441 m  
22/10/10*

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



| ID        | Name                      | Trace     | RT    | Area      | IS Area   | Abs. Resp | Flags | Mod. Date | Mod. Time | %Red     | %Dev  | S/N    |
|-----------|---------------------------|-----------|-------|-----------|-----------|-----------|-------|-----------|-----------|----------|-------|--------|
| 245114006 | HMX                       | 176 > 102 |       |           | 3904.763  |           |       |           |           |          |       |        |
| 245114006 | RDX                       | 176 > 102 |       |           | 3904.763  |           |       |           |           |          |       |        |
| 245114006 | 135-Trinitrobenzene       | 213 > 183 |       |           | 3904.763  |           |       |           |           |          |       |        |
| 245114006 | 13-Dinitrobenzene-d4      | 172 > 142 | 12.20 | 3904.763  |           | 3904.763  | bb    |           |           | 607.3532 | 121.5 | 308.6  |
| 245114006 | 13-Dinitrobenzene         | 168 > 138 |       |           | 3904.763  |           |       |           |           |          |       |        |
| 245114006 | Tetryl                    | 241 > 181 |       |           | 3904.763  |           |       |           |           |          |       |        |
| 245114006 | Nitrobenzene              | 123 > 46  |       |           | 21222.330 |           |       |           |           |          |       |        |
| 245114006 | 4-Amino-26-dinitrotoluene | 197 > 167 |       |           | 21222.330 |           |       |           |           |          |       |        |
| 245114006 | 2-Amino-46-dinitrotoluene | 197 > 180 |       |           | 21222.330 |           |       |           |           |          |       |        |
| 245114006 | 246-Trinitrotoluene       | 227 > 210 |       |           | 21222.330 |           |       |           |           |          |       |        |
| 245114006 | 34-dinitrotoluene         | 182 > 152 | 14.63 | 10825.412 | 21222.330 | 10825.412 | bb    |           |           | 283.3888 | 113.4 | 655.7  |
| 245114006 | 26-dinitrotoluene         | 182 > 152 |       |           | 21222.330 |           |       |           |           |          |       |        |
| 245114006 | 24-dinitrotoluene         | 182 > 152 |       |           | 21222.330 |           |       |           |           |          |       |        |
| 245114006 | 26-dinitrotoluene-d3      | 185 > 155 | 17.72 | 21222.330 | 21222.330 | 21222.330 | bb    |           |           | 574.8293 | 115.0 | 1635.6 |
| 245114006 | 2-Nitrotoluene            | 137 > 46  |       |           | 21222.330 |           |       |           |           |          |       |        |
| 245114006 | 4-Nitrotoluene            | 137 > 46  |       |           | 21222.330 |           |       |           |           |          |       |        |
| 245114006 | 3-Nitrotoluene            | 137 > 46  |       |           | 21222.330 |           |       |           |           |          |       |        |
| 245114006 | PETN                      | 361 > 62  |       |           | 21222.330 |           |       |           |           |          |       |        |

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8413

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114006

Sample Amount 2

Moisture: 10.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100022.wiff

Date Analyzed: 10-FEB-10 13:57

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

|            |   |                                    |   |          |
|------------|---|------------------------------------|---|----------|
| Instrument | X | <u>Concentrated Extract Volume</u> | X | Dilution |
| Value      |   | <u>Sample Amount</u>               |   | Factor   |

Jan 21/11/10

Sample Name: "243114065" Sample ID: "94425021ER" File: "EXS02100022.wif"

Peak Name: "1A1B" Mass(es): "257.2204.9 amu"

Comment: "LCX832125" Annotation: "

File Index: 1

Sample Type: Unknown

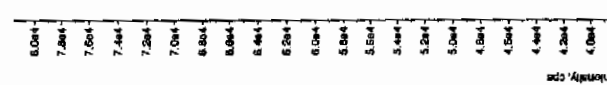
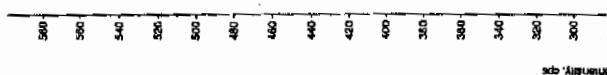
Concentration: 0.00 ng/mL

Calculated Conc: 2/10/2010

Acq. Date: 1:57:17 PM

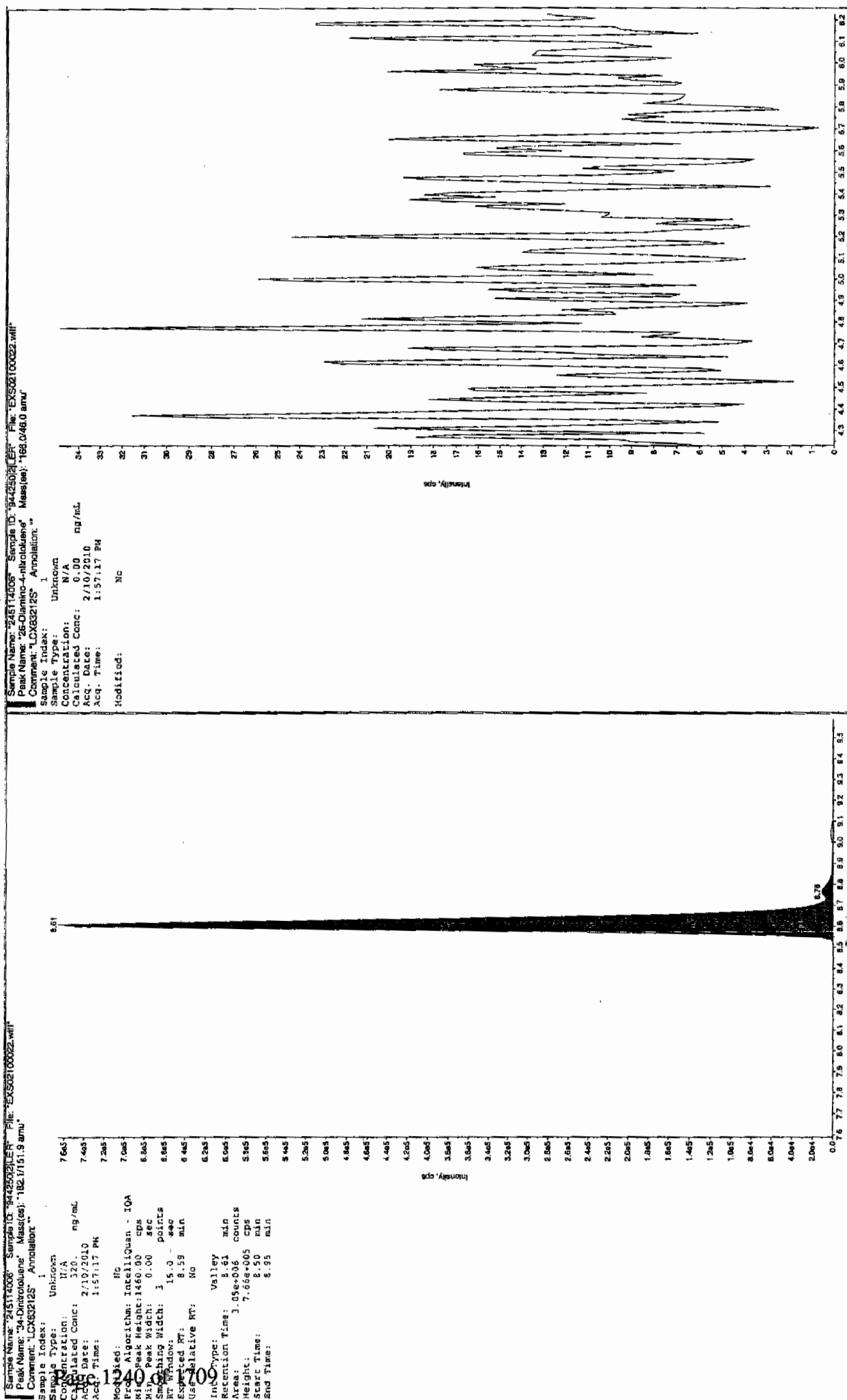
Acq. Time: 110

Modified: No



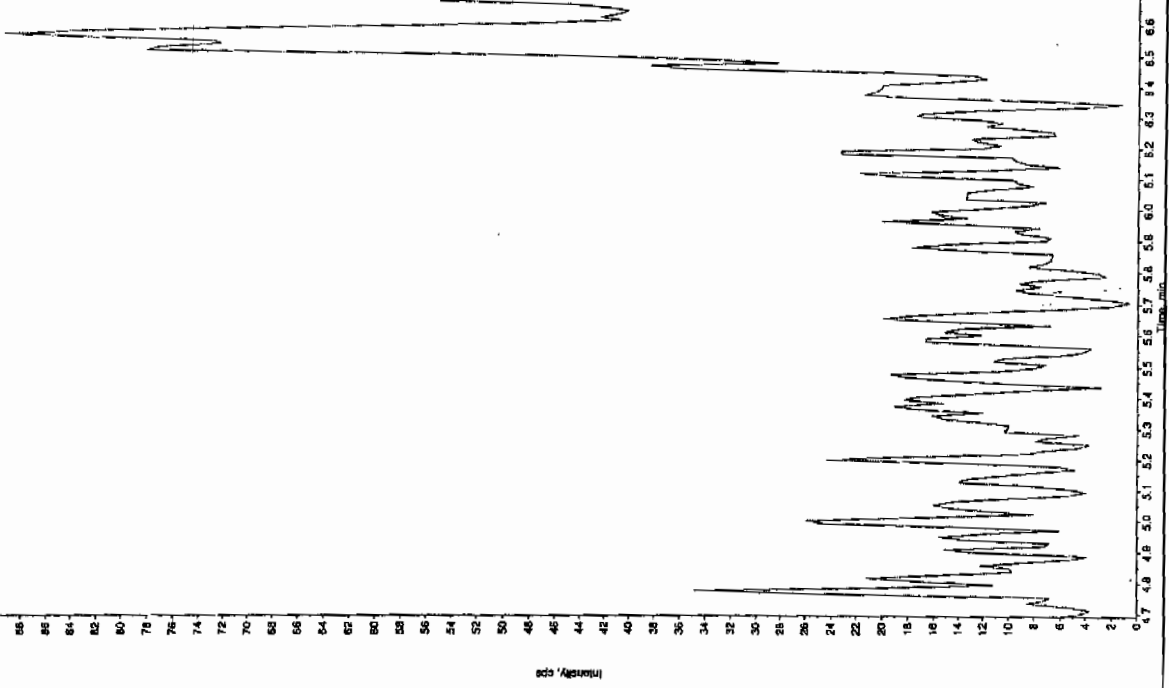
JEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Jan 21/11/10



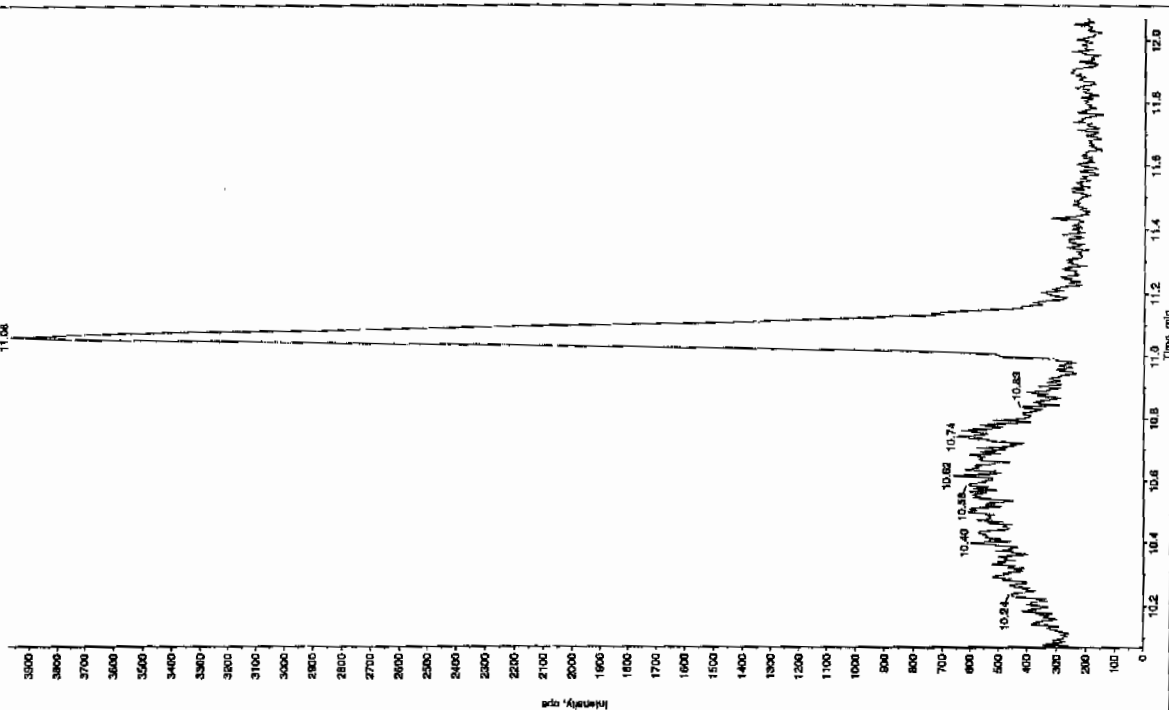
Sample Name: "245114006" Sample ID: "94425021.ER" File: "EX502100022.wif"  
 Peak Name: "24-Diamino-5-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 1:57:17 PM  
 Modified: No



Sample Name: "245114006" Sample ID: "94425021.ER" File: "EX502100022.wif"  
 Peak Name: "bis(o-cresyl) phosphite" Mass(es): "365.191.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 1:57:17 PM  
 Modified: No



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8425

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114007

Sample Amount 2

Moisture: 10.4

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208048a

Date Analyzed: 09-FEB-10 13:51

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor



Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208048a

Date: 09-Feb-2010

Time: 13:51:13

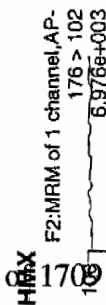
ID: 245114007

Vol: 2:2,D

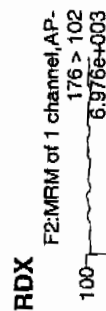
1077  
2/10/10

LANU 944250 / 21 / 2007

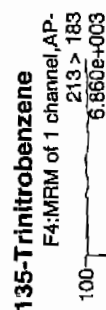
HMX



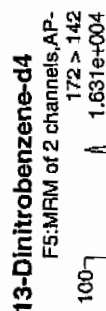
RDX



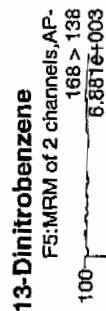
135-Trinitrobenzene



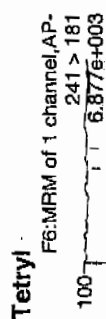
13-Dinitrobenzene-d4



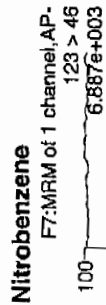
13-Dinitrobenzene



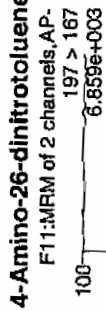
Tetryl



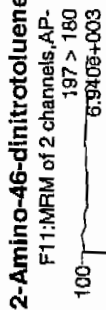
Nitrobenzene



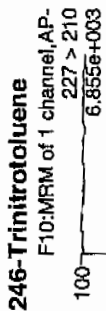
4-Amino-26-dinitrotoluene



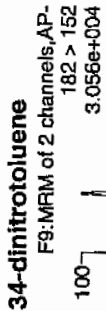
2-Amino-46-dinitrotoluene



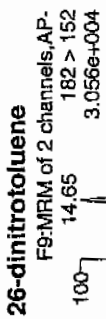
246-Trinitrotoluene



34-dinitrotoluene

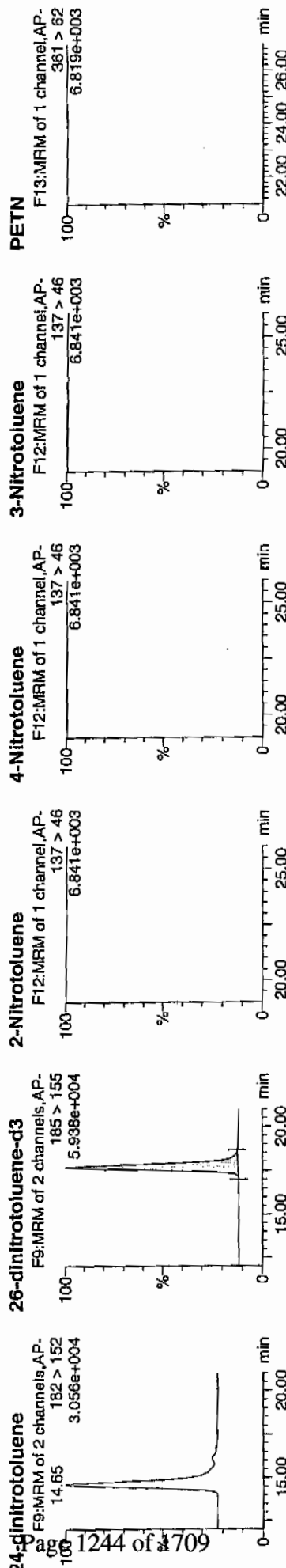


26-dinitrotoluene



20 m or 10/10

Dataset: C:\MASSLYNX\New\_Exp\PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



| ID        | Name                      | Trace     | RT    | Area      | IS Area   | Abs.Resp  | Response  | Flags | Mod.Date | Mod.Time | Area mL  | %Rec  | %Dev | S/N    |
|-----------|---------------------------|-----------|-------|-----------|-----------|-----------|-----------|-------|----------|----------|----------|-------|------|--------|
| 245114007 | HMx                       | 176 > 102 |       | 3957.252  | 3957.252  |           |           |       |          |          |          |       |      |        |
| 245114007 | RDX                       | 176 > 102 |       | 3957.252  | 3957.252  |           |           |       |          |          |          |       |      |        |
| 245114007 | 135-Trinitrobenzene       | 213 > 183 |       | 3957.252  | 3957.252  |           |           |       |          |          |          |       |      |        |
| 245114007 | 13-Dinitrobenzene-d4      | 172 > 142 | 12.20 | 3957.252  | 3957.252  | 3957.252  | 3957.252  | bb    |          |          | 615.5174 | 123.1 | 23.1 | 432.0  |
| 245114007 | 13-Dinitrobenzene         | 168 > 138 |       |           |           |           |           |       |          |          |          |       |      |        |
| 245114007 | Tetryl                    | 241 > 181 |       |           |           |           |           |       |          |          |          |       |      |        |
| 245114007 | Nitrobenzene              | 123 > 46  |       |           |           |           |           |       |          |          |          |       |      |        |
| 245114007 | 4-Amino-26-dinitrotoluene | 197 > 167 |       |           |           |           |           |       |          |          |          |       |      |        |
| 245114007 | 2-Amino-46-dinitrotoluene | 197 > 180 |       |           |           |           |           |       |          |          |          |       |      |        |
| 245114007 | 246-Trinitrotoluene       | 227 > 210 |       |           |           |           |           |       |          |          |          |       |      |        |
| 245114007 | 34-dinitrotoluene         | 182 > 152 | 14.65 | 11090.921 | 20840.514 | 11090.921 | 266.090   | bb    |          |          | 295.6586 | 118.3 | 18.3 | 543.2  |
| 245114007 | 26-dinitrotoluene         | 182 > 152 |       |           |           |           |           |       |          |          |          |       |      |        |
| 245114007 | 24-dinitrotoluene         | 182 > 152 |       |           |           |           |           |       |          |          |          |       |      |        |
| 245114007 | 26-dinitrotoluene-d3      | 185 > 155 | 17.71 | 20840.514 | 20840.514 | 20840.514 | 20840.514 | bb    |          |          | 564.4874 | 112.9 | 12.9 | 1771.3 |
| 245114007 | 2-Nitrotoluene            | 137 > 46  |       |           |           |           |           |       |          |          |          |       |      |        |
| 245114007 | 4-Nitrotoluene            | 137 > 46  |       |           |           |           |           |       |          |          |          |       |      |        |
| 245114007 | 3-Nitrotoluene            | 137 > 46  |       |           |           |           |           |       |          |          |          |       |      |        |
| 245114007 | PETN                      | 361 > 62  |       |           |           |           |           |       |          |          |          |       |      |        |

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8425

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114007

Sample Amount 2

Moisture: 10.4

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100023.wiff

Date Analyzed: 10-FEB-10 14:12

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

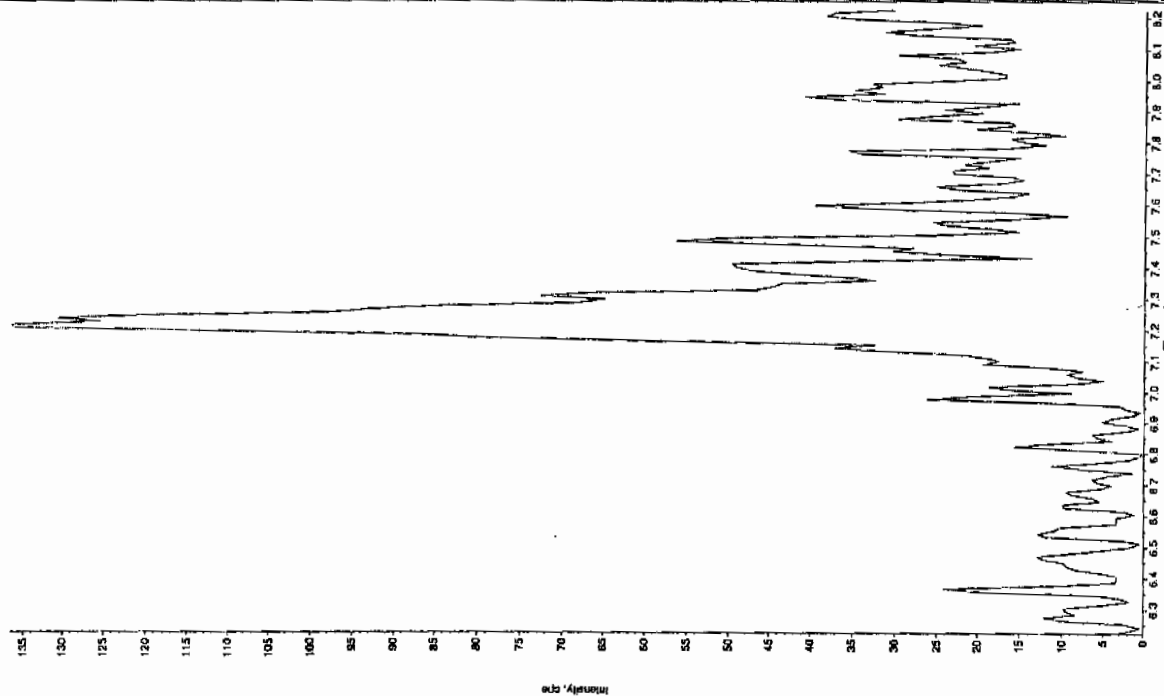
\*Concentration =

|                  |   |                             |   |                 |
|------------------|---|-----------------------------|---|-----------------|
| Instrument Value | X | Concentrated Extract Volume | X | Dilution Factor |
|                  |   | Sample Amount               |   |                 |

See 2/11/10

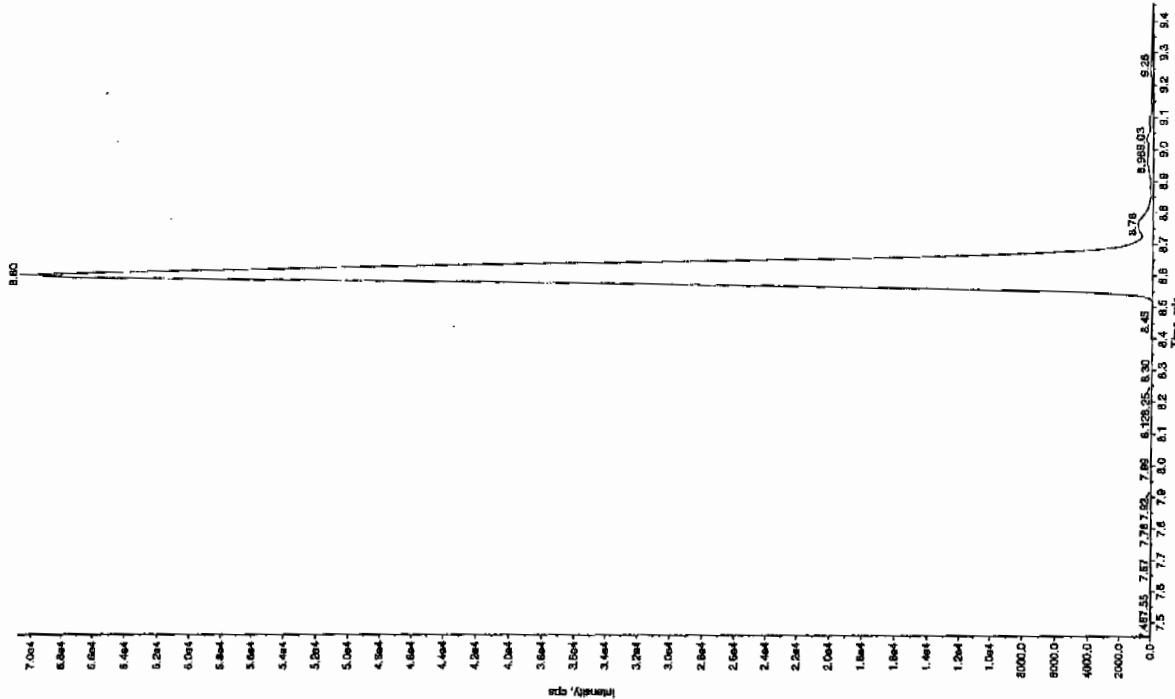
Sample Name: "245114007" Sample ID: "94425021.0" File: "EXS02100023.will"  
 Peak Name: "TAIB" Mass(es): "257.2204.9 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 2/10/2010  
 Acq. Date: 2/12/59 PM  
 Modified: No



Sample Name: "245114007" Sample ID: "94425021.0" File: "EXS02100023.will"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 2/10/2010  
 Acq. Date: 2/12/59 PM  
 Modified: No

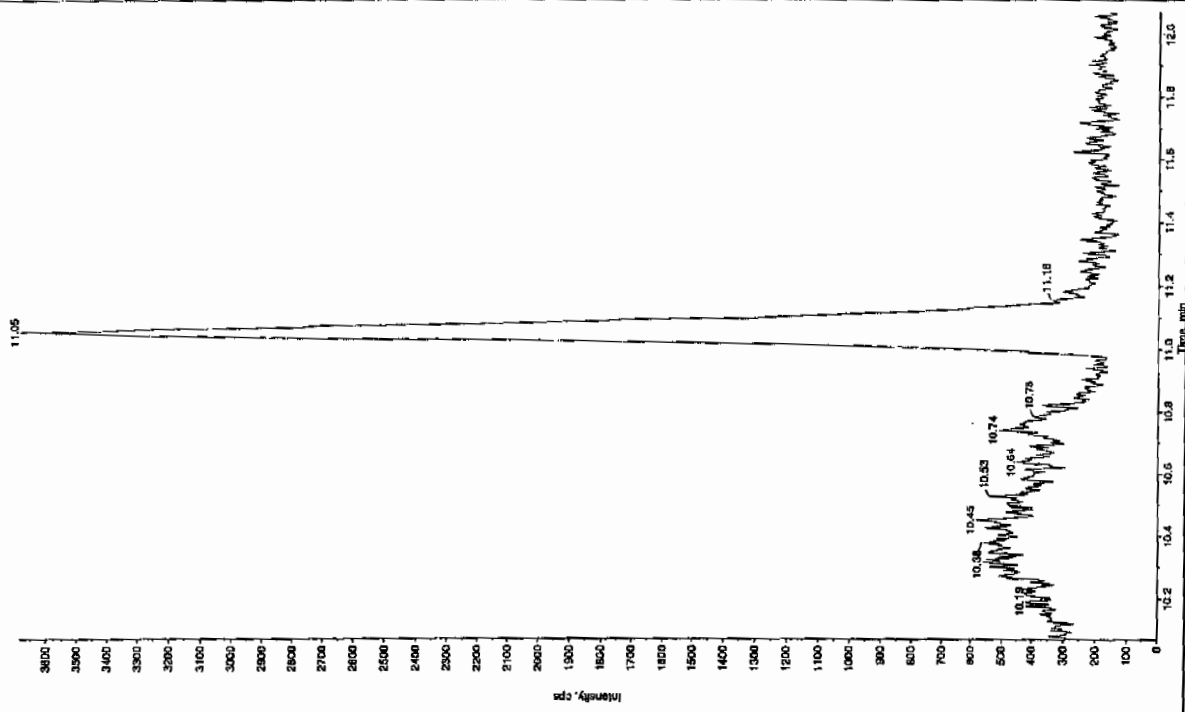


See 2/11/10



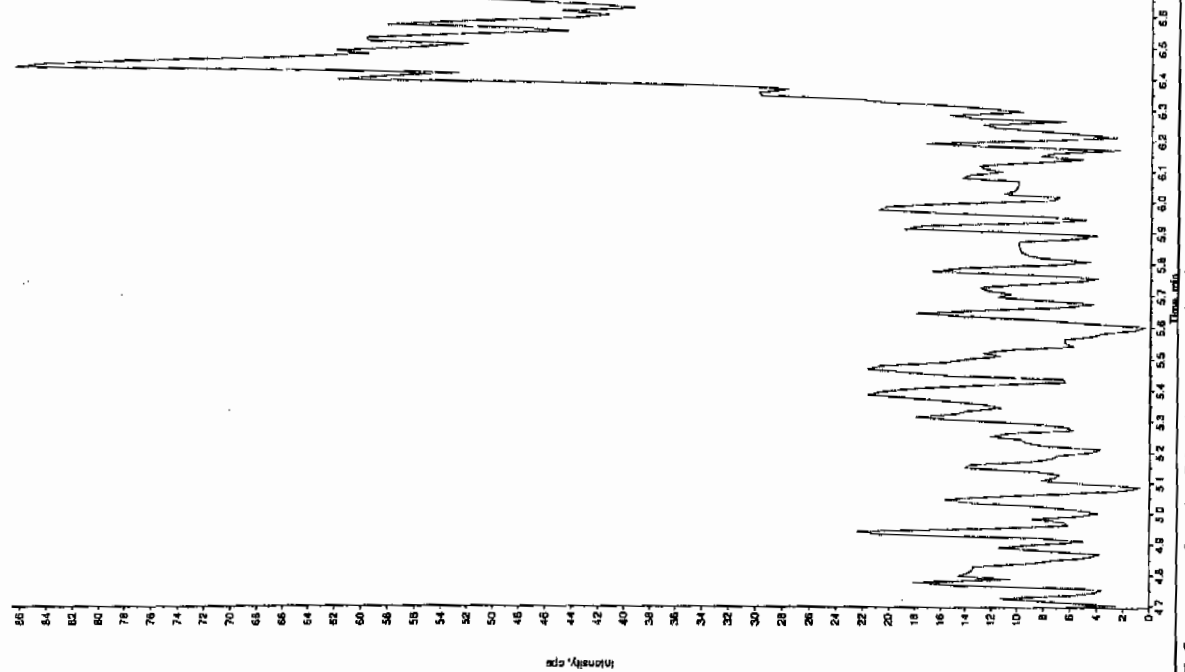
Sample Name: 245114007 Sample ID: 84425021.ELT File: EX502100023.will  
 Peak Name: bis(o-cresyl) phosphate Mass(es): 369.1810 amu  
 Comment: LCX832125 Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 2:12:59 PM  
 Modified: No



Sample Name: 245114007 Sample ID: 84425021.ELT File: EX502100023.will  
 Peak Name: 24-Diamino-Entolobene Mass(es): 186.0450 amu  
 Comment: LCX832125 Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 2:12:59 PM  
 Modified: No



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8422

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114008

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208052a

Date Analyzed: 09-FEB-10 15:49

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X Concentrated Extract Volume Sample Amount X Dilution Factor

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\data\EXP0208052a

Date: 09-Feb-2010

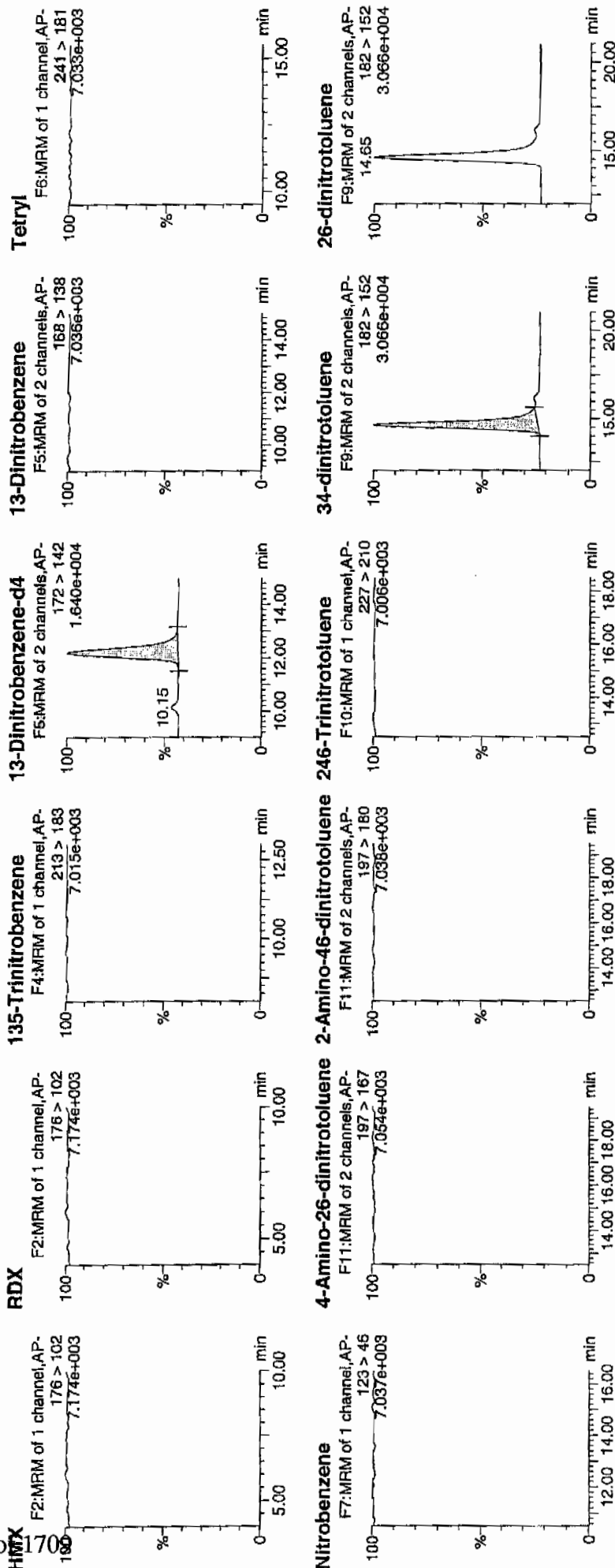
Time: 15:49:14

ID: 245114008

Vial: 2:2,E

10/10  
2/10/10

WAW 944250 | Sars | 21



ARM on 10/10

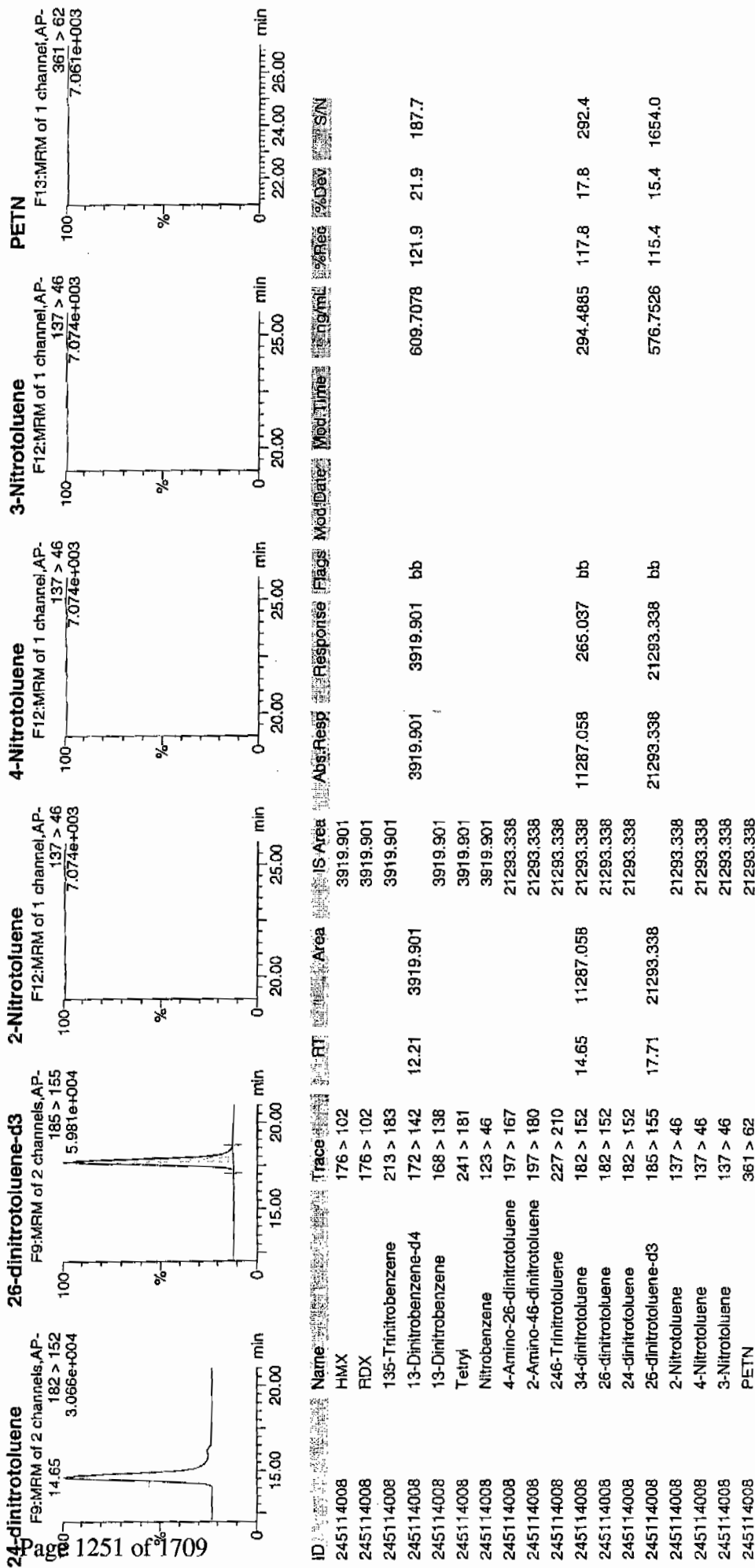


# Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Feb 10 09:25:16 2010, Page 28 of 79

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8422

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114008

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100027.wiff

Date Analyzed: 10-FEB-10 15:15

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

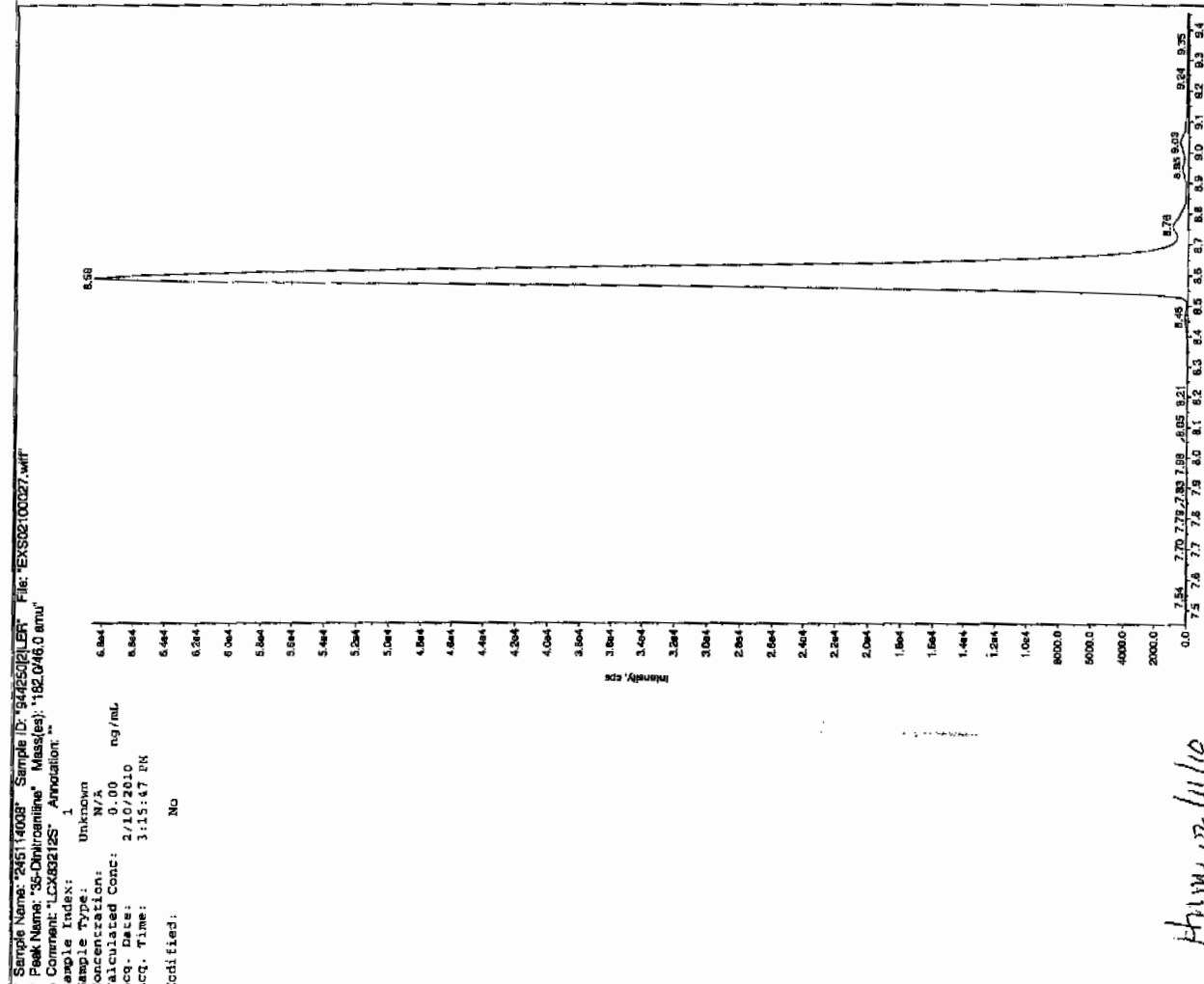
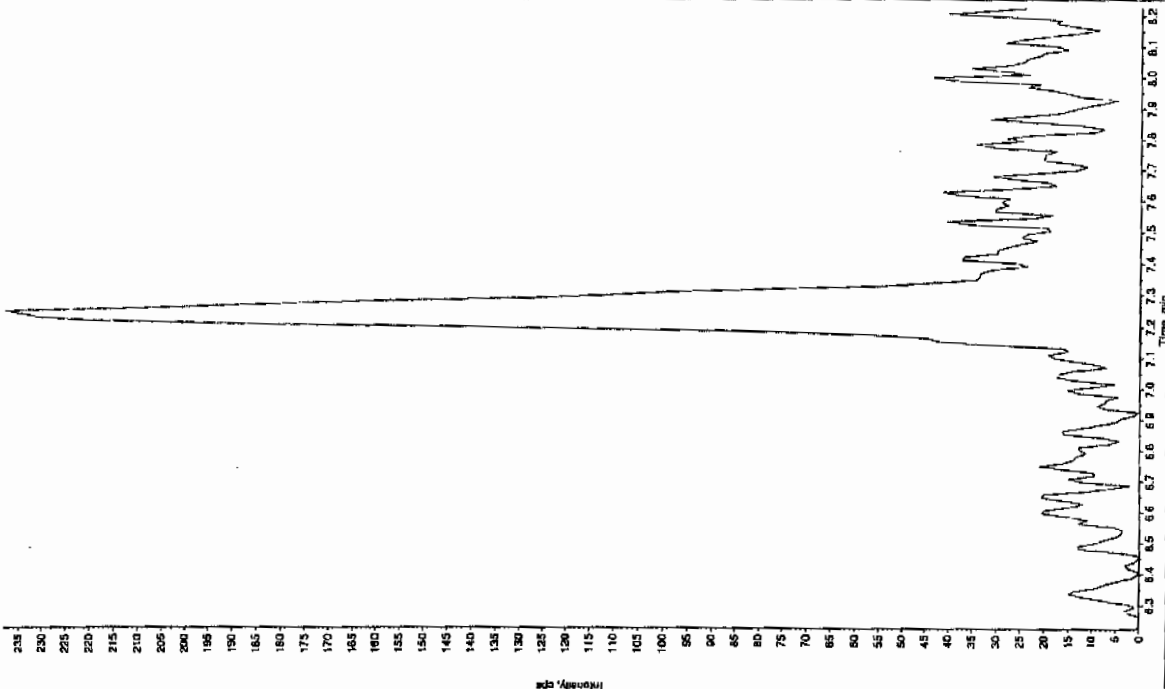
\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Jan 21/10

Sample Name: "245114008" Sample ID: "9442502" File: "EX502100027.wif"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 3:15:47 PM  
 Modified: No

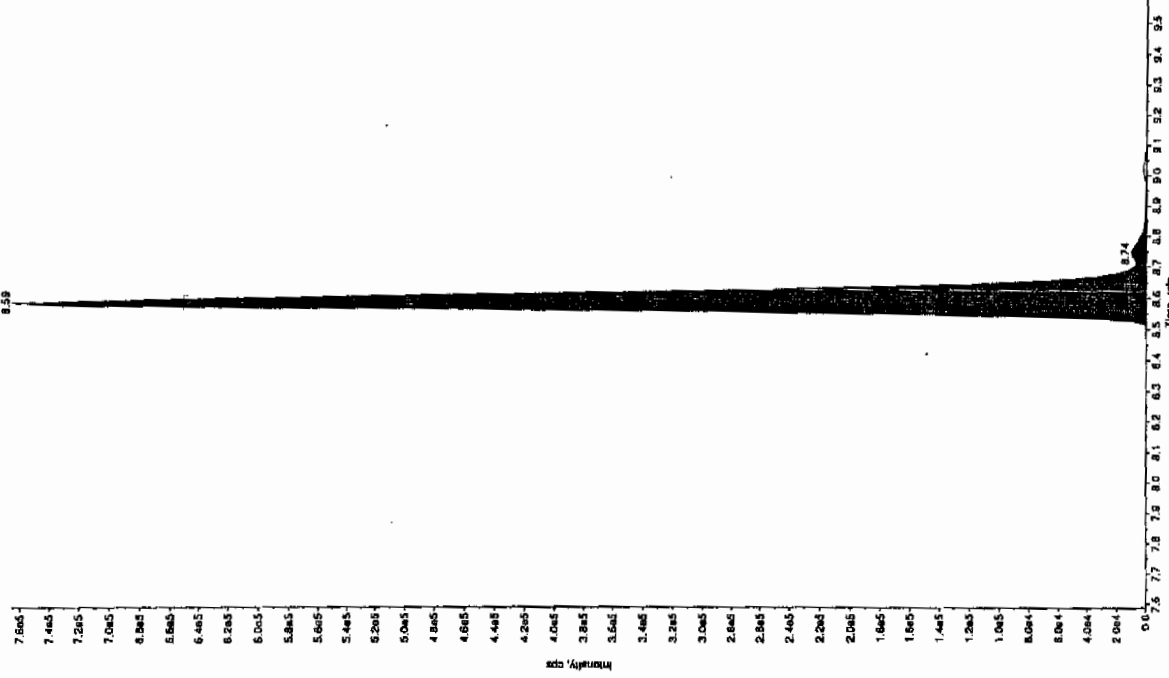


Jan 22/10

Sample Name: "245114008" Sample ID: "94425021ER" File: "EXS02100027.wil"  
 Peak Name: "34-Dihydrobenzofuran" Mass(es): "182.1/151.9 amu"  
 Comment: "LCX83212S" Annotation: ""

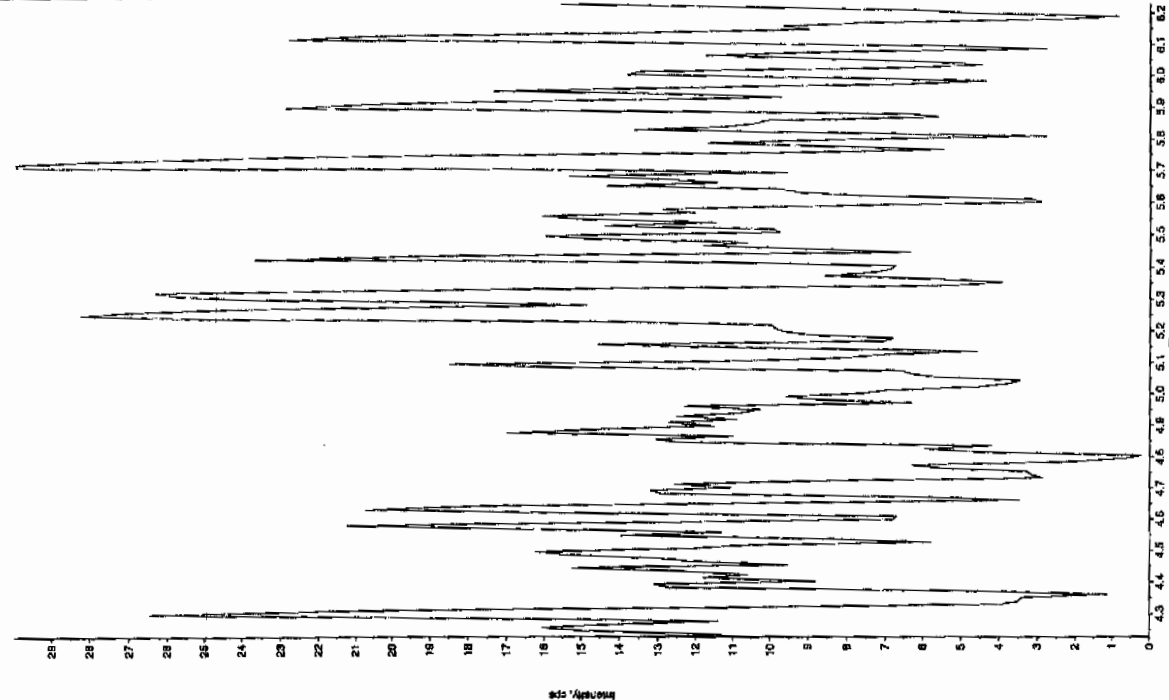
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 3:15:47 PM  
 Modified: No

Peak Data:  
 Peak: 1  
 Retention Time: 8.59 min  
 Peak Height: 1450.00 cps  
 Peak Width: 0.00 sec  
 Peak Area: 15.0 points  
 Peak RT: 8.59 min  
 Peak RT: No  
 L. Type: Valley  
 L. Retention Time: 8.59 min  
 L. Peak Height: 1450.00 counts  
 L. Peak Width: 0.00 sec  
 L. Peak Area: 15.0 points  
 L. Peak RT: 8.59 min  
 L. Peak RT: No



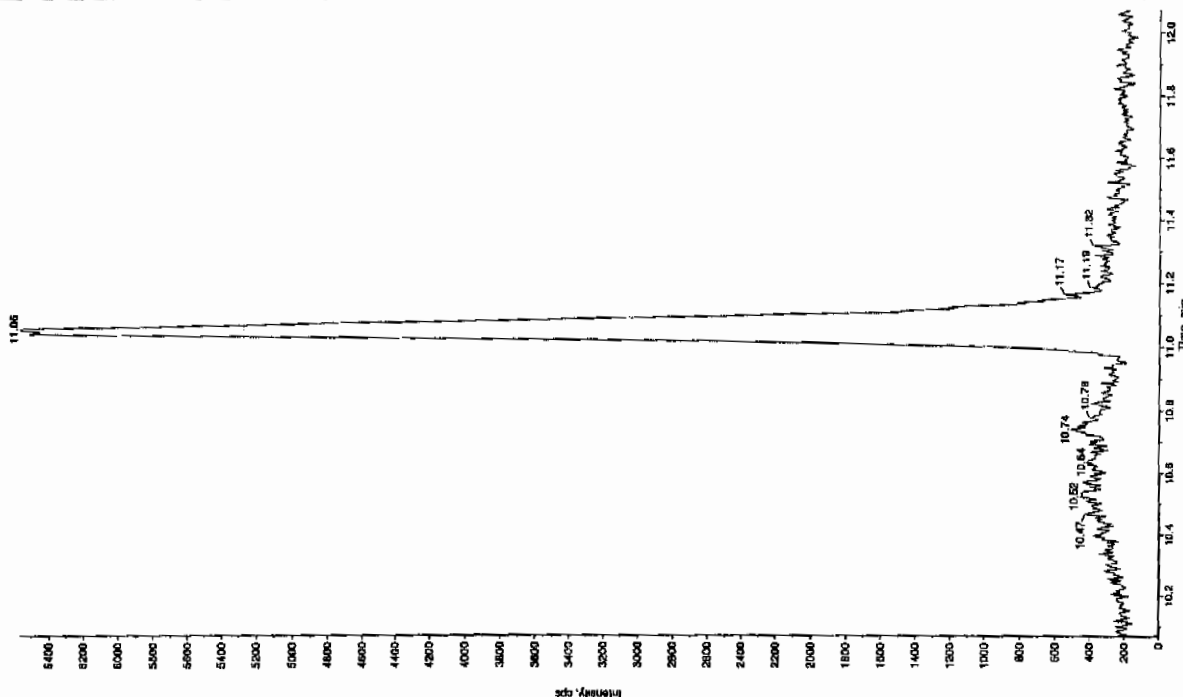
Sample Name: "245114008" Sample ID: "94425021ER" File: "EXS02100027.wil"  
 Peak Name: "28-Diamino-4-phenylene" Mass(es): "166.0/166.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 3:15:47 PM  
 Modified: No



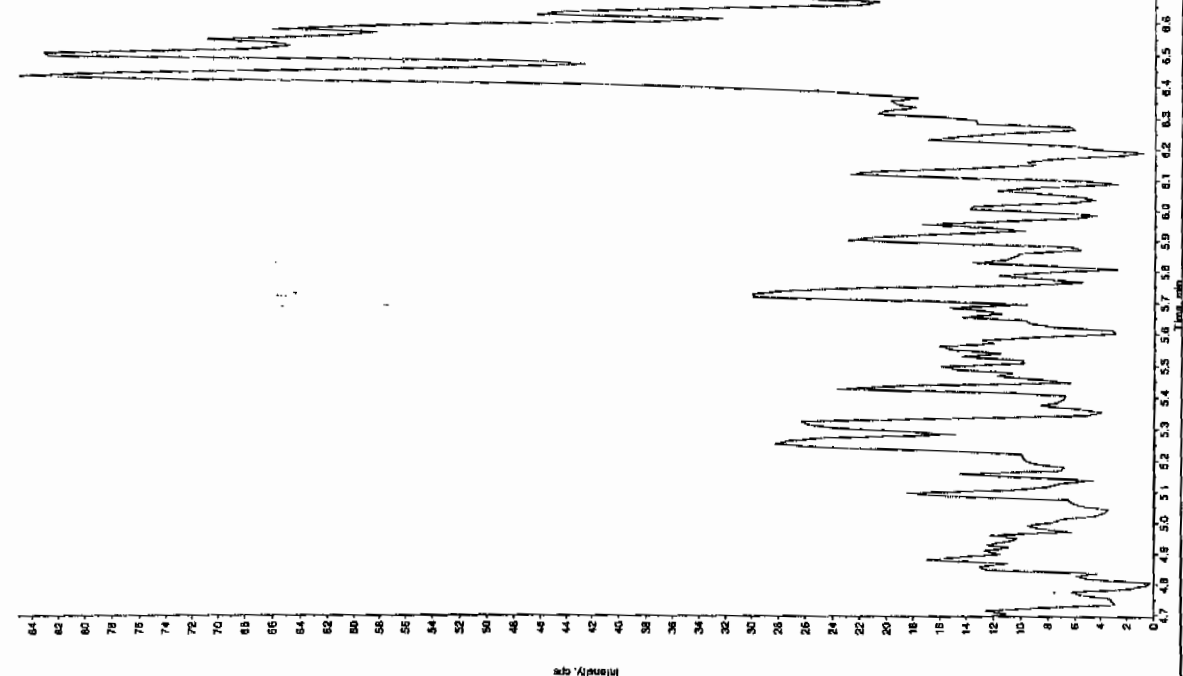
Sample Name: "245114008" Sample ID: "944250121" File: "EXS02100027.wif"  
 Peak Name: "tris(o-cresyl) phosphate" Mass(es): "359.191.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 3:15:47 PM  
 Modified: No



Sample Name: "245114008" Sample ID: "944250121" File: "EXS02100027.wif"  
 Peak Name: "24-Dinitro-6-nitrotoluene" Mass(es): "186.046.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 3:15:47 PM  
 Modified: No



GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8417

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114009

Sample Amount 2

Moisture: 5.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208053a

Date Analyzed: 09-FEB-10 16:18

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Quantify Sample Report  
SEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208053a

Date: 09-Feb-2010

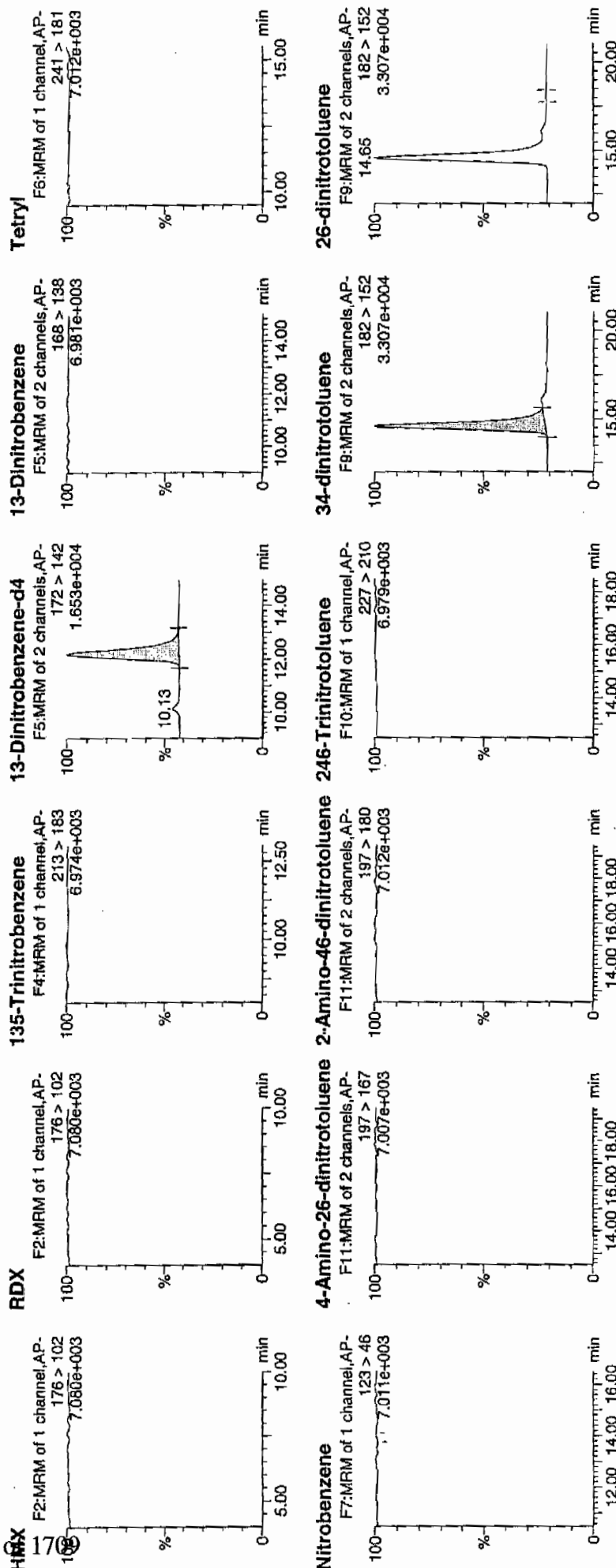
Time: 16:18:45

ID: 245114009

Ver: 2:2,F

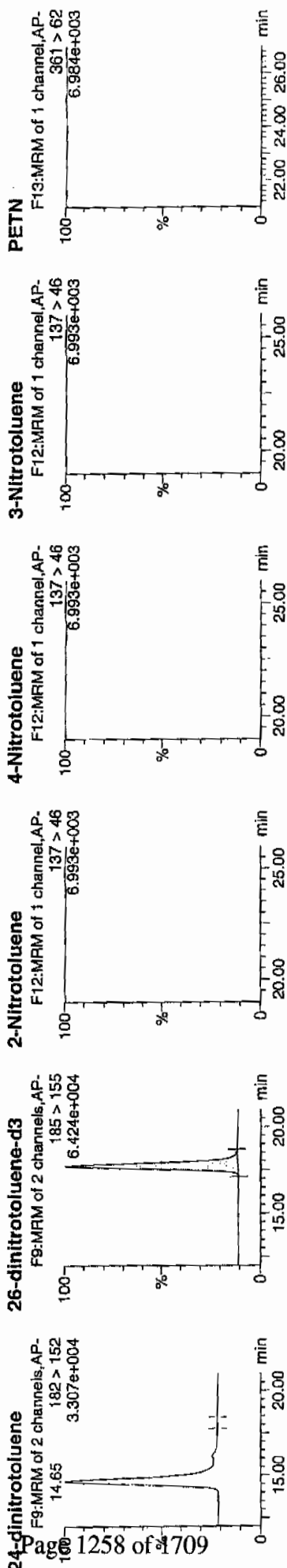
1077  
2/10/10

944250 / 21



Amr 02/10/10

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



| ID        | Name                      | Trace     | RT    | Area      | LS Area   | Abs/Resp  | Response  | Flags | Mod Time | Mod Date           | %Rec     | %Dev  | SN          |
|-----------|---------------------------|-----------|-------|-----------|-----------|-----------|-----------|-------|----------|--------------------|----------|-------|-------------|
| 245114009 | HMX                       | 176 > 102 |       |           | 4045.127  |           |           |       |          |                    |          |       |             |
| 245114009 | RDX                       | 176 > 102 |       |           | 4045.127  |           |           |       |          |                    |          |       |             |
| 245114009 | 135-Trinitrobenzene       | 213 > 183 |       |           | 4045.127  |           |           |       |          |                    |          |       |             |
| 245114009 | 13-Dinitrobenzene-d4      | 172 > 142 | 12.20 | 4045.127  | 4045.127  | 4045.127  | 4045.127  | bb    |          |                    | 629.1856 | 125.8 | 25.8 262.3  |
| 245114009 | 13-Dinitrobenzene         | 168 > 138 |       |           | 4045.127  |           |           |       |          |                    |          |       |             |
| 245114009 | Tetryl                    | 241 > 181 |       |           | 4045.127  |           |           |       |          |                    |          |       |             |
| 245114009 | Nitrobenzene              | 123 > 46  |       |           | 4045.127  |           |           |       |          | 10-Feb-10 09:17:05 |          |       |             |
| 245114009 | 4-Amino-26-dinitrotoluene | 197 > 167 |       |           | 22834.461 |           |           |       |          |                    |          |       |             |
| 245114009 | 2-Amino-46-dinitrotoluene | 197 > 180 |       |           | 22834.461 |           |           |       |          |                    |          |       |             |
| 245114009 | 246-Trinitrotoluene       | 227 > 210 |       |           | 22834.461 |           |           |       |          |                    |          |       |             |
| 245114009 | 34-dinitrotoluene         | 182 > 152 | 14.65 | 12368.715 | 22834.461 | 12368.715 | 270.834   | bb    |          |                    | 300.9298 | 120.4 | 20.4 1097.0 |
| 245114009 | 26-dinitrotoluene         | 182 > 152 |       |           | 22834.461 |           |           |       |          | 10-Feb-10 09:11:42 |          |       |             |
| 245114009 | 24-dinitrotoluene         | 182 > 152 |       |           | 22834.461 |           |           |       |          | 10-Feb-10 09:09:20 |          |       |             |
| 245114009 | 26-dinitrotoluene-d3      | 185 > 155 | 17.71 | 22834.461 | 22834.461 | 22834.461 | 22834.461 | bb    |          |                    | 618.4955 | 123.7 | 23.7 1810.3 |
| 245114009 | 2-Nitrotoluene            | 137 > 46  |       |           | 22834.461 |           |           |       |          |                    |          |       |             |
| 245114009 | 4-Nitrotoluene            | 137 > 46  |       |           | 22834.461 |           |           |       |          |                    |          |       |             |
| 245114009 | 3-Nitrotoluene            | 137 > 46  |       |           | 22834.461 |           |           |       |          |                    |          |       |             |
| 245114009 | PETN                      | 361 > 62  |       |           | 22834.461 |           |           |       |          |                    |          |       |             |



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8417

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114009

Sample Amount 2

Moisture: 5.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100028.wiff

Date Analyzed: 10-FEB-10 15:31

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

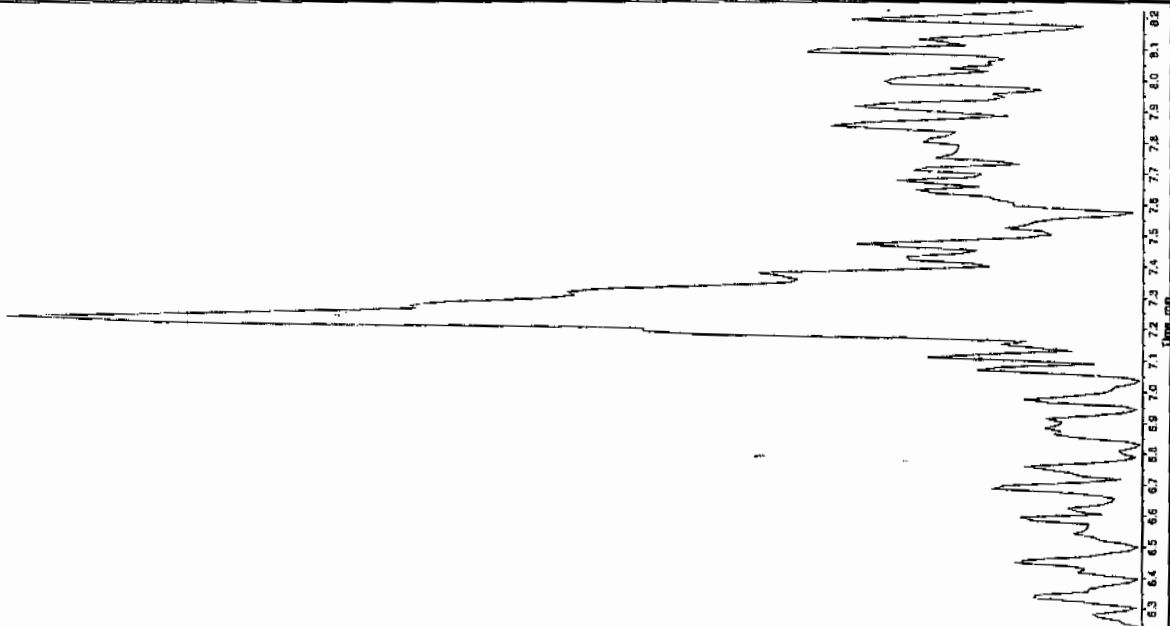
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Sen 2/11/10

Sample Name: "24511403" Sample ID: "944250" File: "EXS02100028.wif"  
 Peak Name: "TATB" Mass(es): "257 2204.9 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 3:31:31 PM  
 Modified: No

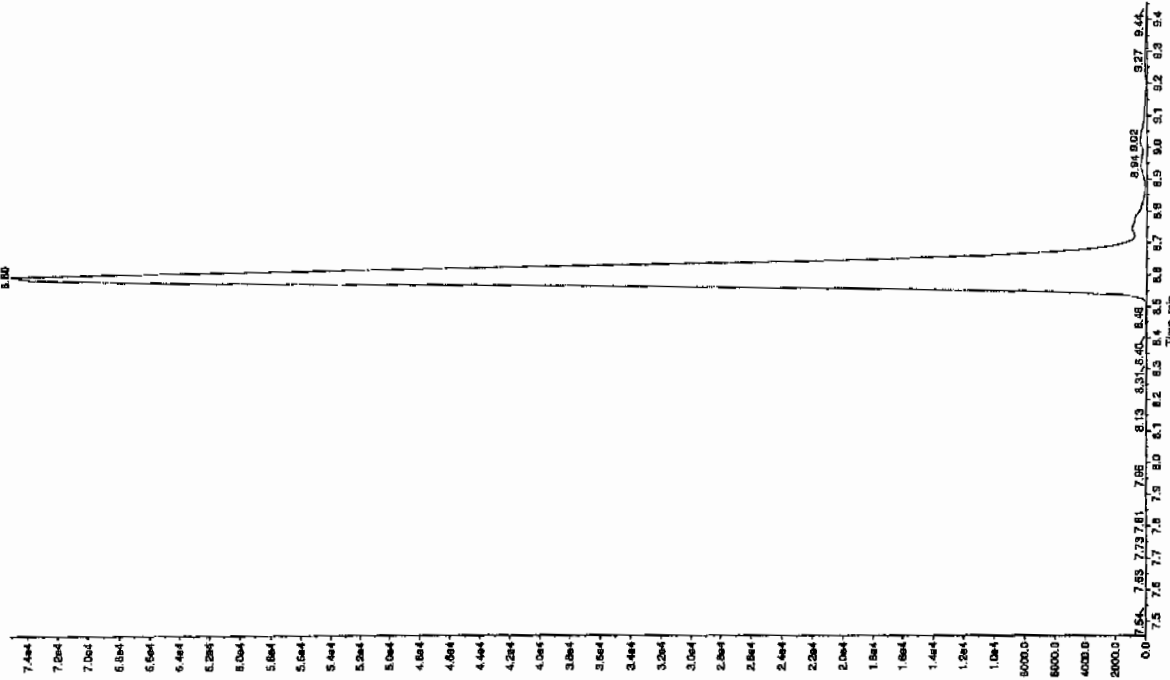
Intensity, cps



Sample Name: "24511403" Sample ID: "944250" File: "EXS02100028.wif"  
 Peak Name: "TATB" Mass(es): "182 046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

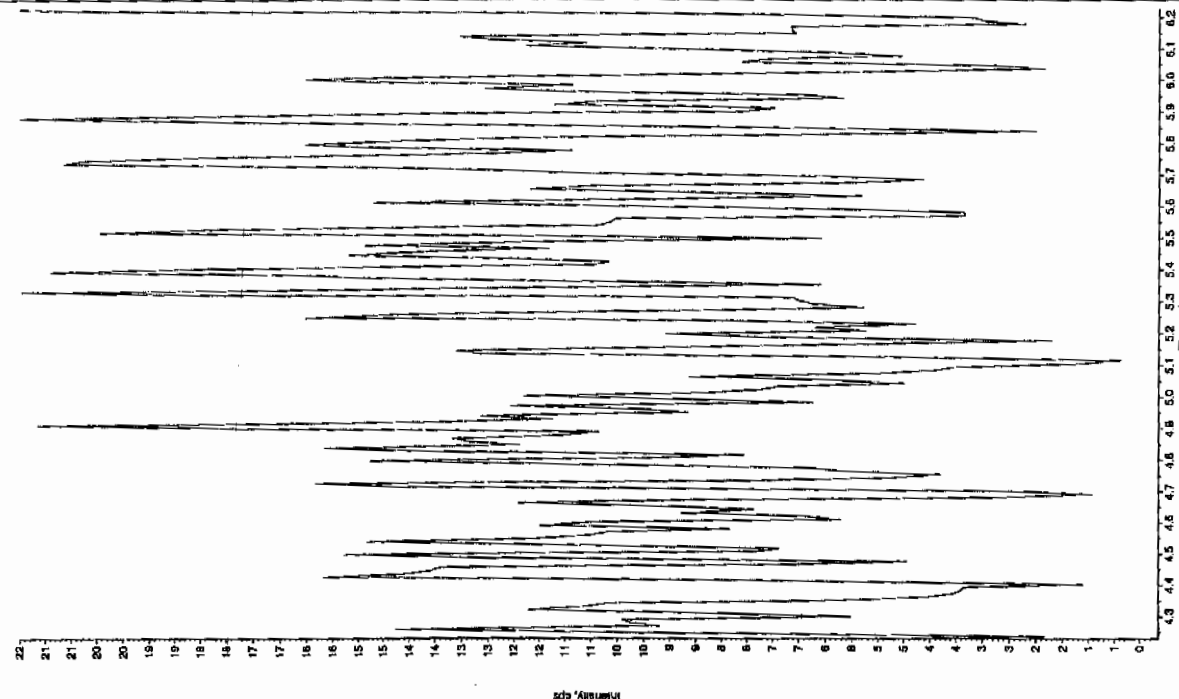
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 3:31:31 PM  
 Modified: No

Intensity, cps



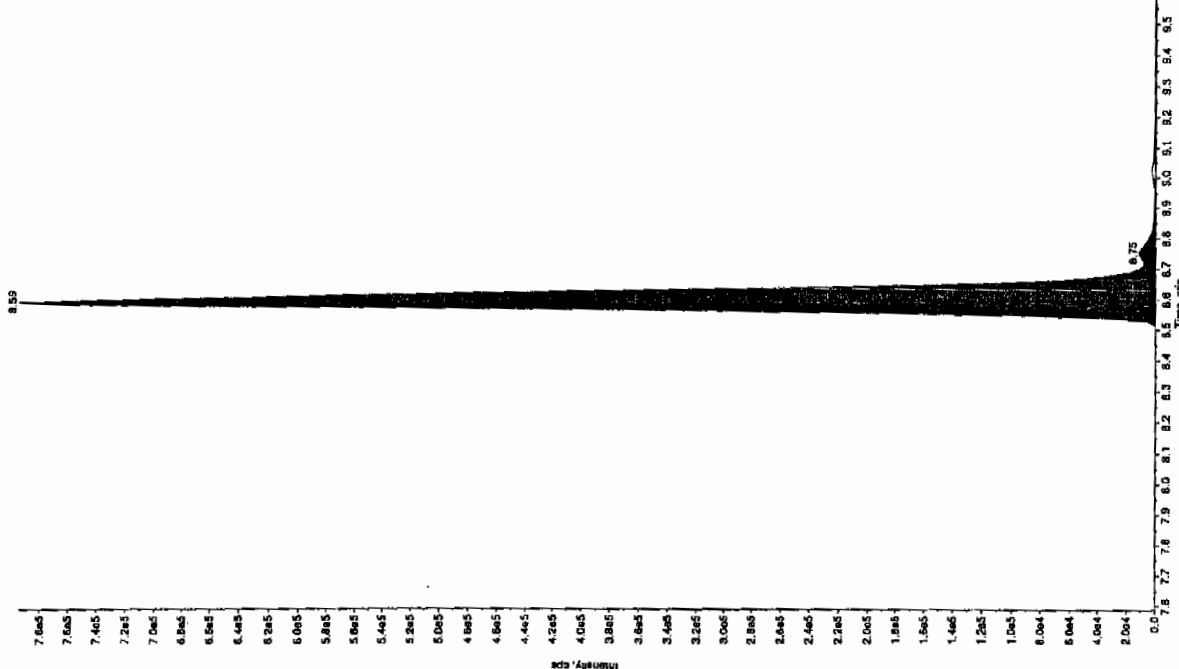
Sample Name: "24514008" Sample ID: "9442501LER" File: "EXS021002B.wif"  
 Peak Name: "26-Dimino-4-methoxy" Mass(es): "155.046.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 3:31:31 PM  
 Modified: No



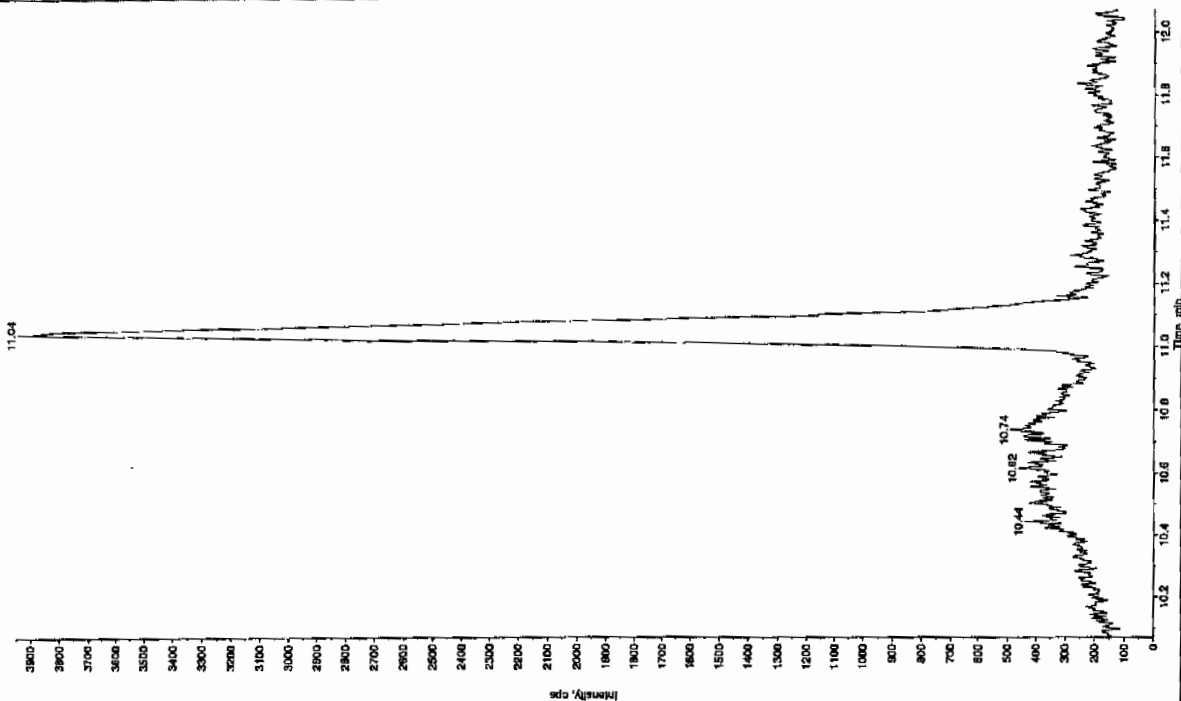
Sample Name: "24514008" Sample ID: "9442501LER" File: "EXS021002B.wif"  
 Peak Name: "26-Dimino-4-methoxy" Mass(es): "155.046.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 343. ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 3:31:31 PM  
 Modified: No



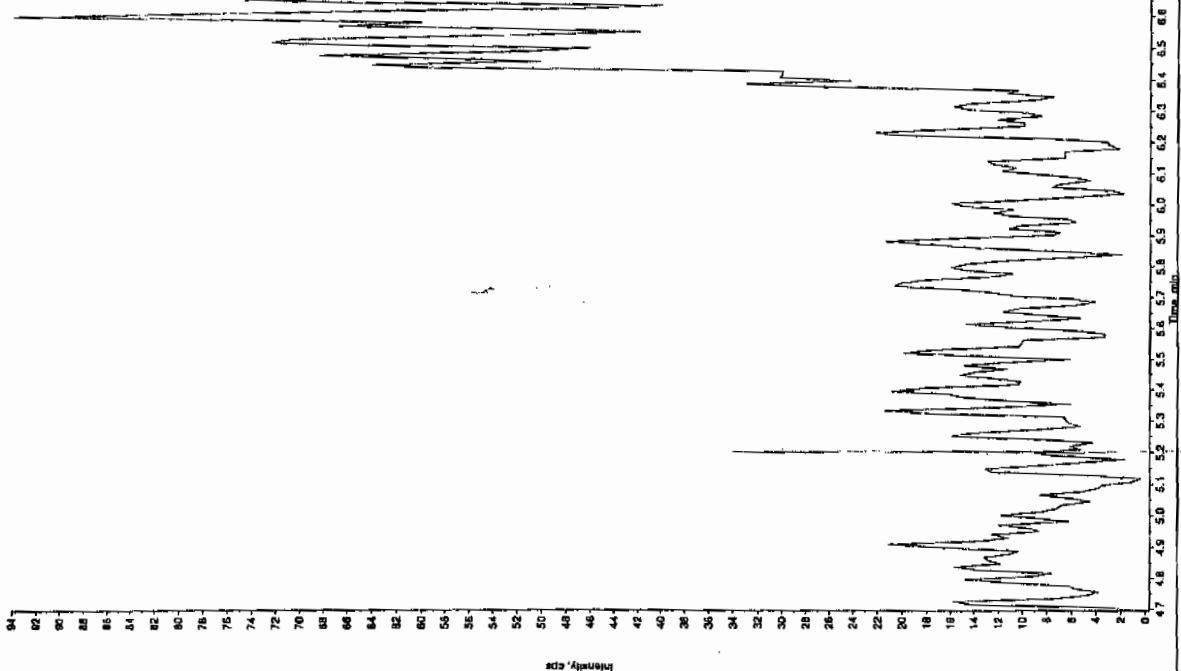
Sample Name: "245114005" Sample ID: "94425021ER" File: "EX502100025.wif"  
 Peak Name: "1,3-bis(4-oxaphenyl)propane" Mass(es): "369.191.0 and  
 Comment: "LCX50212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 3:31:31 PM  
 Modified: No



Sample Name: "245114005" Sample ID: "94425021ER" File: "EX502100025.wif"  
 Peak Name: "24-Diamino-5-nitrobenzene" Mass(es): "166.046.0 and  
 Comment: "LCX50212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 3:31:31 PM  
 Modified: No



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8423

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114010

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208054a

Date Analyzed: 09-FEB-10 16:48

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

|                  |   |   |   |                 |
|------------------|---|---|---|-----------------|
| Instrument Value | X | $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ | X | Dilution Factor |
|------------------|---|---|---|-----------------|

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208054a

Date: 09-Feb-2010

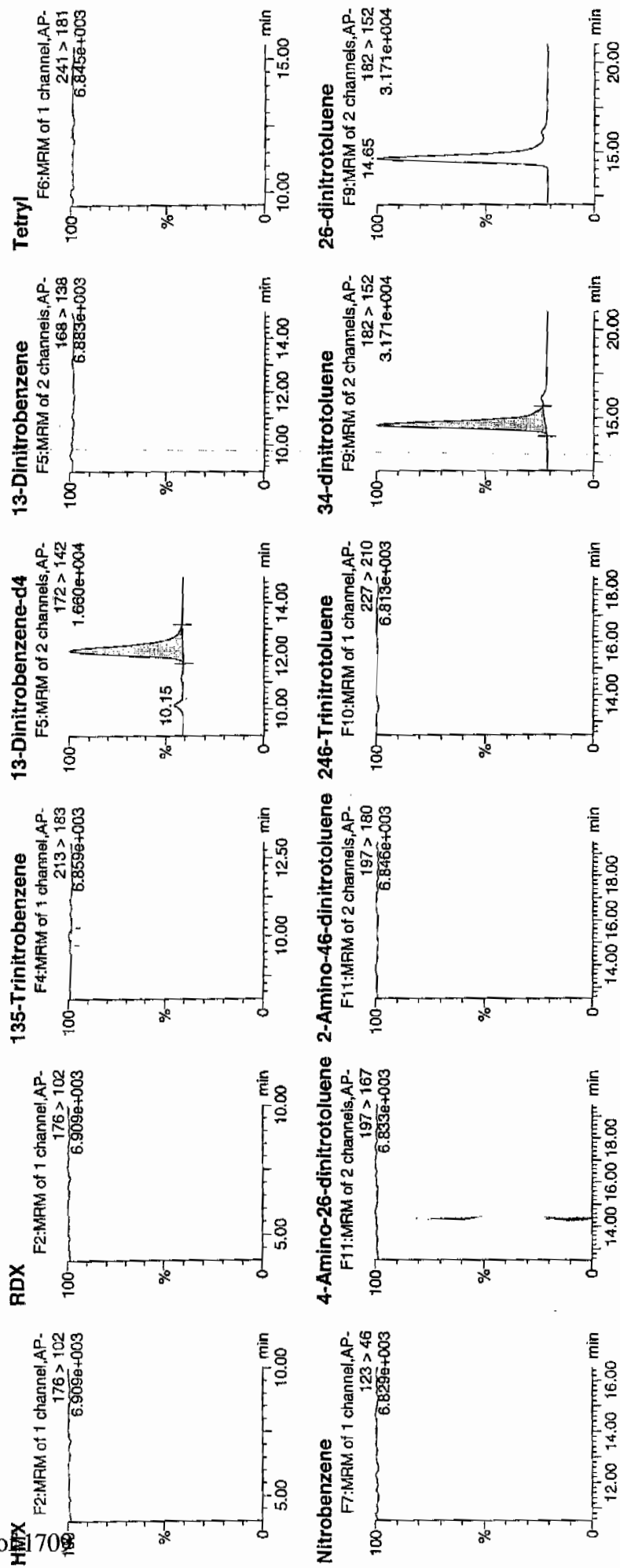
Time: 16:48:13

ID: 245114010

Via: 2:3.A

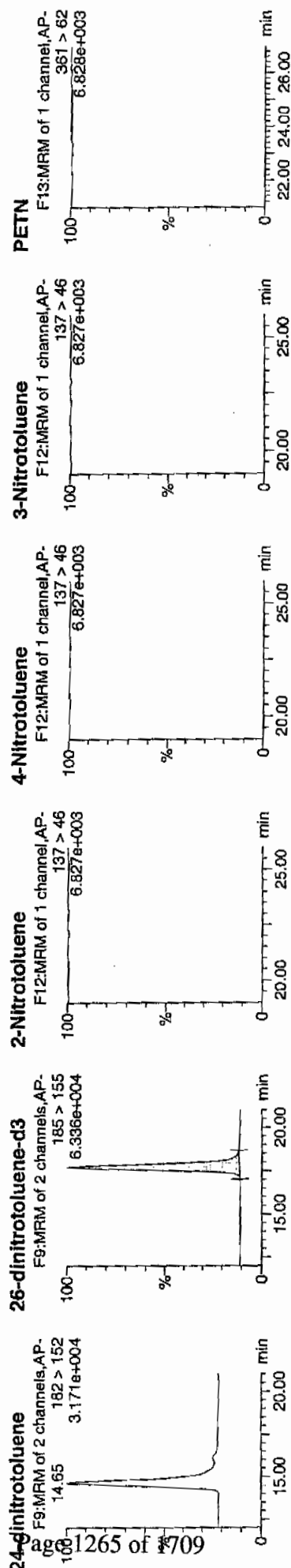
100%  
2/10/10

LANU (944250) / 8023 / 21



Time 2/10/10

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



| ID        | Name                      | RT        | Area  | IS Area   | Abs. Resp | Response | Flags | Mod Date | Mod Time  | ng/ml    | % Rec | % Dev | S/N |
|-----------|---------------------------|-----------|-------|-----------|-----------|----------|-------|----------|-----------|----------|-------|-------|-----|
| 245114010 | HMX                       | 176 > 102 |       | 4154.237  |           |          |       |          |           |          |       |       |     |
| 245114010 | RDX                       | 176 > 102 |       | 4154.237  |           |          |       |          |           |          |       |       |     |
| 245114010 | 135-Trinitrobenzene       | 213 > 183 |       | 4154.237  |           |          |       |          |           |          |       |       |     |
| 245114010 | 13-Dinitrobenzene-d4      | 172 > 142 | 12.20 | 4154.237  |           |          |       | MM-      | 10-Feb-10 | 09:19:44 |       |       |     |
| 245114010 | 13-Dinitrobenzene         | 168 > 138 |       | 4154.237  |           |          |       |          |           |          |       |       |     |
| 245114010 | Tetryl                    | 241 > 181 |       | 4154.237  |           |          |       |          |           |          |       |       |     |
| 245114010 | Nitrobenzene              | 123 > 46  |       | 4154.237  |           |          |       |          |           |          |       |       |     |
| 245114010 | 4-Amino-26-dinitrotoluene | 197 > 167 |       | 22640.533 |           |          |       |          |           |          |       |       |     |
| 245114010 | 2-Amino-46-dinitrotoluene | 197 > 180 |       | 22640.533 |           |          |       |          |           |          |       |       |     |
| 245114010 | 246-Trinitrotoluene       | 227 > 210 |       | 22640.533 |           |          |       |          |           |          |       |       |     |
| 245114010 | 34-dinitrotoluene         | 182 > 152 | 14.65 | 11792.302 |           |          |       |          |           |          |       |       |     |
| 245114010 | 26-dinitrotoluene         | 182 > 152 |       | 22640.533 |           |          |       |          |           |          |       |       |     |
| 245114010 | 24-dinitrotoluene         | 182 > 152 |       | 22640.533 |           |          |       |          |           |          |       |       |     |
| 245114010 | 26-dinitrotoluene-d3      | 185 > 155 | 17.71 | 22640.533 |           |          |       |          |           |          |       |       |     |
| 245114010 | 2-Nitrotoluene            | 137 > 46  |       | 22640.533 |           |          |       |          |           |          |       |       |     |
| 245114010 | 4-Nitrotoluene            | 137 > 46  |       | 22640.533 |           |          |       |          |           |          |       |       |     |
| 245114010 | 3-Nitrotoluene            | 137 > 46  |       | 22640.533 |           |          |       |          |           |          |       |       |     |
| 245114010 | PETN                      | 361 > 62  |       | 22640.533 |           |          |       |          |           |          |       |       |     |

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8423

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114010

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100029.wiff

Date Analyzed: 10-FEB-10 15:47

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor



See 2/11/10

Sample Name: "245114010" Sample ID: "94425021LRF" File: "EXS02100025.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCX83212S" Annotation: ""

File Index: 1

Sample Type: Unknown

Concentration: 0.00

Calculated Conc: 2710/2010

Acq. Date: 2/10/2010

Acq. Time: 3:47:13 PM

Modified: No

Sample Name: "245114010" Sample ID: "94425021LRF" File: "EXS02100025.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCX83212S" Annotation: ""

File Index: 1

Sample Type: Unknown

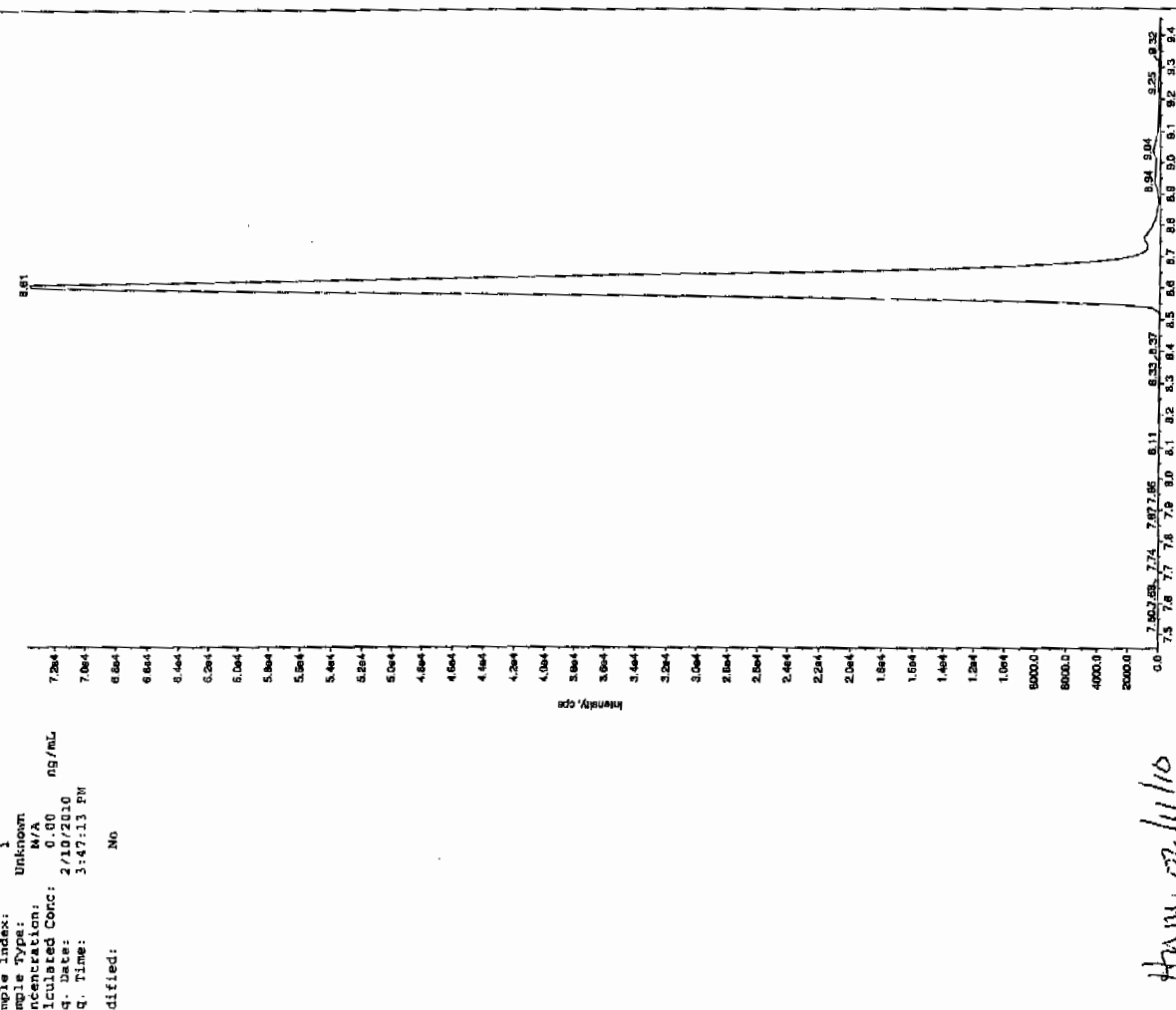
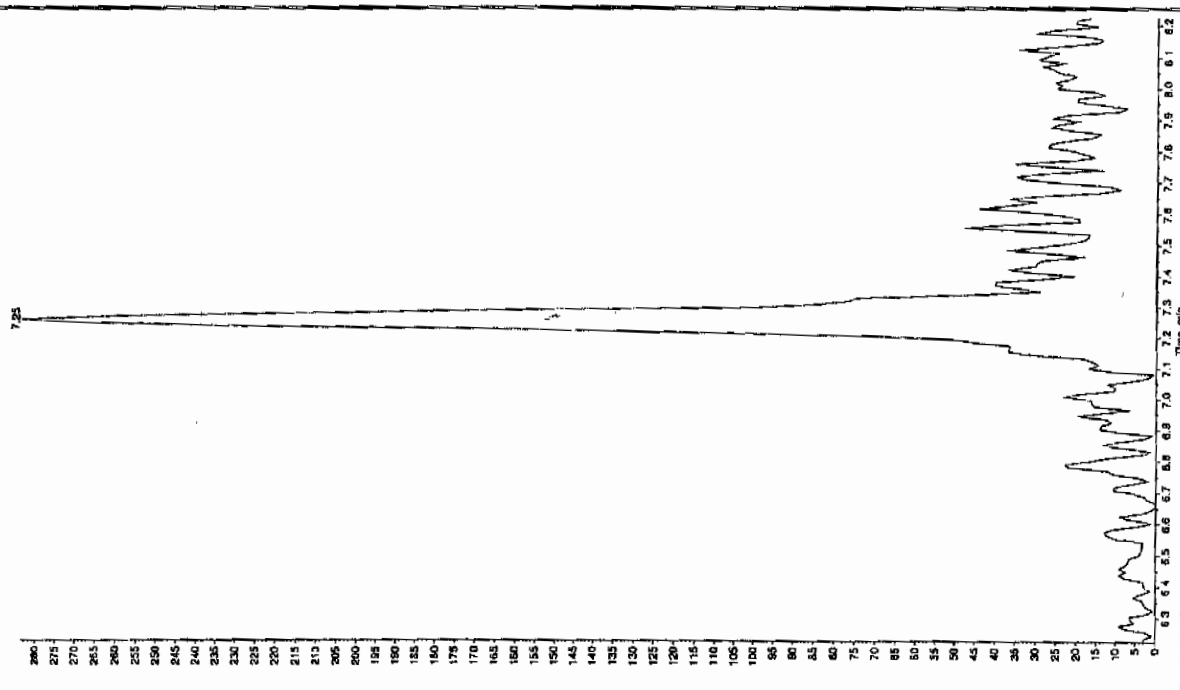
Concentration: 0.00

Calculated Conc: 2710/2010

Acq. Date: 2/10/2010

Acq. Time: 3:47:13 PM

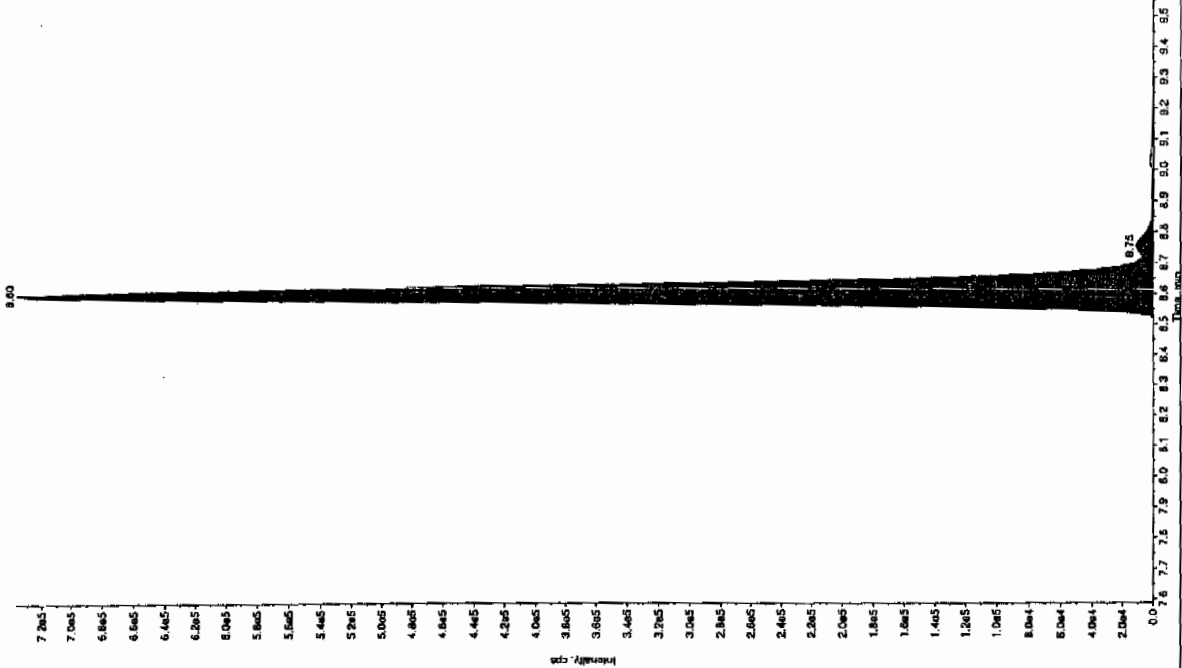
Modified: No



Have 02/11/10

Sample Name: "245114010" Sample ID: "94425021LRY" File: "EXS02100029.wif"  
 Peak Name: "25-Diamino-4-nitrotoluene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 3:47:13 PM  
 Modified: No

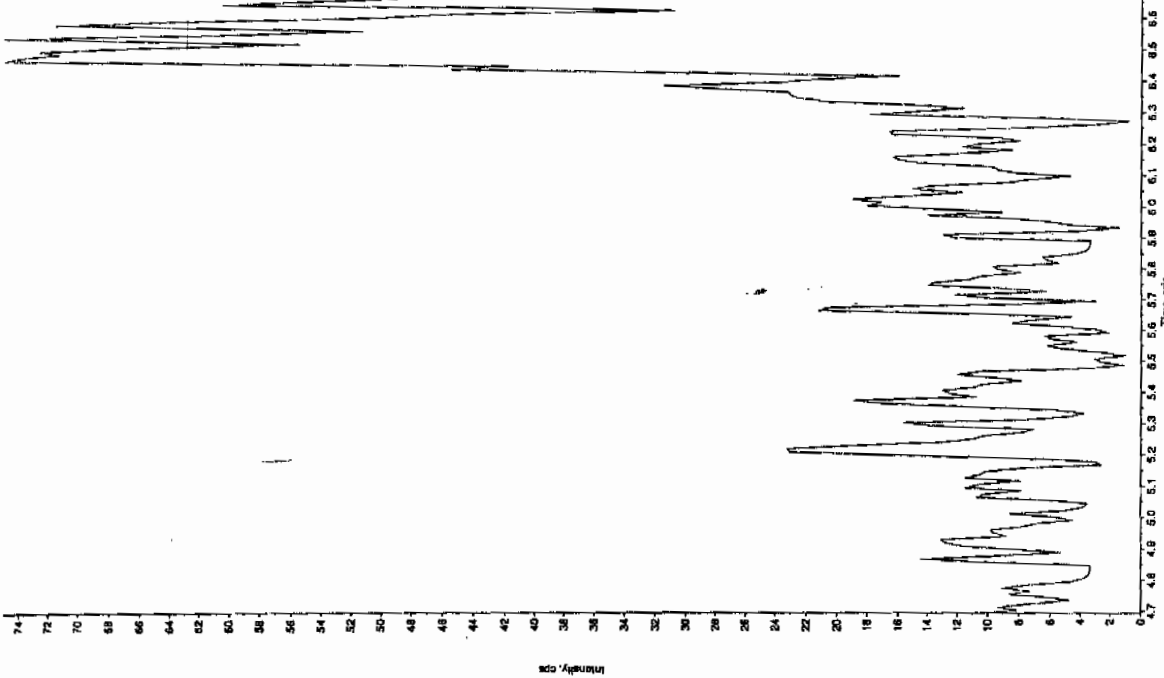


Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 3:47:13 PM  
 Modified: No  
 Peak Name: "25-Diamino-4-nitrotoluene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCX832125" Annotation: ""  
 Peak Height: 1460.00 cps  
 Peak Width: 0.50 sec  
 Peak Area: 35.3 points  
 Peak RT: 8.59 min  
 Peak Width RT: 0.59 min  
 Peak Name: "25-Diamino-4-nitrotoluene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCX832125" Annotation: ""  
 Peak Height: 1460.00 cps  
 Peak Width: 0.50 sec  
 Peak Area: 35.3 points  
 Peak RT: 8.59 min  
 Peak Width RT: 0.59 min

GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

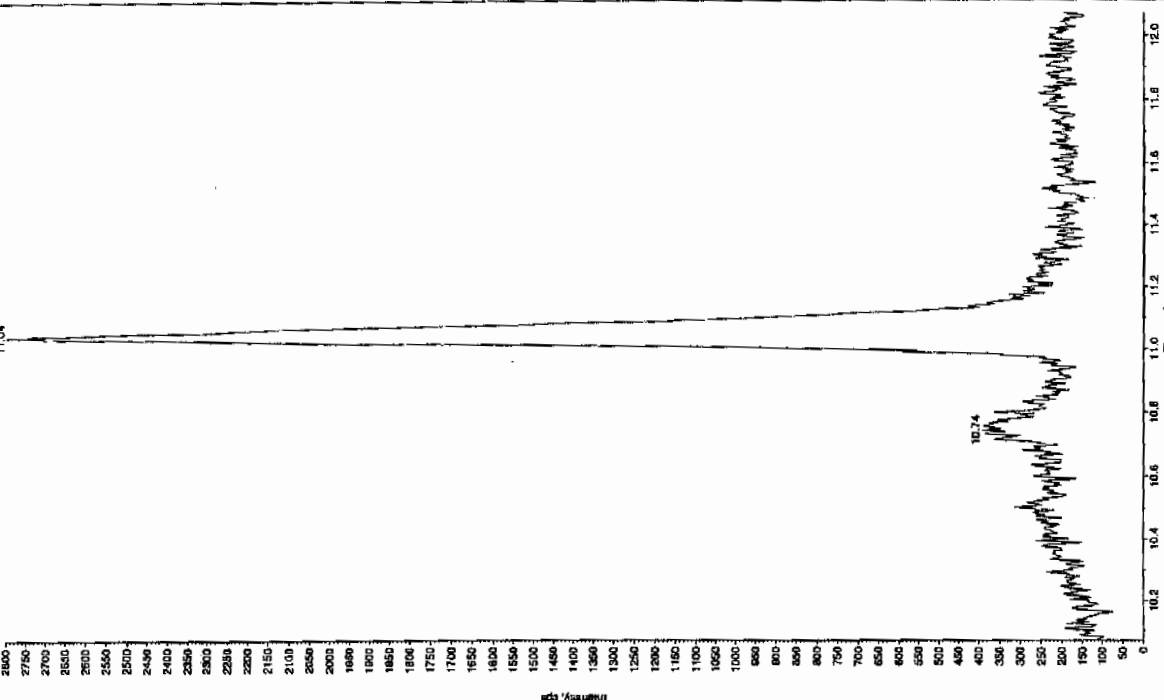
Sample Name: "245114010" Sample ID: "94425021ER" File: "EX502100029.will"  
 Peak Name: "24-Diamino-6-pitroclouene" Mass(es): "166.046.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 3:47:13 PM  
 Modified: No



Sample Name: "245114010" Sample ID: "94425021ER" File: "EX502100029.will"  
 Peak Name: "bis(o-cresyl) phosphates" Mass(es): "358.191.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 3:47:13 PM  
 Modified: No



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8416

Lab Code: GEI

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114011

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208055a

Date Analyzed: 09-FEB-10 17:17

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

|                  |   |                                    |   |                 |
|------------------|---|------------------------------------|---|-----------------|
| Instrument Value | X | <u>Concentrated Extract Volume</u> | X | Dilution Factor |
|                  |   | <u>Sample Amount</u>               |   |                 |

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208055a

Date: 09-Feb-2010

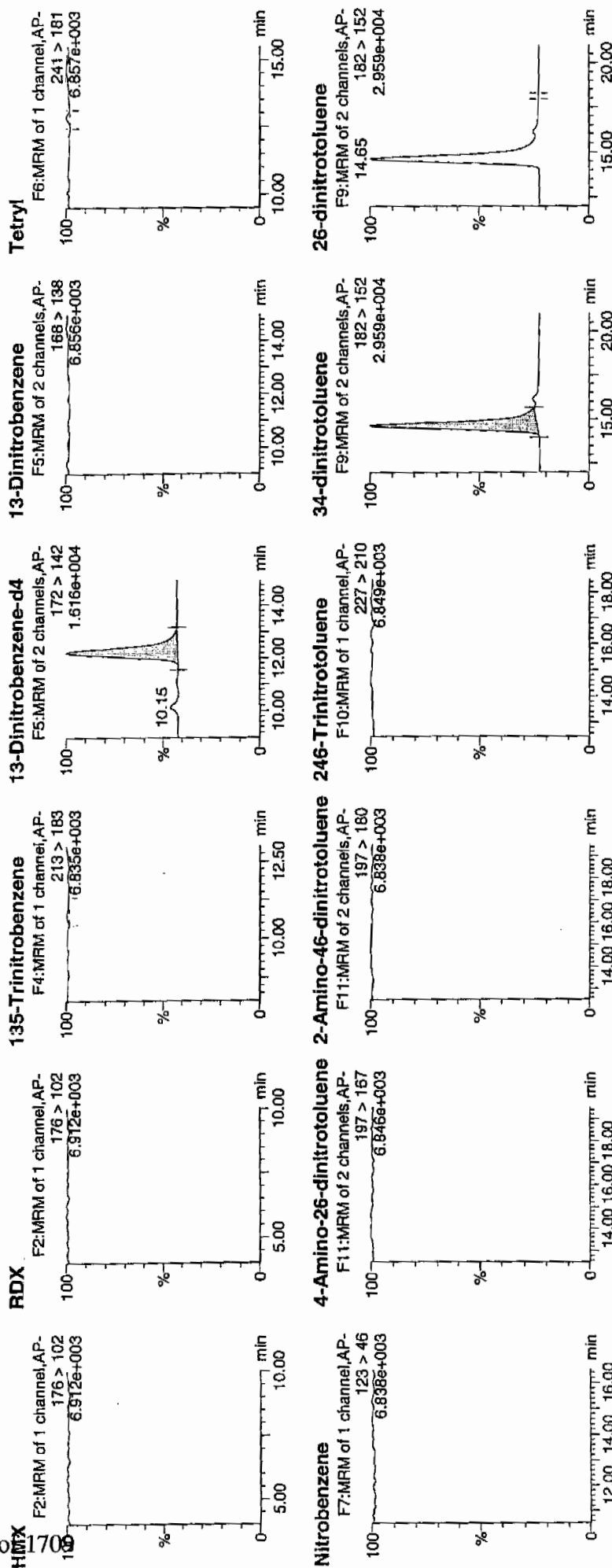
Time: 17:17:42

ID: 245114011

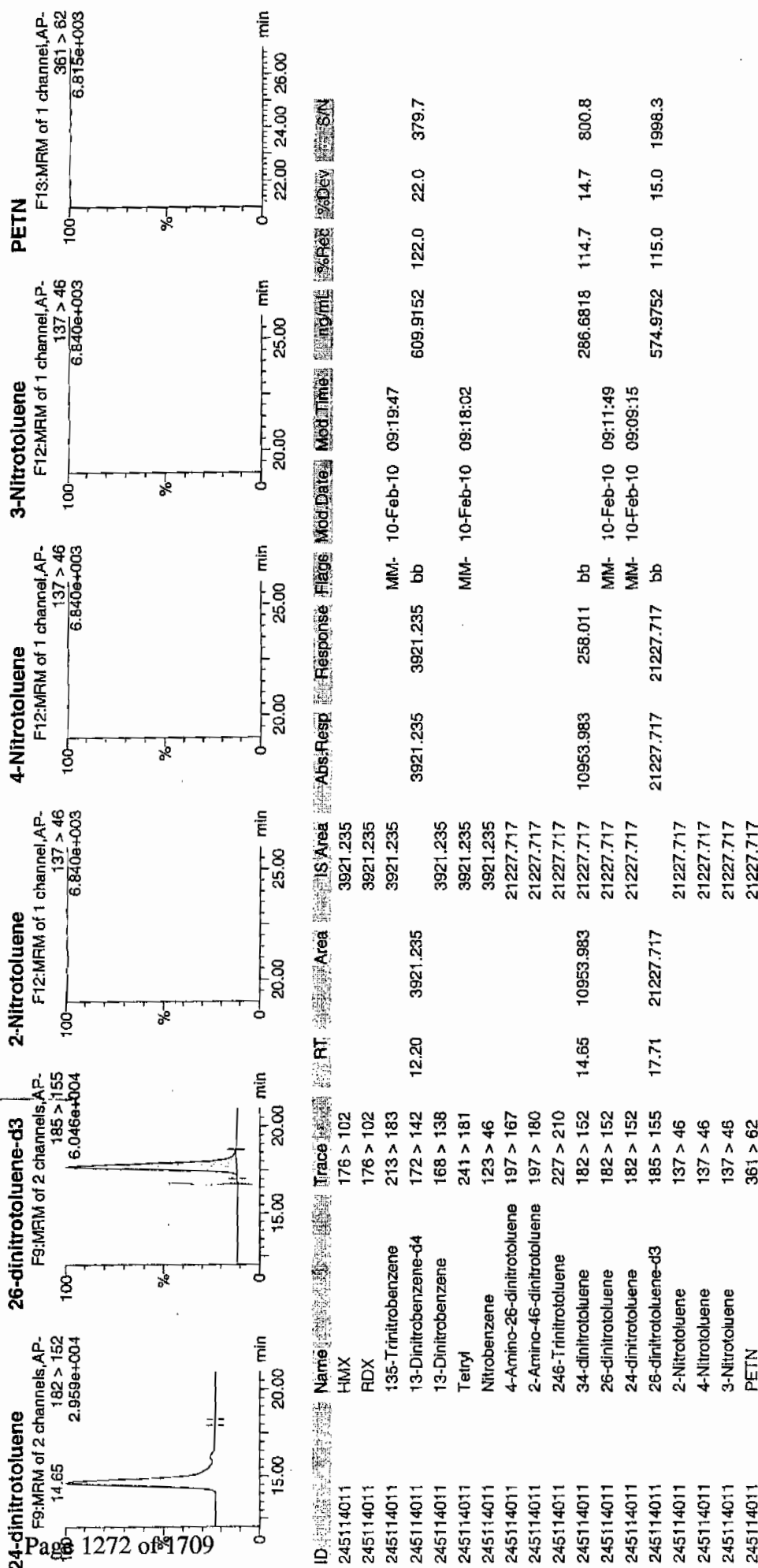
Vial: 2:3,B

44AP  
2/10/10

LAUW 944250 | 8022 | 21



same as 10/10



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8416

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114011

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100030.wiff

Date Analyzed: 10-FEB-10 16:02

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

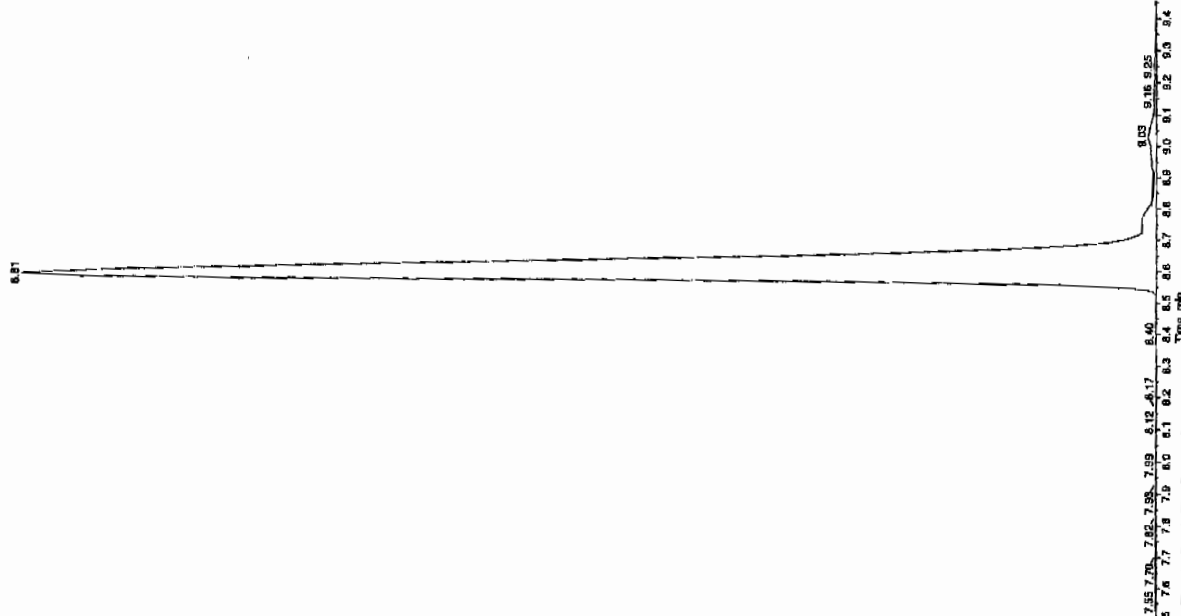
\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Sample Name: "245114011" Sample ID: "9442502011" File: "EX502100030.wif"  
 Peak Name: "35-Dinitrobenzidine" Mass(es): "182.046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 4:02:56 PM  
 Modified: No

Intensity, cps

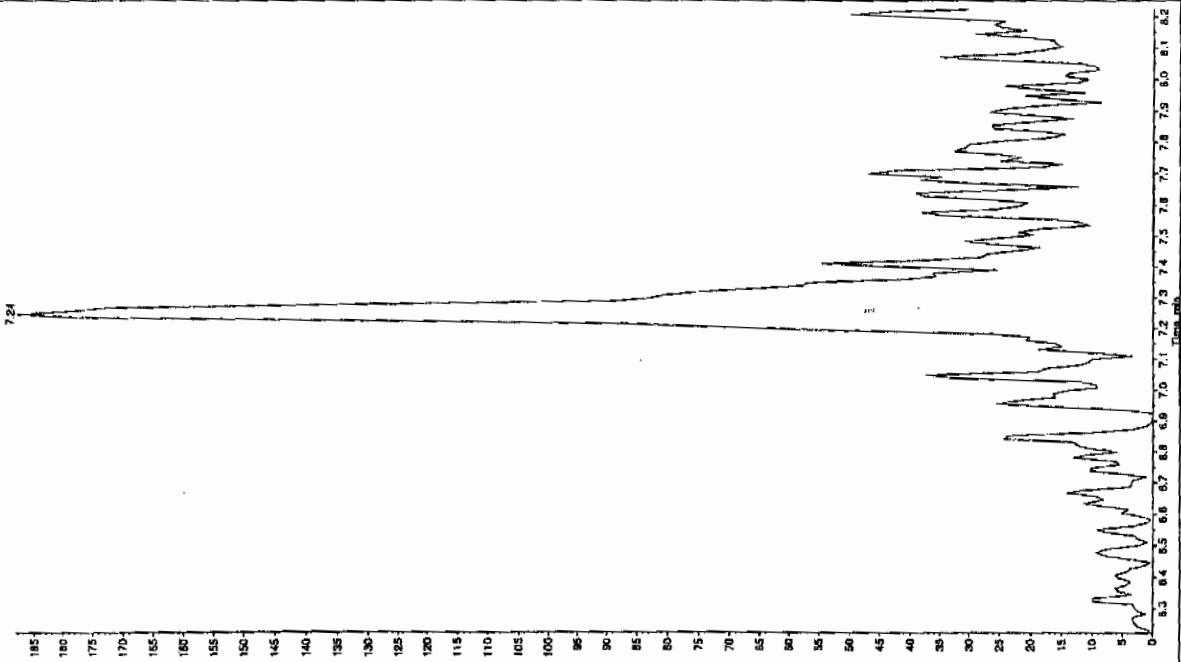


Time 2/10/10

Sample Name: "245114011" Sample ID: "9442502011" File: "EX502100030.wif"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 4:02:56 PM  
 Modified: No

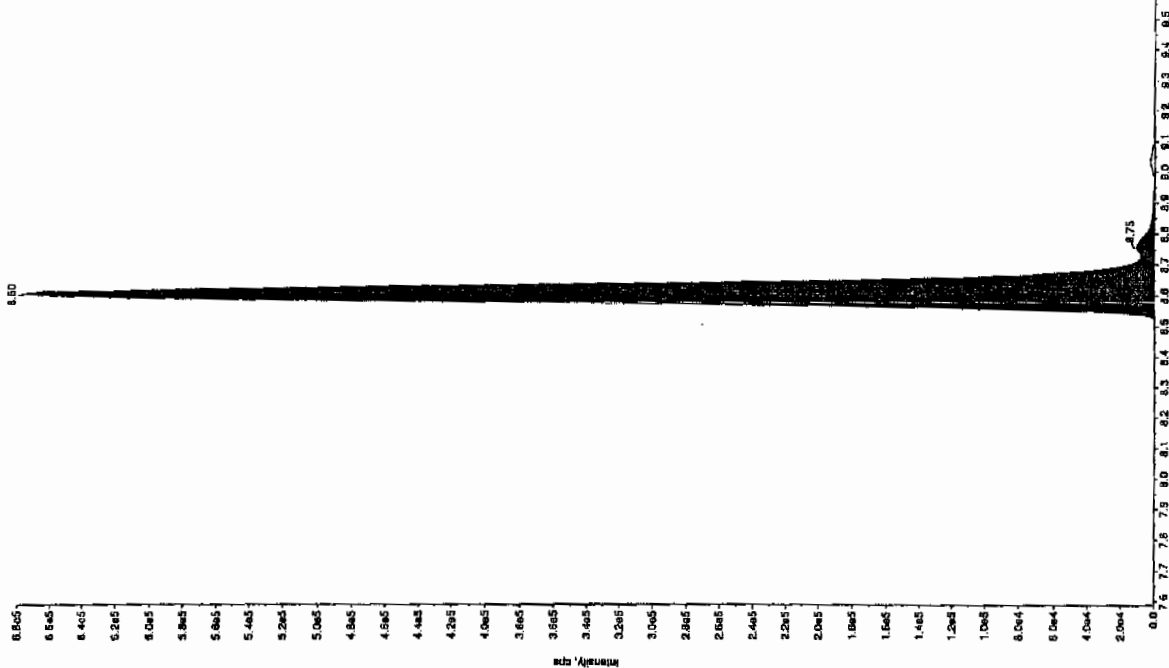
Intensity, cps





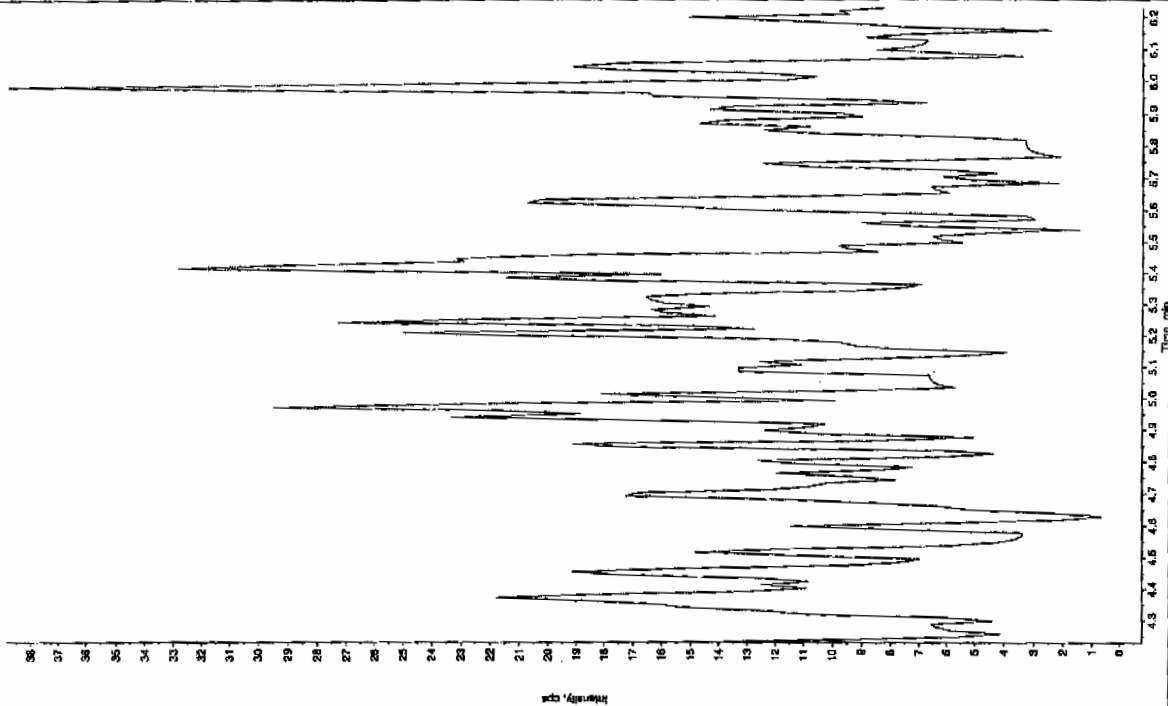
Sample Name: "245114011" Sample ID: "94425021ER" File: "EXS02100030.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "182.1131.9 amu"  
 Comment: "LCX83212S" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 4:02:56 PM  
 Modified: No  
 Peak Algorithm: IntelliQuan - IQA  
 Min Peak Height: 160.00 cps  
 Min Peak Width: 0.00 sec  
 Smoothing: 3 points  
 RT Window: 15.0 sec  
 Exported RT: 8.59 min  
 Used Relative RT: No  
 Ion Type: Valley  
 Retention Time: 8.60 min  
 Area: 2.88e+006 counts  
 Height: 6.59e+005 cps  
 Start Time: 8.50 min  
 End Time: 8.95 min



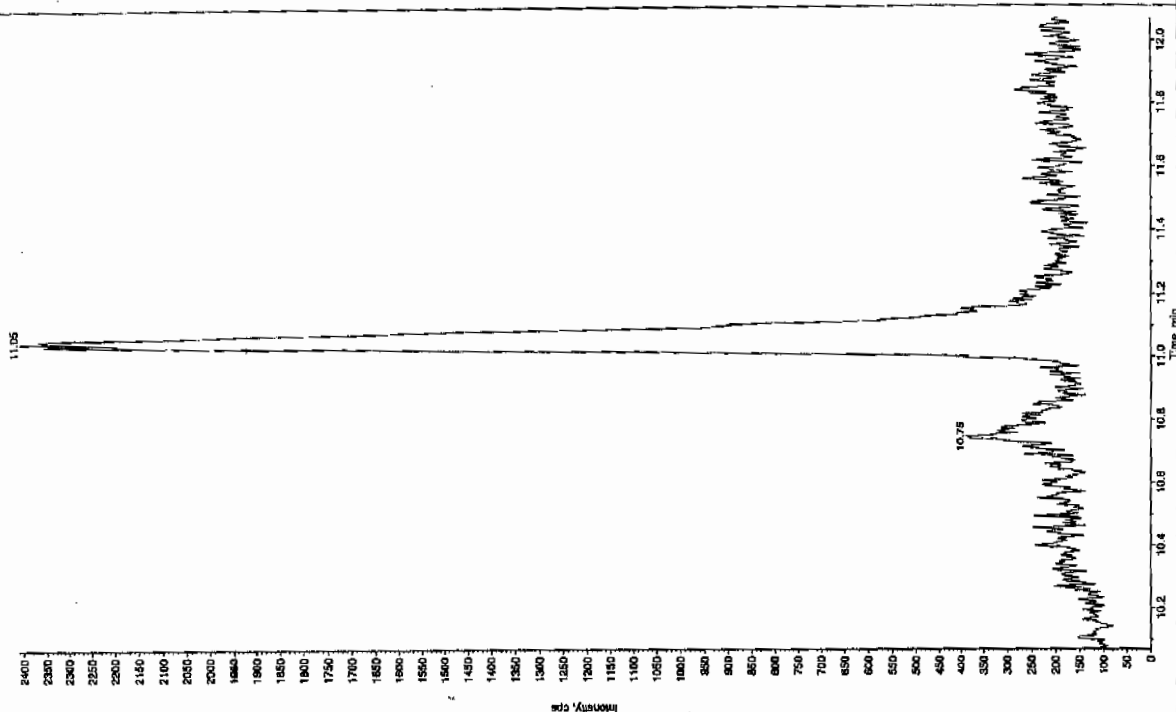
Sample Name: "245114011" Sample ID: "94425021ER" File: "EXS02100030.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "186.048.0 amu"  
 Comment: "LCX83212S" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 4:02:56 PM  
 Modified: No



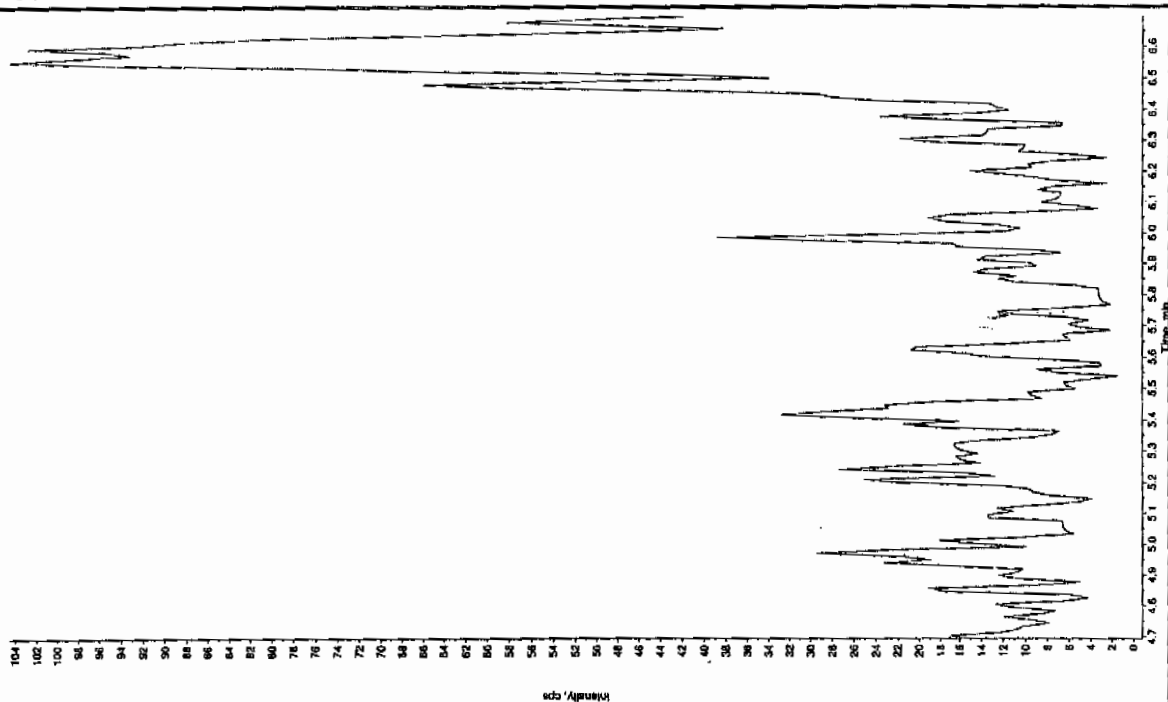
Sample Name: "245114011" Sample ID: "9442502121" File: "EX802100030.wif"  
 Peak Name: "105.0-cresyl phosphate" Mass(es): "359.191.0 amu"  
 Comment: "LC832125" Annotation: "1"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/19/2010  
 Acq. Time: 4:02:56 PM  
 Modified: No



Sample Name: "245114011" Sample ID: "9442502121" File: "EX802100030.wif"  
 Peak Name: "94.4-mono-6-methoxy" Mass(es): "158.046.0 amu"  
 Comment: "LC832125" Annotation: "1"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/19/2010  
 Acq. Time: 4:02:56 PM  
 Modified: No



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8418

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114012

Sample Amount 2

Moisture: 11.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208056a

Date Analyzed: 09-FEB-10 17:47

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

|                  |   |   |   |                 |
|------------------|---|---|---|-----------------|
| Instrument Value | X | $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ | X | Dilution Factor |
|------------------|---|---|---|-----------------|

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208056a

Date: 09-Feb-2010

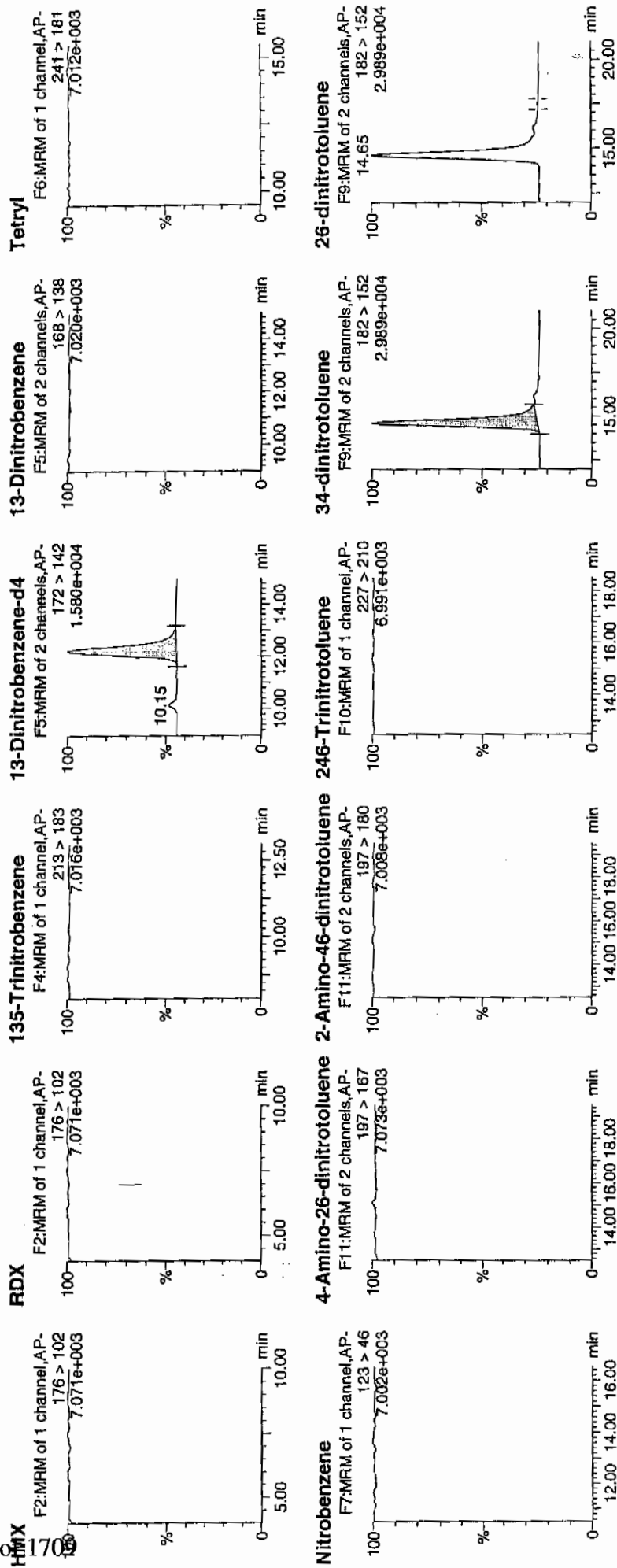
Time: 17:47:27

ID: 245114012

Val: 2:3,C

10/10  
2/10/10

LAU/944250/8022/12/



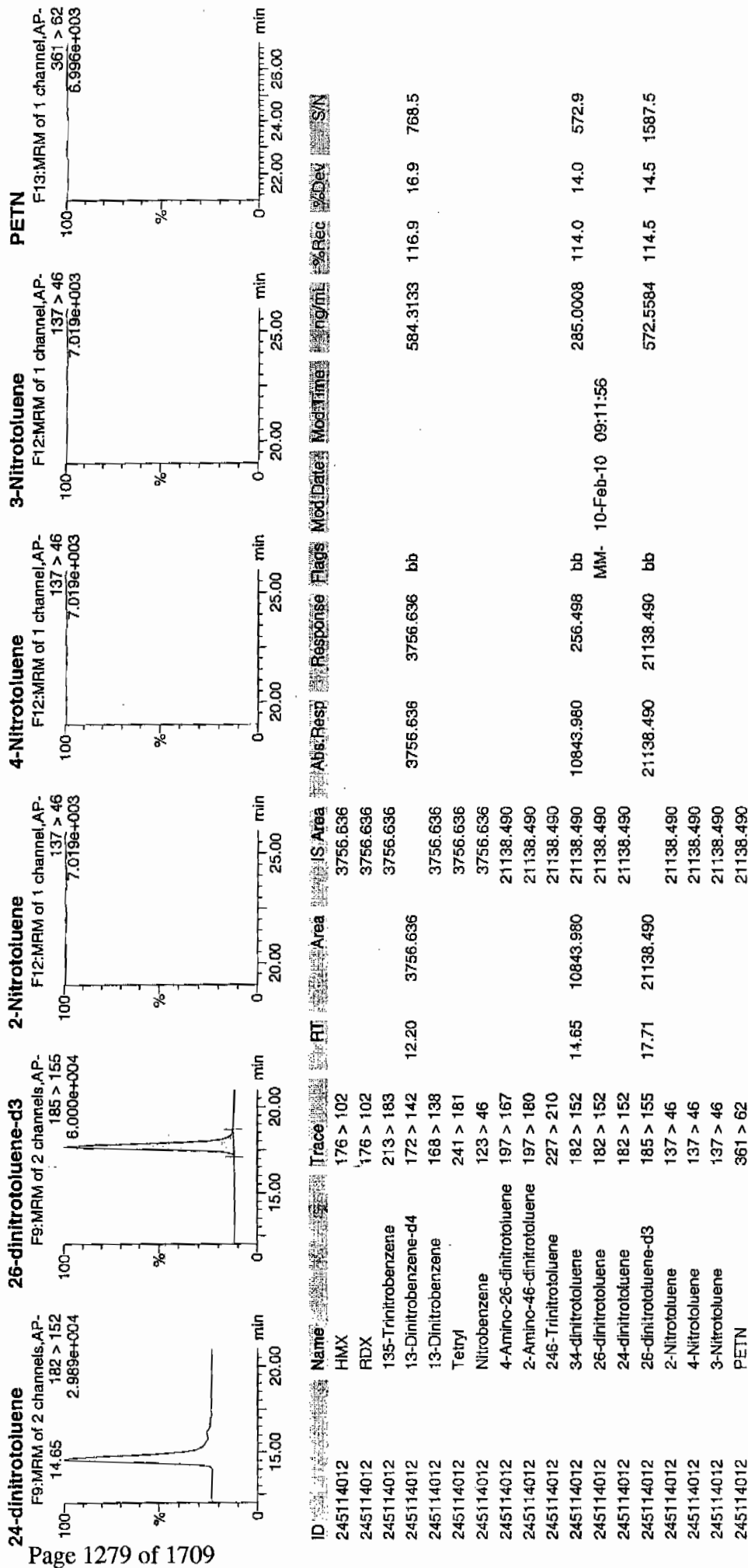
Amo or holo

# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Feb 10 09:25:16 2010, Page 36 of 79

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8418

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114012

Sample Amount 2

Moisture: 11.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100031.wiff

Date Analyzed: 10-FEB-10 16:18

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

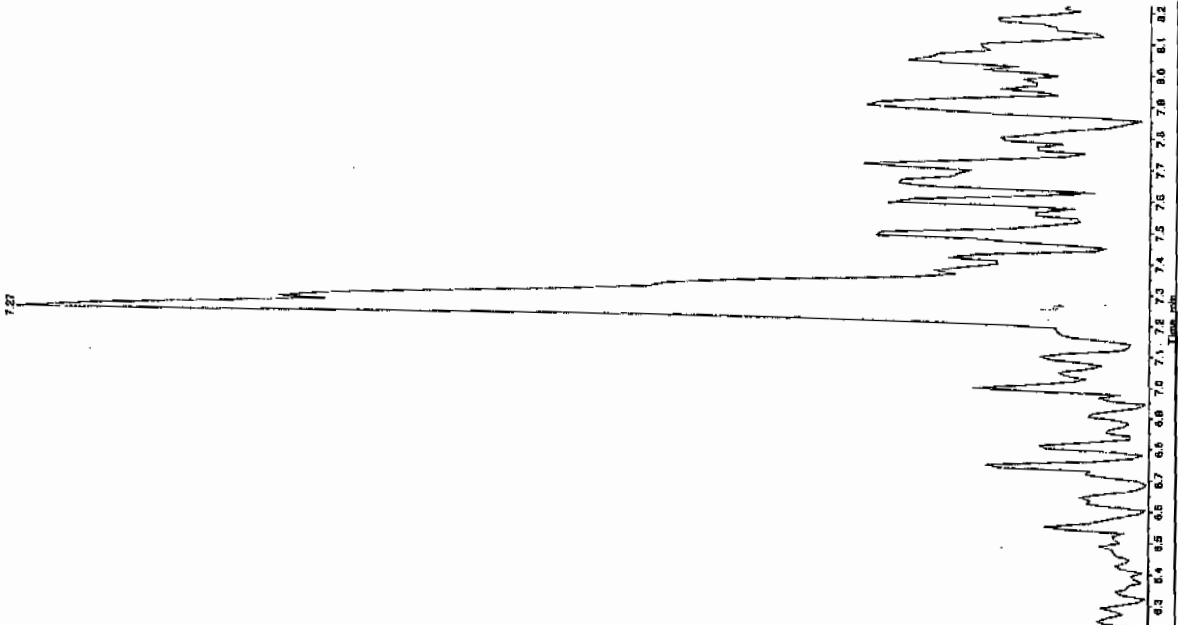
|                  |   |                                    |   |                 |
|------------------|---|------------------------------------|---|-----------------|
| Instrument Value | X | <u>Concentrated Extract Volume</u> | X | Dilution Factor |
|                  |   | Sample Amount                      |   |                 |

Run 211110

Sample Name: "245114012" Sample ID: "94425012" File: "EX502100031.will"  
 Peak Name: "TATB" Mass(es): "257 2204.9 amu"  
 Comment: "LCX83212S" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 2/10/2010  
 Acq. Date: 4/18/40 PM  
 Modified: No

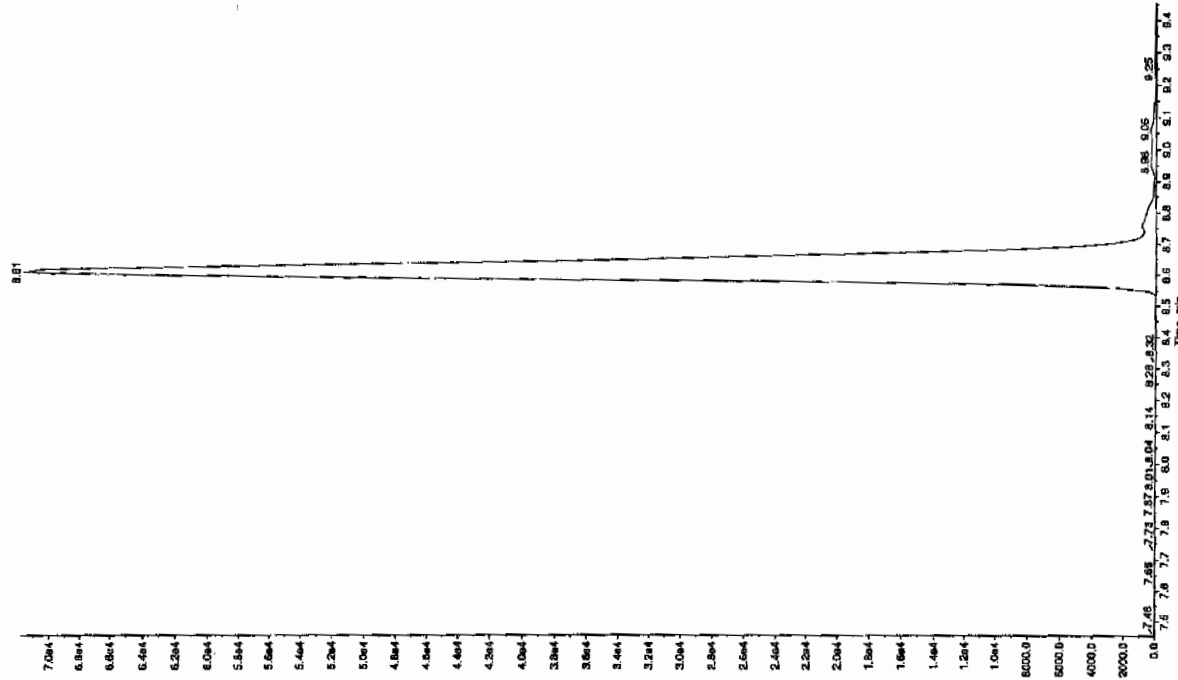
Intensity, cps



Sample Name: "245114012" Sample ID: "94425012" File: "EX502100031.will"  
 Peak Name: "3S-Dinitrophenol" Mass(es): "182.046.0 amu"  
 Comment: "LCX83212S" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 2/10/2010  
 Acq. Date: 4/18/40 PM  
 Modified: No

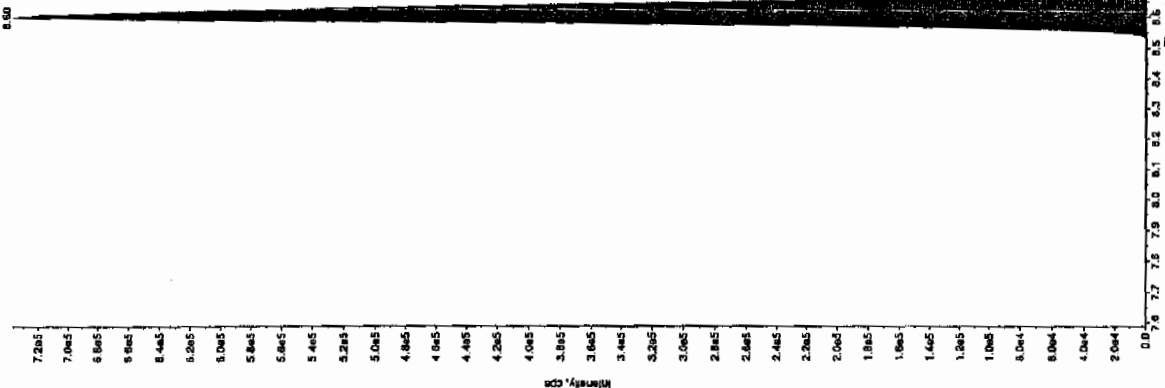
Intensity, cps



Run 211110

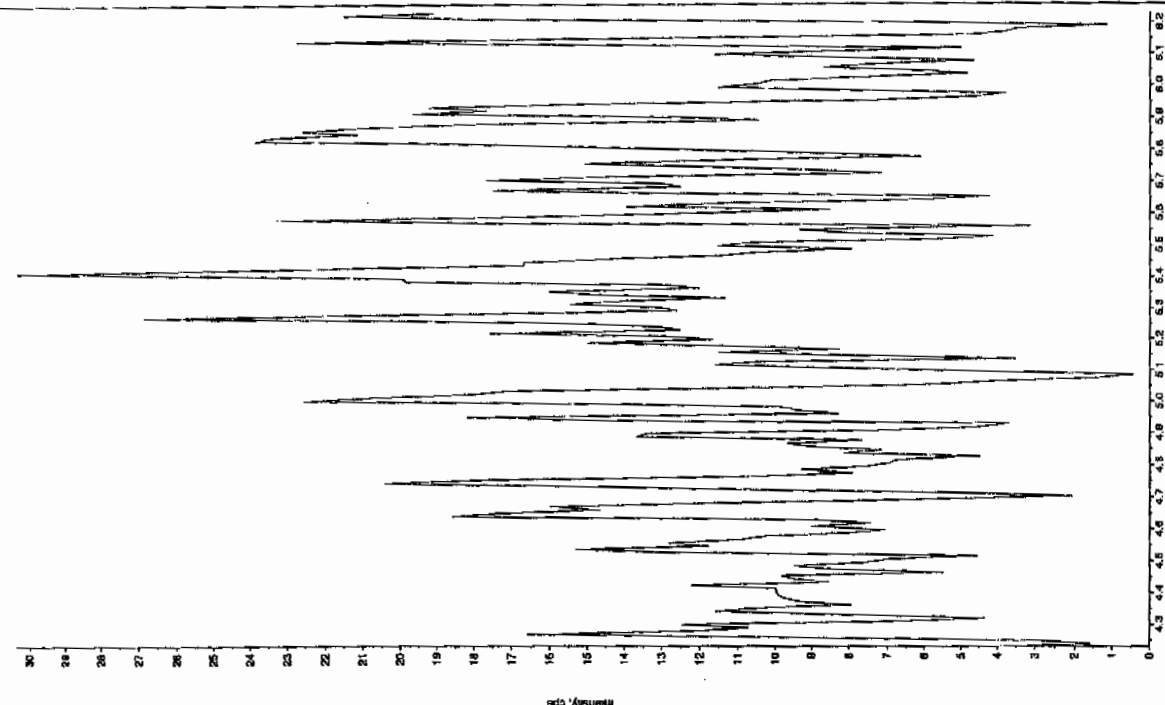
Sample Name: "245114012" Sample ID: "94425021ER" File: "EXS02100031.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1715.9 amu"  
 Comment: "LCX83212S" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 4:18:40 PM  
 Modified: No



Sample Name: "245114012" Sample ID: "94425021ER" File: "EXS02100031.wif"  
 Peak Name: "26-Dinitro-4-nitrofluorene" Mass(es): "186.046.0 amu"  
 Comment: "LCX83212S" Annotation: "

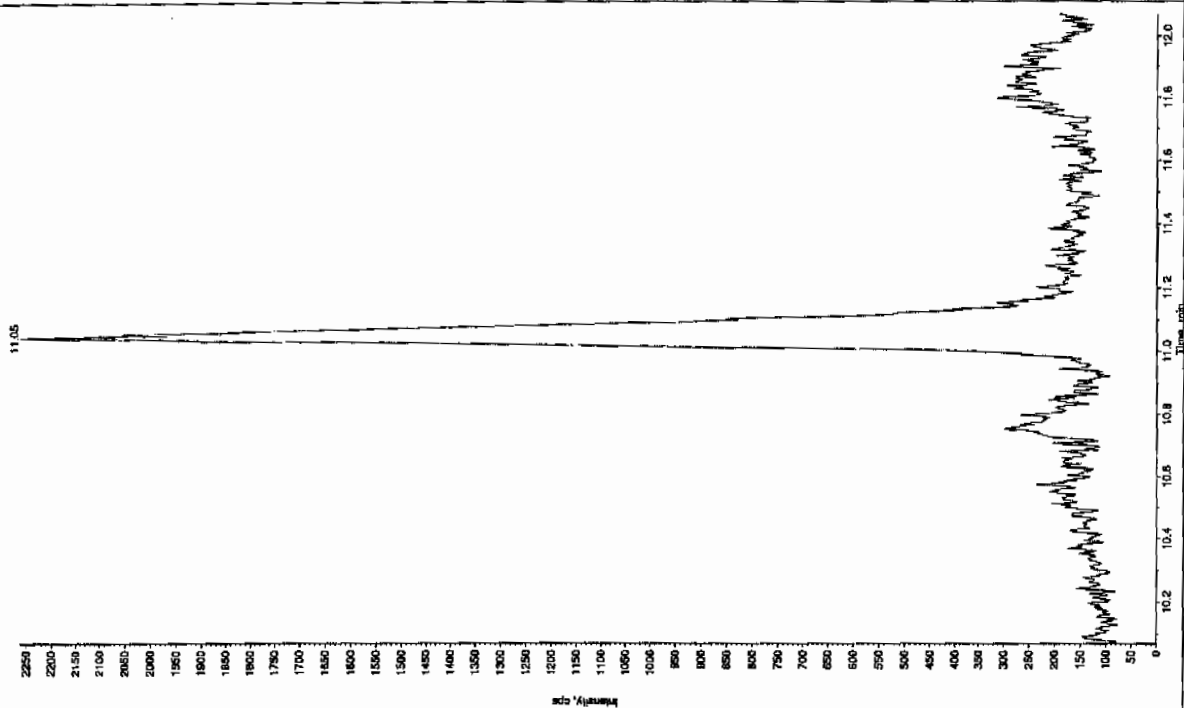
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 4:18:40 PM  
 Modified: No





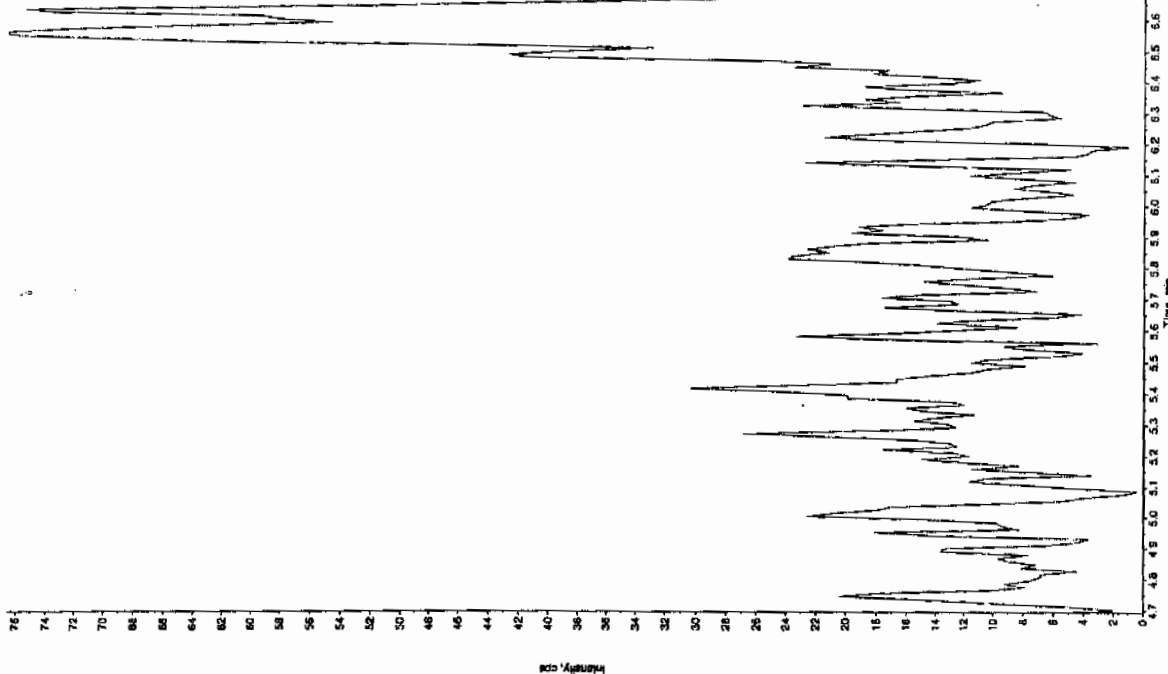
Sample Name: 245114012 Sample ID: 944250212LRF File: EX92100031.wif  
 Peak Name: 118(Crossyl phosphate) Mass(es): 369.181.0 amu  
 Comment: LCX832125 Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 4:18:40 PM  
 Modified: No



Sample Name: 245114012 Sample ID: 944250212LRF File: EX92100031.wif  
 Peak Name: 24-Diamino-6-nitrobenzene Mass(es): 156.046.0 amu  
 Comment: LCX832125 Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 4:18:40 PM  
 Modified: No



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8424

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114013

Sample Amount 2

Moisture: 10.0

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208057a

Date Analyzed: 09-FEB-10 18:16

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208057a

Date: 09-Feb-2010

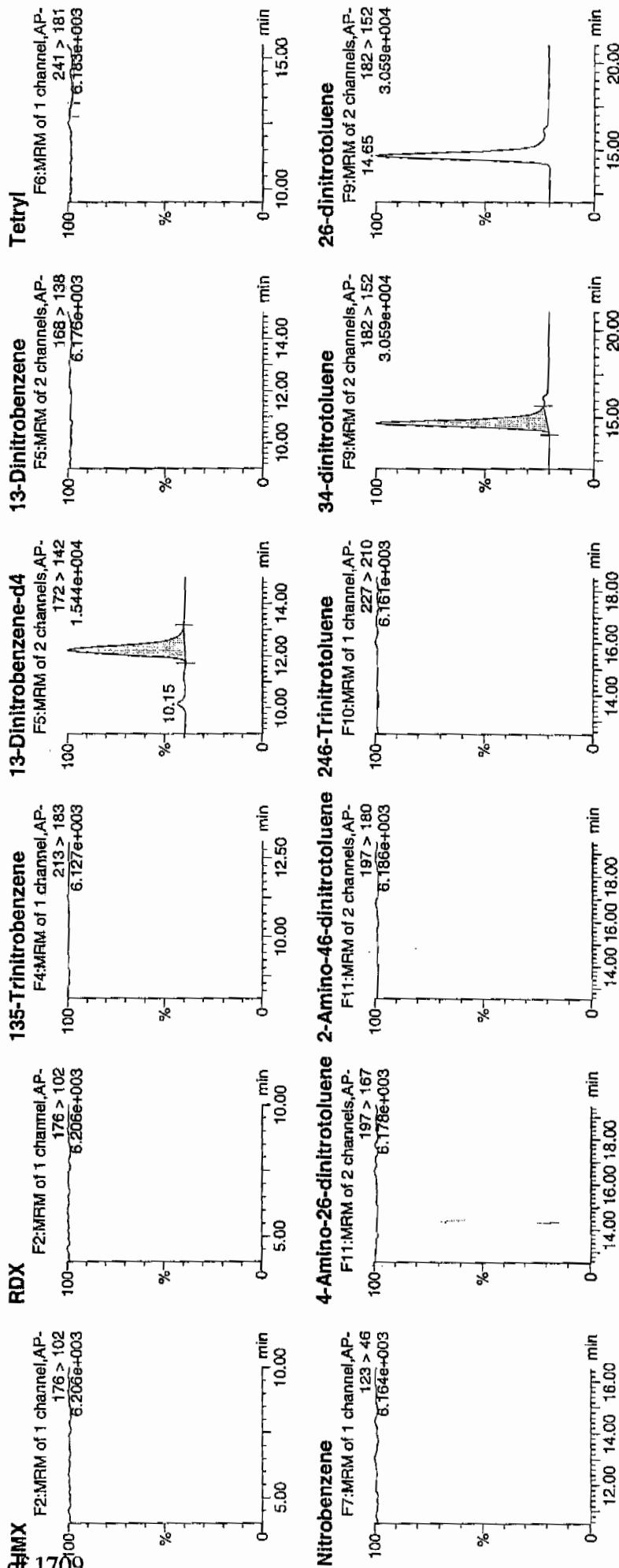
Time: 18:16:55

ID: 245114013

Vial: 2:3,D

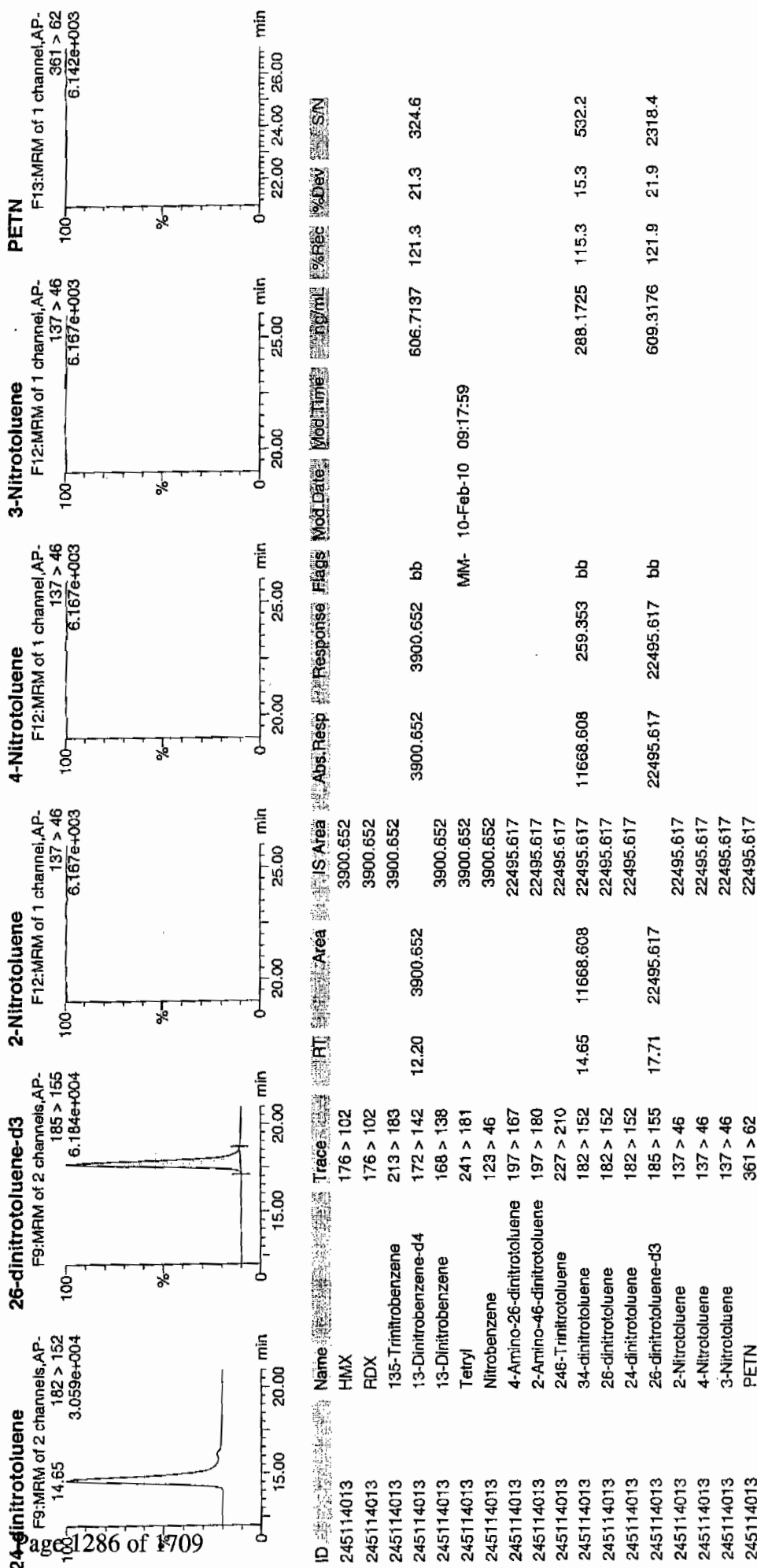
14577  
2/10/10

744250 / 21



Ames 10/10

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8424

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114013

Sample Amount 2

Moisture: 10.0

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100032.wiff

Date Analyzed: 10-FEB-10 16:34

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

|                  |   |   |   |                 |
|------------------|---|---|---|-----------------|
| Instrument Value | X | $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ | X | Dilution Factor |
|------------------|---|---|---|-----------------|

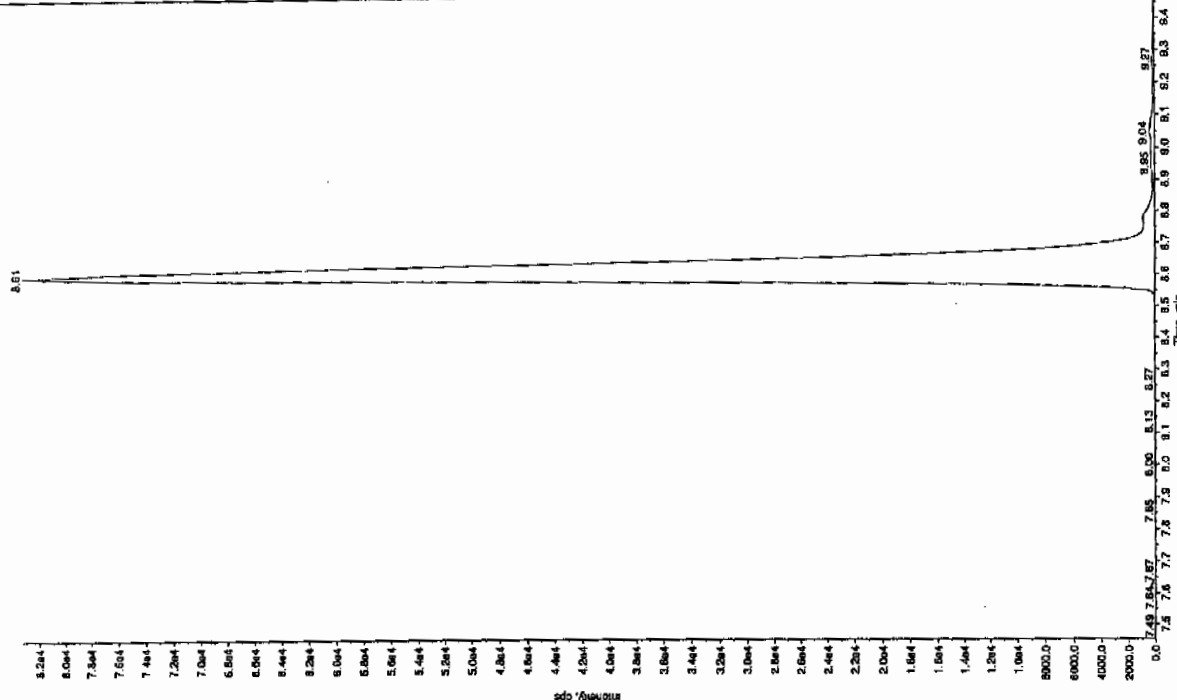
See 211110

Sample Name: "245114013" Sample ID: "94425021LER" File: "EXS02100032.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "192.0460 amu"

Comment: "LCX83212S" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 4:34:23 PM  
 Modified: No



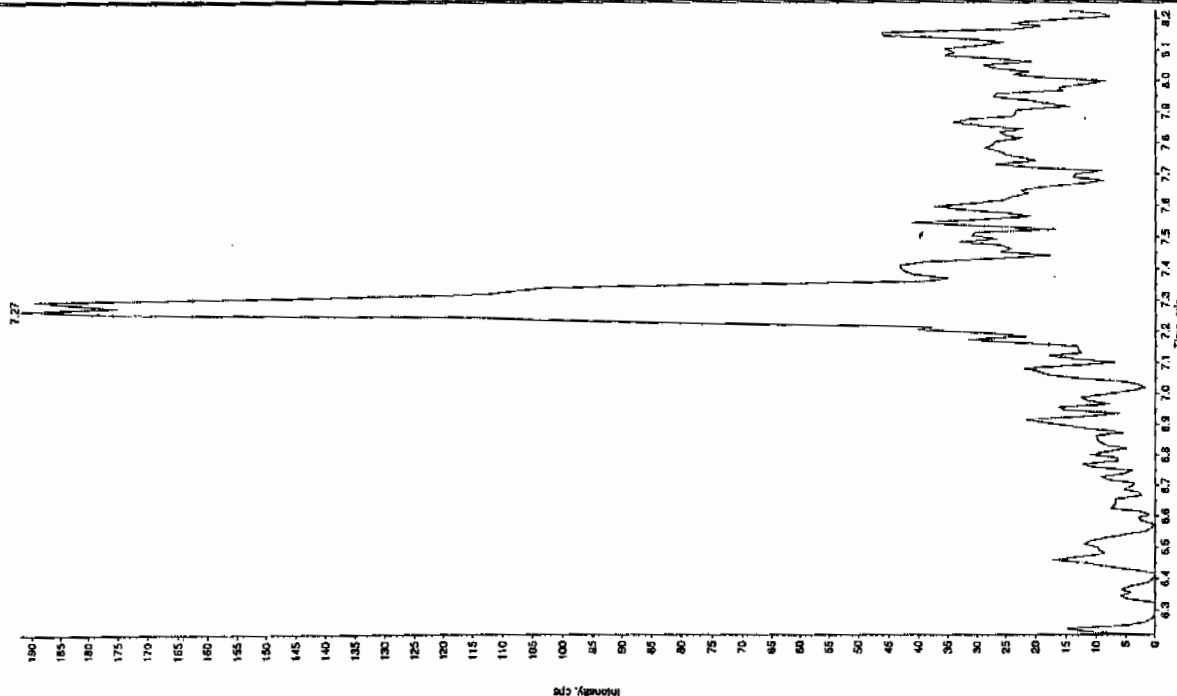
4/11/10

Sample Name: "245114013" Sample ID: "94425021LER" File: "EXS02100032.wif"

Peak Name: "TAB" Mass(es): "257.22049 amu"

Comment: "LCX83212S" Annotation: "

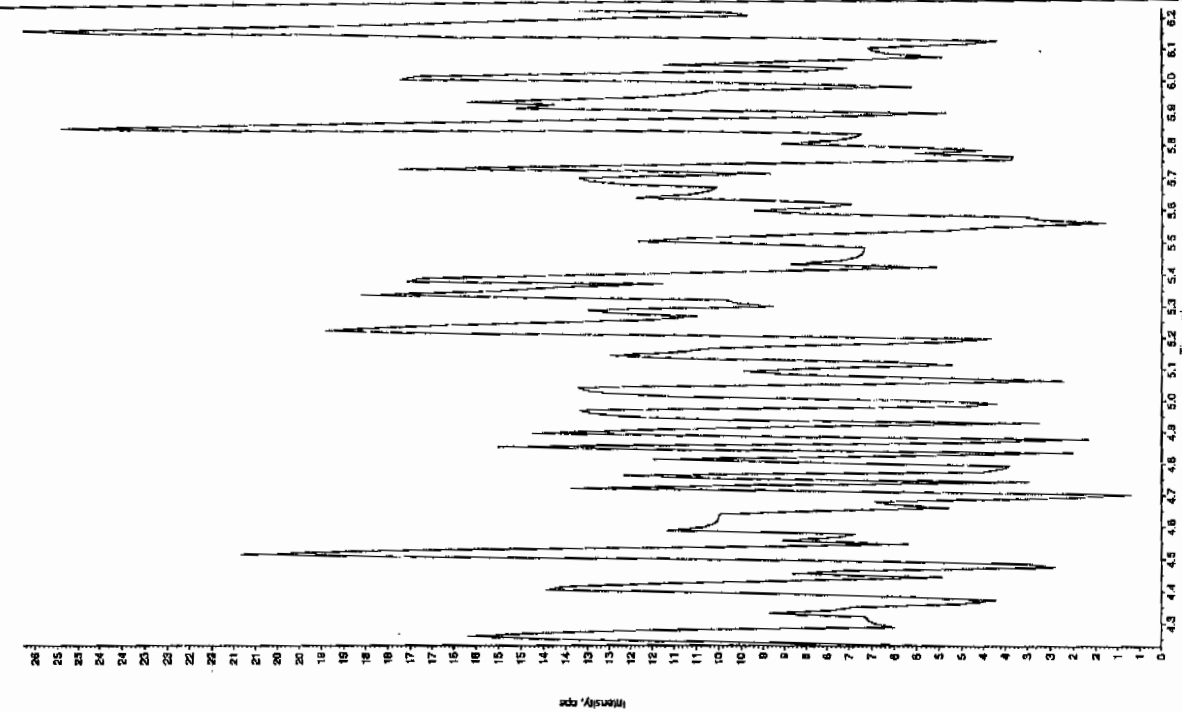
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 4:34:23 PM  
 Modified: No



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

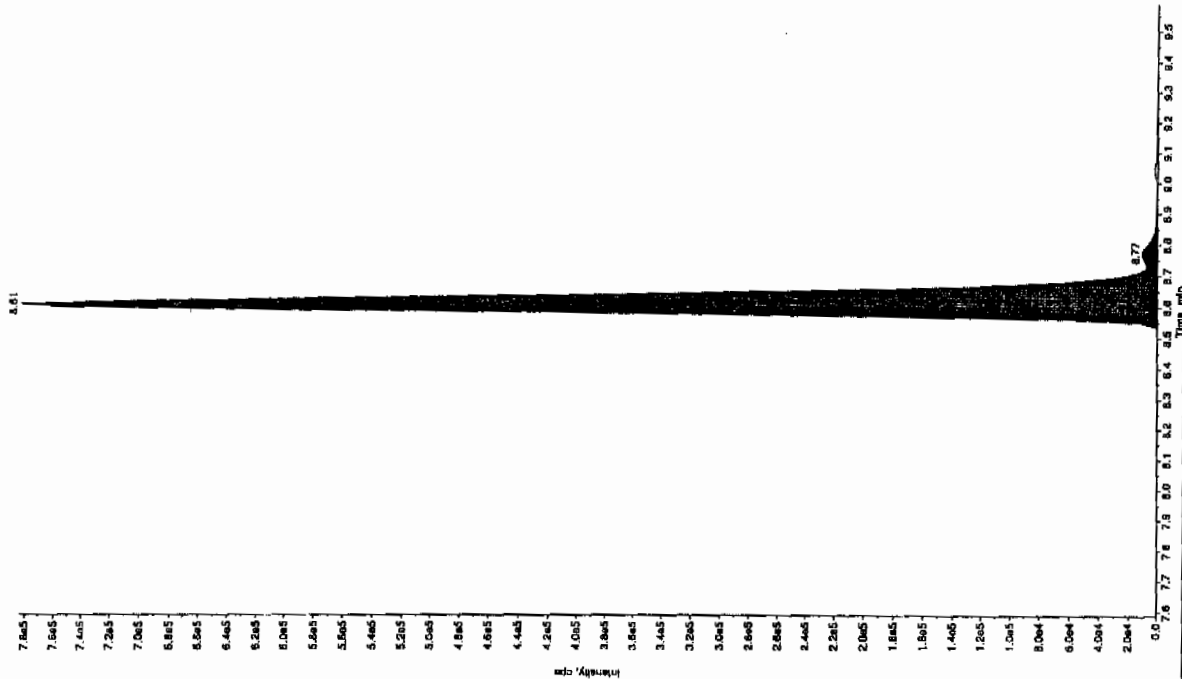
Sample Name: "245114013" Sample ID: "94425021ER" File: "EXS02100032.wif"  
Peak Name: "26-Diainno-4-nitrofluene" Mass(es): "166.046.0 amu"  
Comment: "LCX832125" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 2/10/2010  
Acq. Time: 4:34:23 PM  
Modified: No



Sample Name: "245114013" Sample ID: "94425021ER" File: "EXS02100032.wif"  
Peak Name: "34-Diainno-4-nitrofluene" Mass(es): "182.151.9 amu"  
Comment: "LCX832125" Annotation: ""

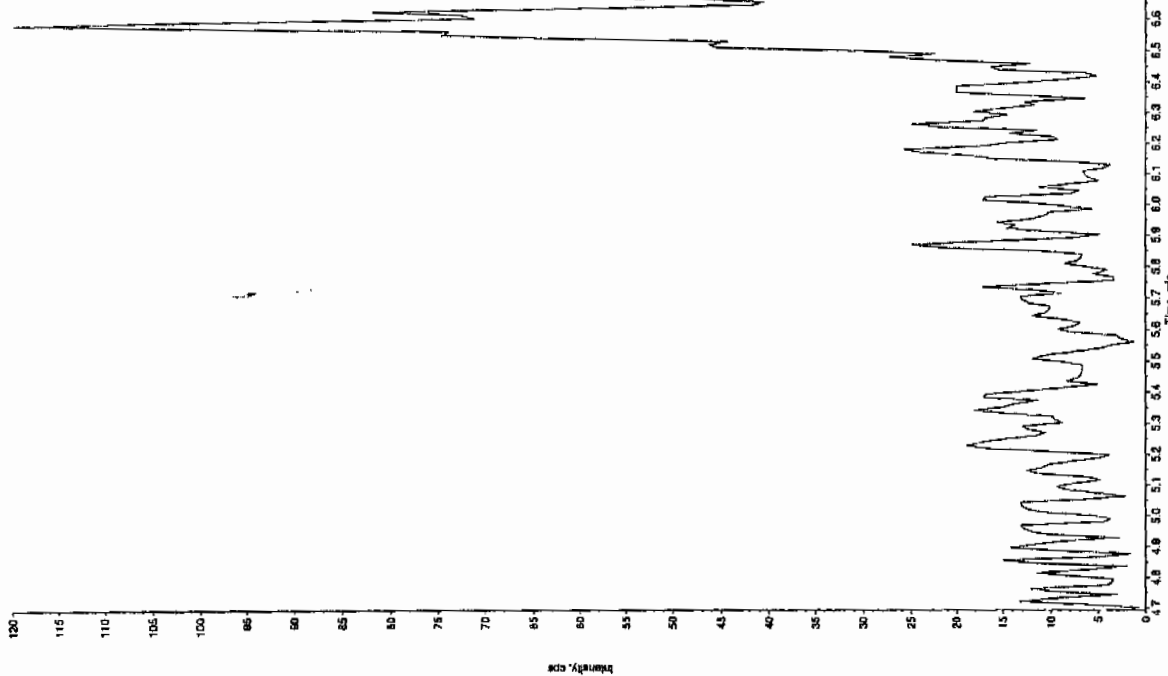
Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 2/10/2010  
Acq. Date: 4:34:23 PM  
Acq. Time: 4:34:23 PM  
Modified: No  
Peak Name: "34-Diainno-4-nitrofluene" Mass(es): "182.151.9 amu"  
Peak Height: 1460.00 cps  
Peak Width: 0.00 sec  
Smoothing Width: 15.0 points  
Window: 15.0 sec  
Detected RT: 8.59 min  
Relative RT: No



Method: "IntelliQuan - 10A"  
Peak Name: "34-Diainno-4-nitrofluene" Mass(es): "182.151.9 amu"  
Peak Height: 1460.00 cps  
Peak Width: 0.00 sec  
Smoothing Width: 15.0 points  
Window: 15.0 sec  
Detected RT: 8.59 min  
Relative RT: No  
Method: "IntelliQuan - 10A"  
Peak Name: "34-Diainno-4-nitrofluene" Mass(es): "182.151.9 amu"  
Peak Height: 1460.00 cps  
Peak Width: 0.00 sec  
Smoothing Width: 15.0 points  
Window: 15.0 sec  
Detected RT: 8.59 min  
Relative RT: No

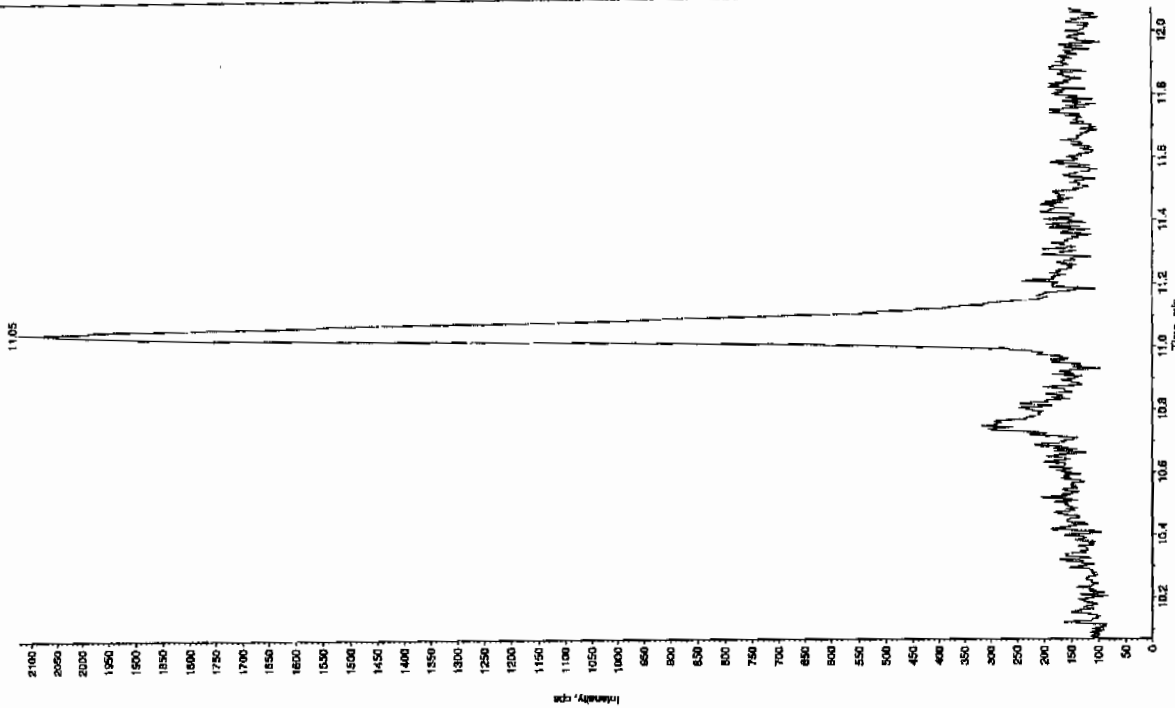
Sample Name: '245114013' Sample ID: '94425021ER' File: 'EX802100032.wif'  
 Peak Name: '24-Diamino-5-nitrothiobenzene' Mass(es): '165.046.0 amu'  
 Comment: 'LCX832125' Annotation: ''

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.03 ng/mL  
 Acq. Date: 2/13/2010  
 Acq. Time: 4:34:23 PM  
 Modified: NO



Sample Name: '245114013' Sample ID: '94425021ER' File: 'EX802100032.wif'  
 Peak Name: 'bis(b-cyano) phosphite' Mass(es): '365.191.0 amu'  
 Comment: 'LCX832125' Annotation: ''

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 4:34:23 PM  
 Modified: NO





1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8421

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114014

Sample Amount 2

Moisture: 12.5

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208058a

Date Analyzed: 09-FEB-10 18:46

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

|                  |   |                             |   |                 |
|------------------|---|-----------------------------|---|-----------------|
| Instrument Value | X | Concentrated Extract Volume | X | Dilution Factor |
|                  |   | Sample Amount               |   |                 |

# Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208058a

Date: 09-Feb-2010

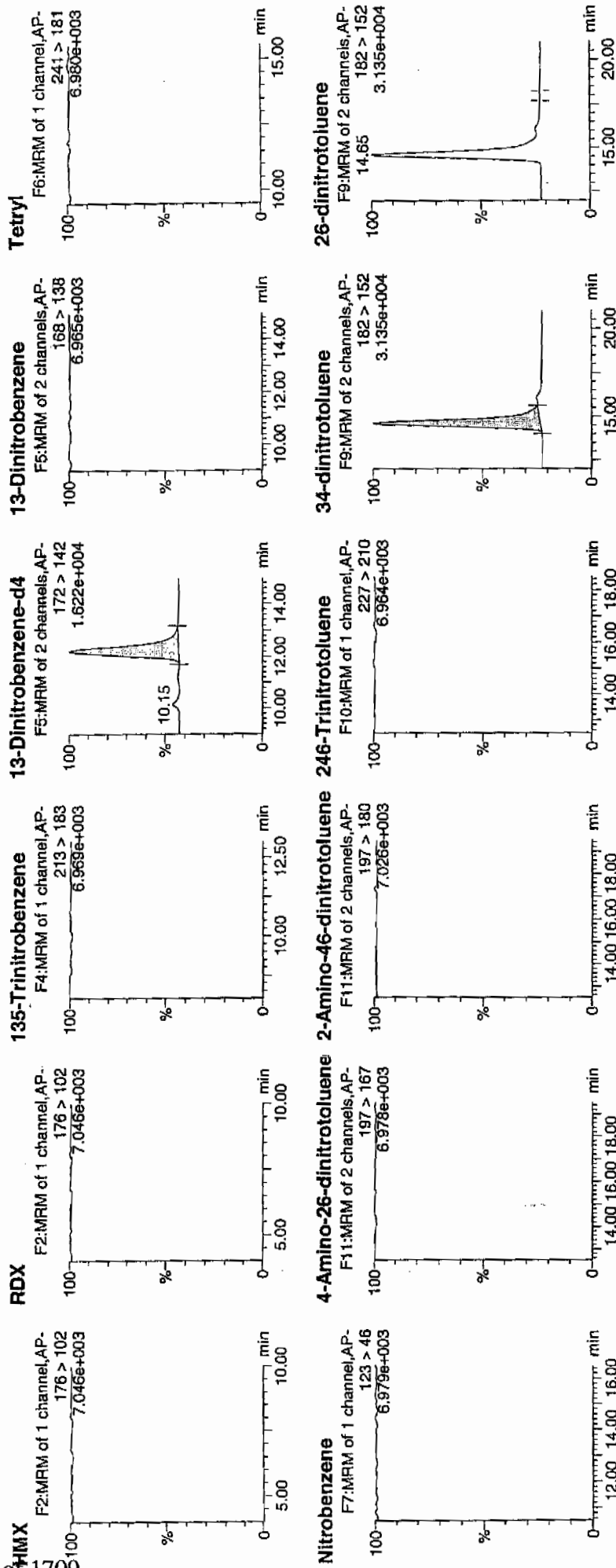
Time: 18:46:23

ID: 245114014

Vial: 2:3,E

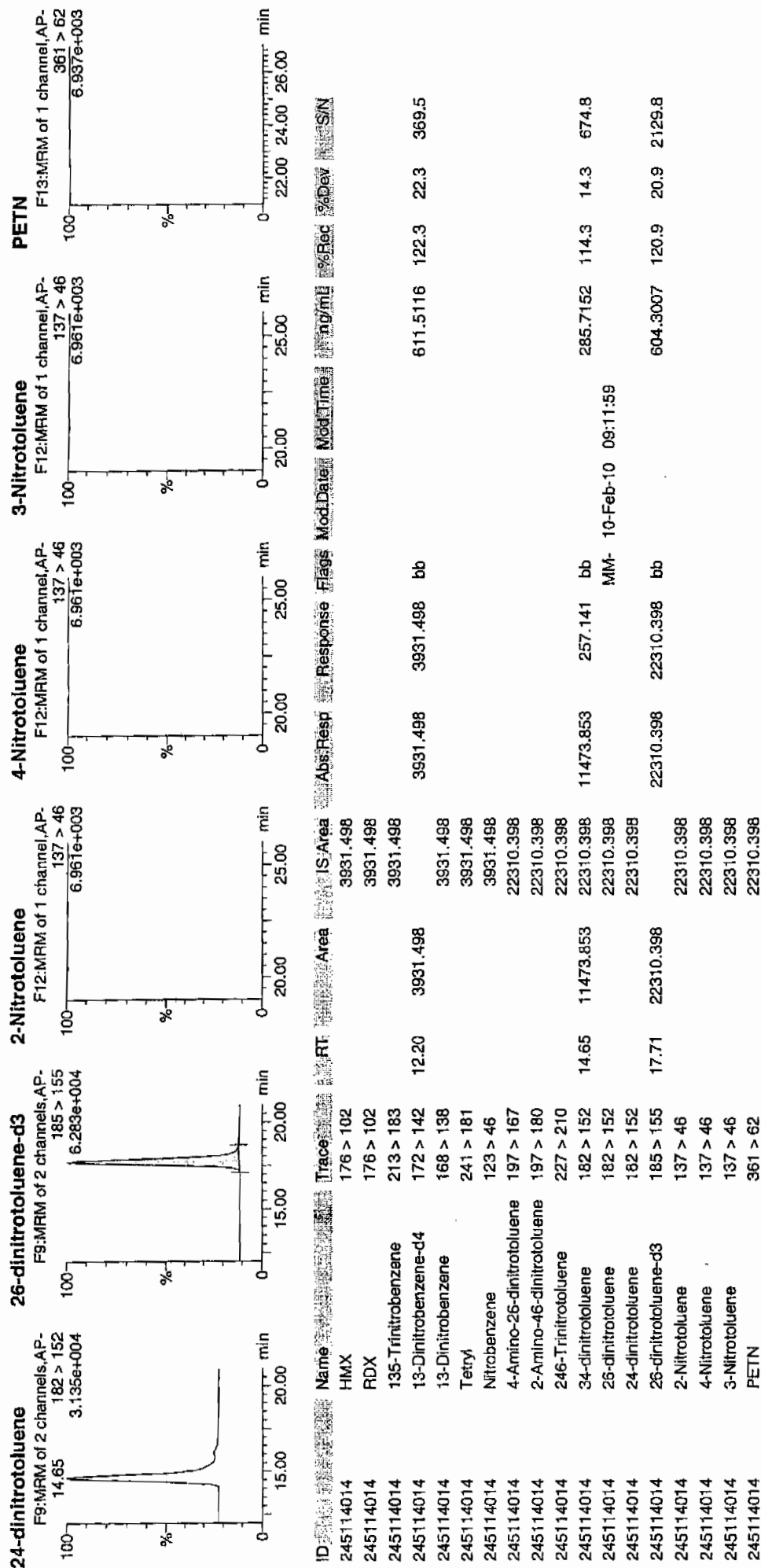
14077  
2/10/10

121  
1944250 / 80000



Handwritten signature

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8421

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114014

Sample Amount 2

Moisture: 12.5

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100033.wiff

Date Analyzed: 10-FEB-10 16:50

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

for 2/11/10

Sample Name: "245114014" Sample ID: "94425021" File: "EXS02100033.wif"

Peak Name: "TATB" Mass(es): "257.2/204.9 amu"

Comment: "LCX832125" Annotation: "

Sample Index: 1

Sample Type: Unknown

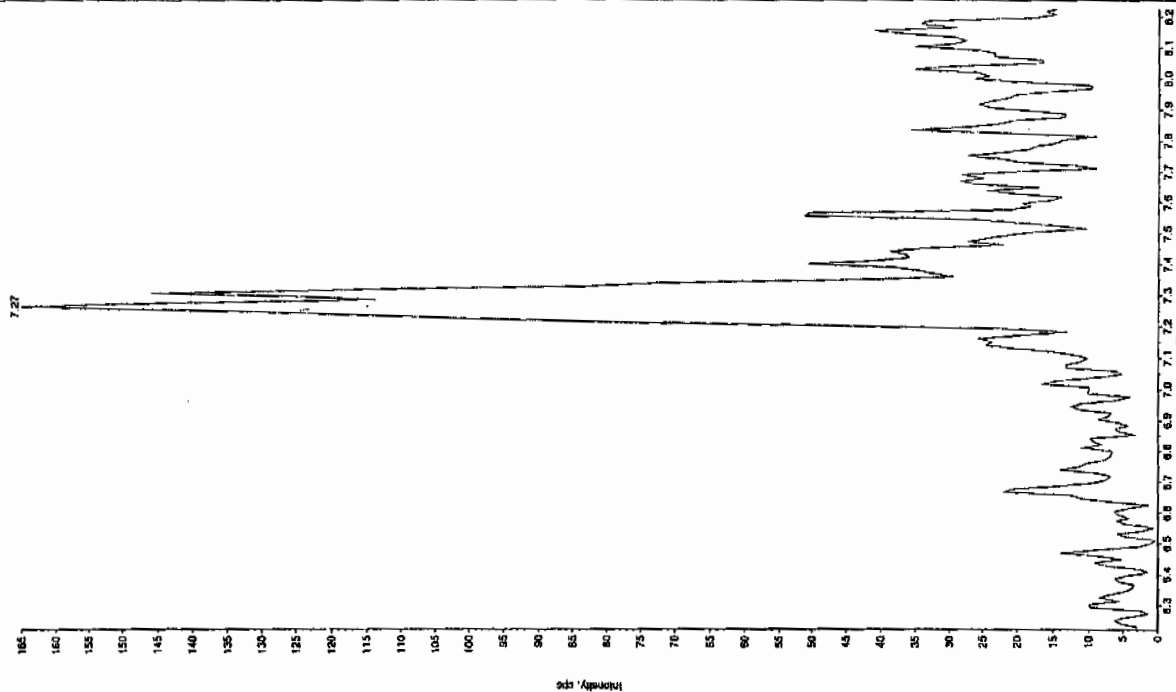
Concentration: 0.00 ng/mL

Calculated Conc: 2/10/2010

Acq. Date: 4:50:05 PM

Acq. Time: 110

Modified:



Sample Name: "245114014" Sample ID: "94425021" File: "EXS02100033.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.0/166.0 amu"

Comment: "LCX832125" Annotation: "

Sample Index: 1

Sample Type: Unknown

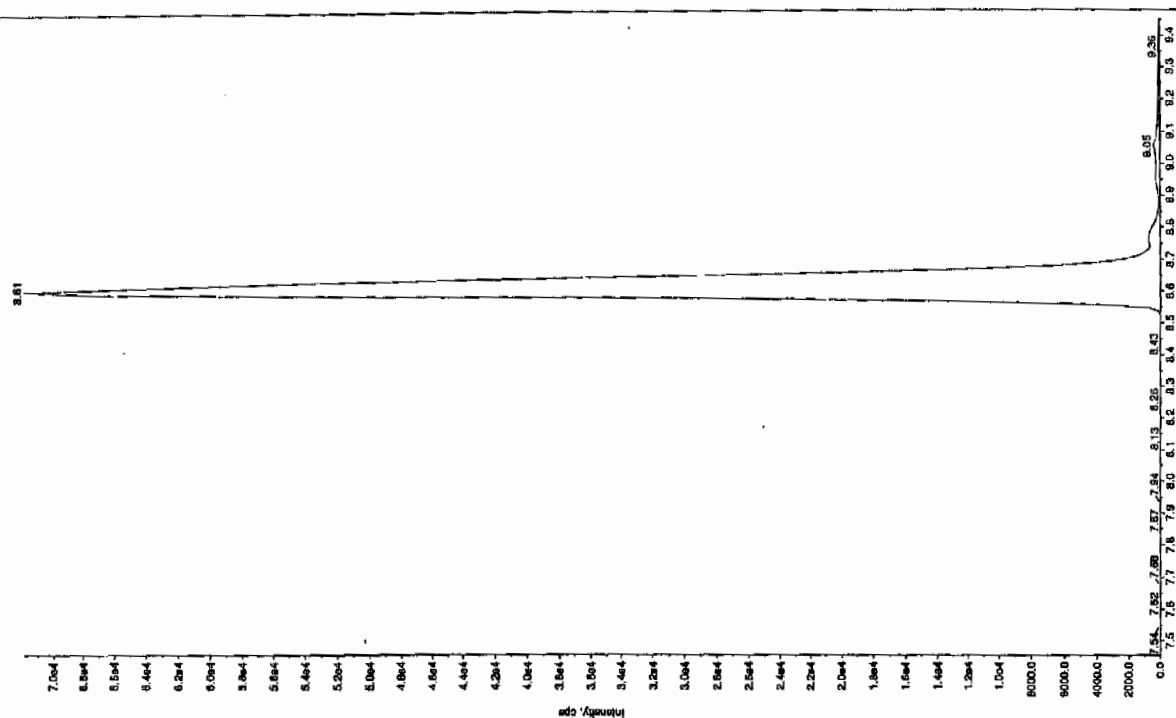
Concentration: 0.00 ng/mL

Calculated Conc: 2/10/2010

Acq. Date: 4:50:05 PM

Acq. Time: 110

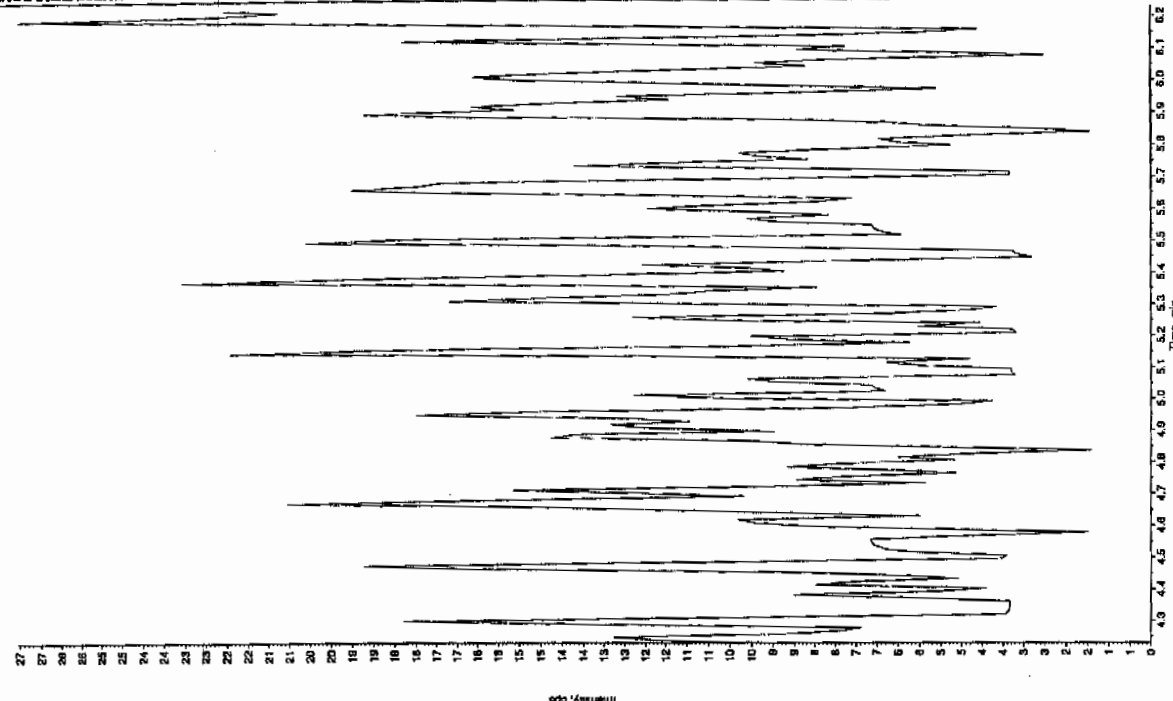
Modified:



Ann on 11/10

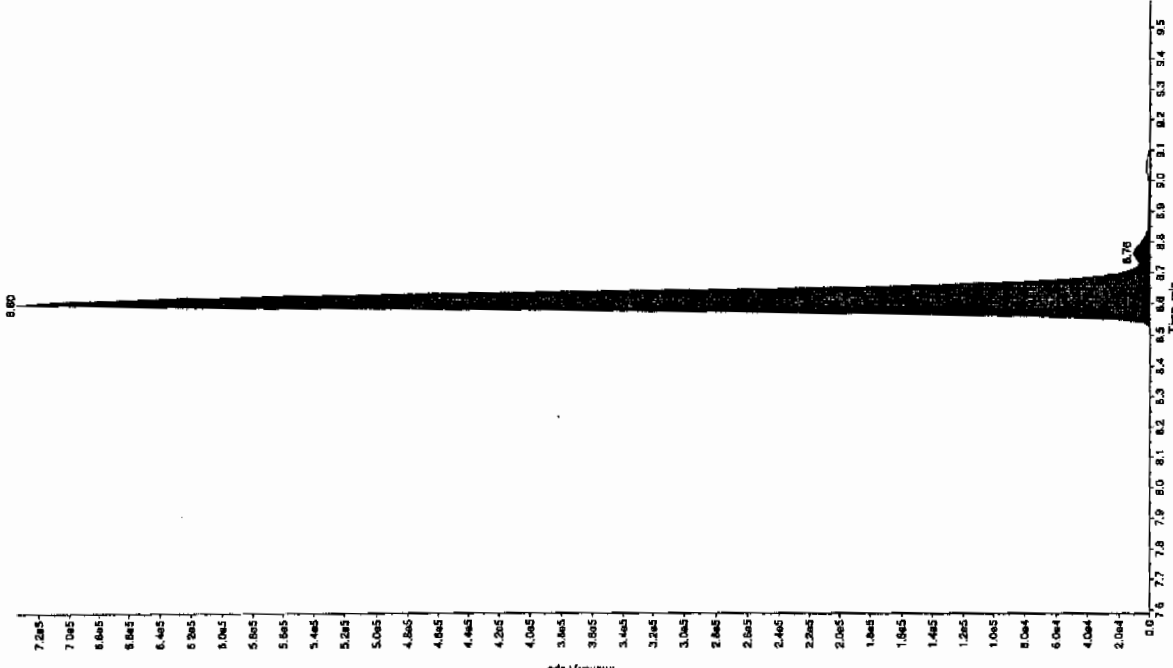
Sample Name: 245114014 Sample ID: 9445021.LRF File: EX502100031.wlf  
 Peak Name: 26-Dinitro-4-nitrofluorene Mass(es): 186.0460 amu  
 Comment: LCX832125 Annotation: --

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 2/10/2010  
 Acq. Date: 4:50:05 PM  
 Acq. Time: 4:50:05 PM  
 Modified: Mo



Sample Name: 245114014 Sample ID: 9445021.LRF File: EX502100031.wlf  
 Peak Name: 34-Dinitrofluorene Mass(es): 182.11519 amu  
 Comment: LCX832125 Annotation: --

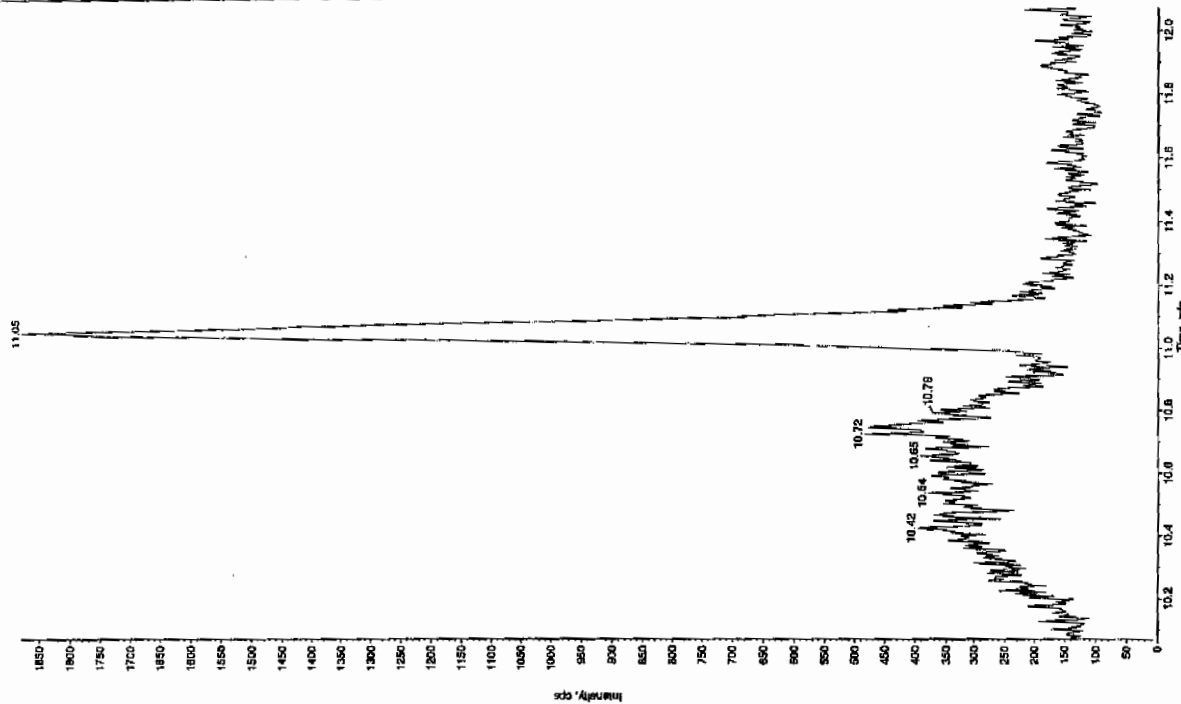
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 2/10/2010  
 Acq. Date: 4:50:05 PM  
 Acq. Time: 4:50:05 PM  
 Modified: Mo



Peak Name: 34-Dinitrofluorene  
 Mass(es): 182.11519 amu  
 Comment: LCX832125 Annotation: --  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 2/10/2010  
 Acq. Date: 4:50:05 PM  
 Acq. Time: 4:50:05 PM  
 Modified: Mo  
 Peak Height: 1460.00 cps  
 Peak Width: 3.00 sec  
 Smoothing Width: 15.0 sec  
 Window: 8.59 min  
 Expected RT: No  
 Relative RT: No  
 Peak Type: Valley  
 Retention Time: 8.59 min  
 Height: 3.05e+006 counts  
 Start Time: 7.35e+005 cps  
 End Time: 8.51 min  
 End Time: 8.35 min

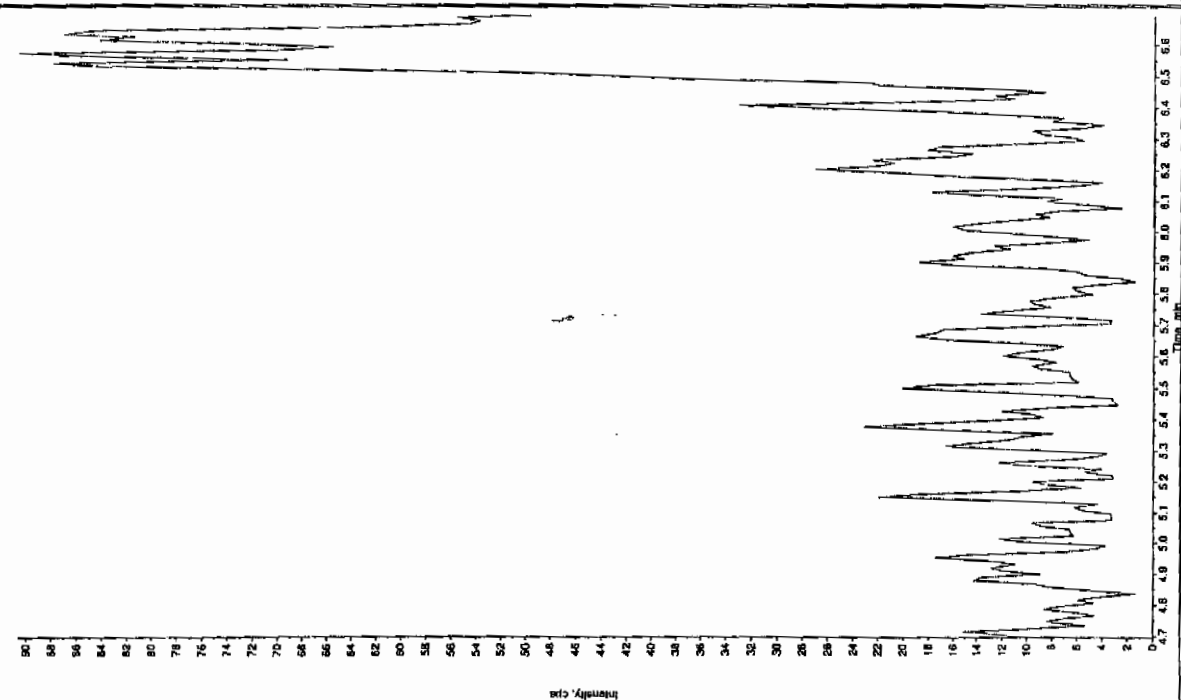
Sample Name: "245114014" Sample ID: "944250JL1E" File: "EX502100033.wif"  
 Peak Name: "165.046.0 amu" Mass(es): "165.046.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 2/10/2010  
 Acq. Date: 4:50:05 PM  
 Acq. Time: No  
 Modified: No



Sample Name: "245114014" Sample ID: "944250JL1E" File: "EX502100033.wif"  
 Peak Name: "165.046.0 amu" Mass(es): "165.046.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 2/10/2010  
 Acq. Date: 4:50:05 PM  
 Acq. Time: No  
 Modified: No



Method 8321A-Modified LCMSMS#4

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8420

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114015

Sample Amount 2

Moisture: 30.1

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208059a

Date Analyzed: 09-FEB-10 19:15

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

|            |   |                                    |   |          |
|------------|---|------------------------------------|---|----------|
| Instrument | X | <u>Concentrated Extract Volume</u> | X | Dilution |
| Value      |   | <u>Sample Amount</u>               |   | Factor   |



Quantify Sample Report  
 3EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208059a

Date: 09-Feb-2010

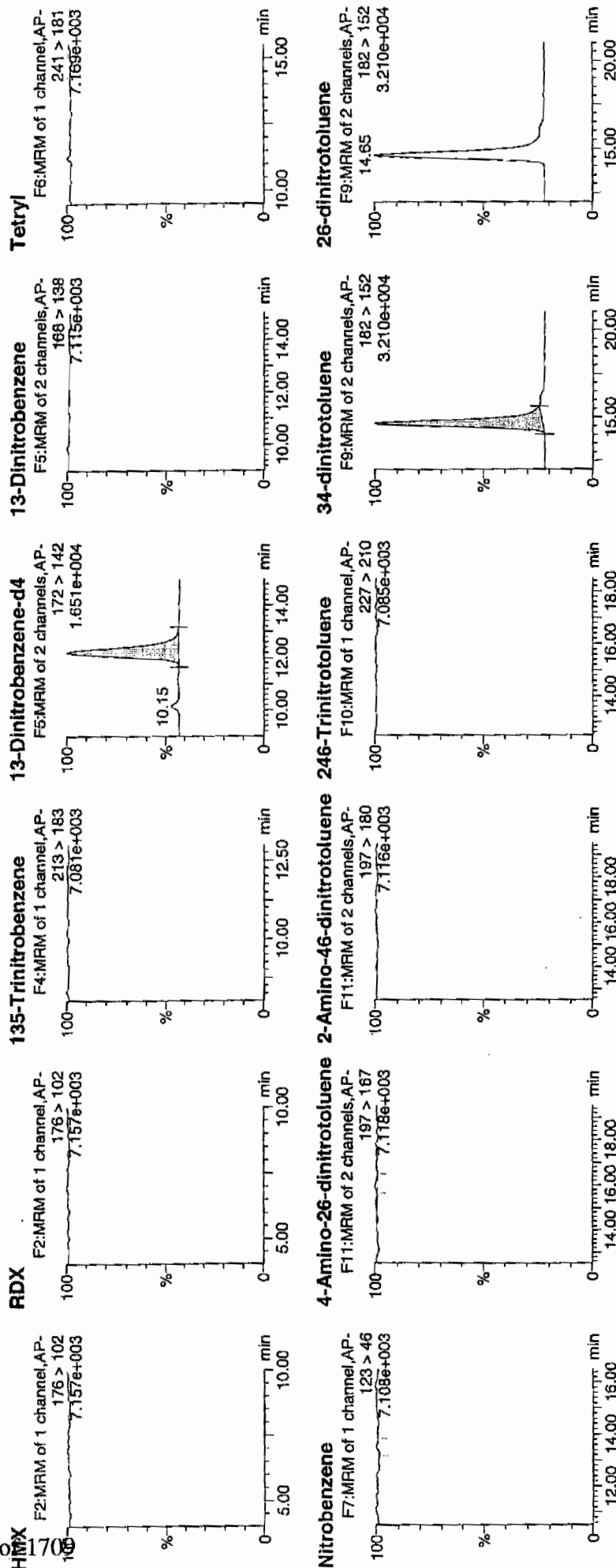
Time: 19:15:51

ID: 245114015

Vol: 2.3,F

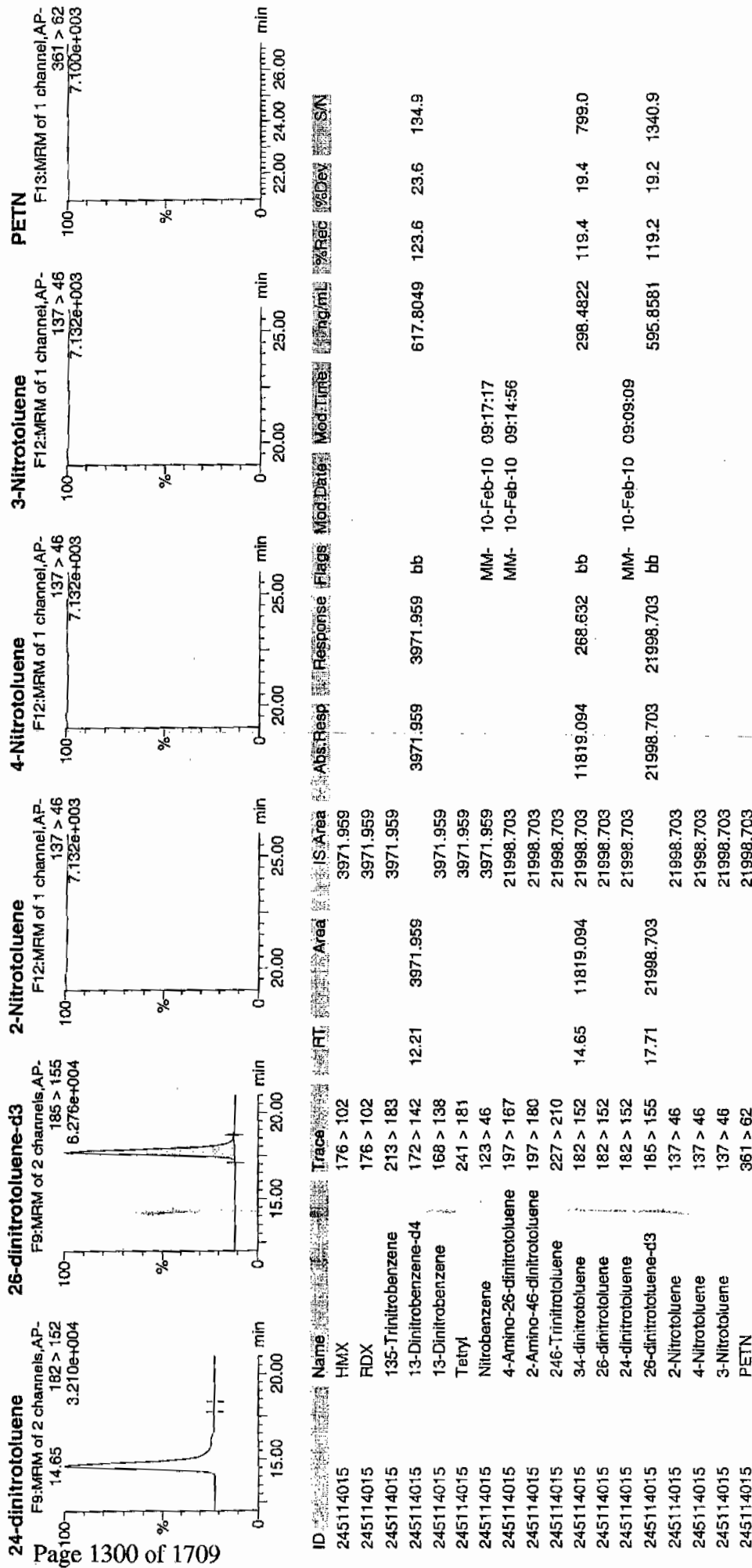
10.15  
 2/10/10

944250 / 8022 / 2 /



Handwritten note: 10.15

Dataset: C:\MASSLYNX\New\_Exp\PROJ020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8420

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 245114015

Sample Amount 2

Moisture: 30.1

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100034.wiff

Date Analyzed: 10-FEB-10 17:05

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

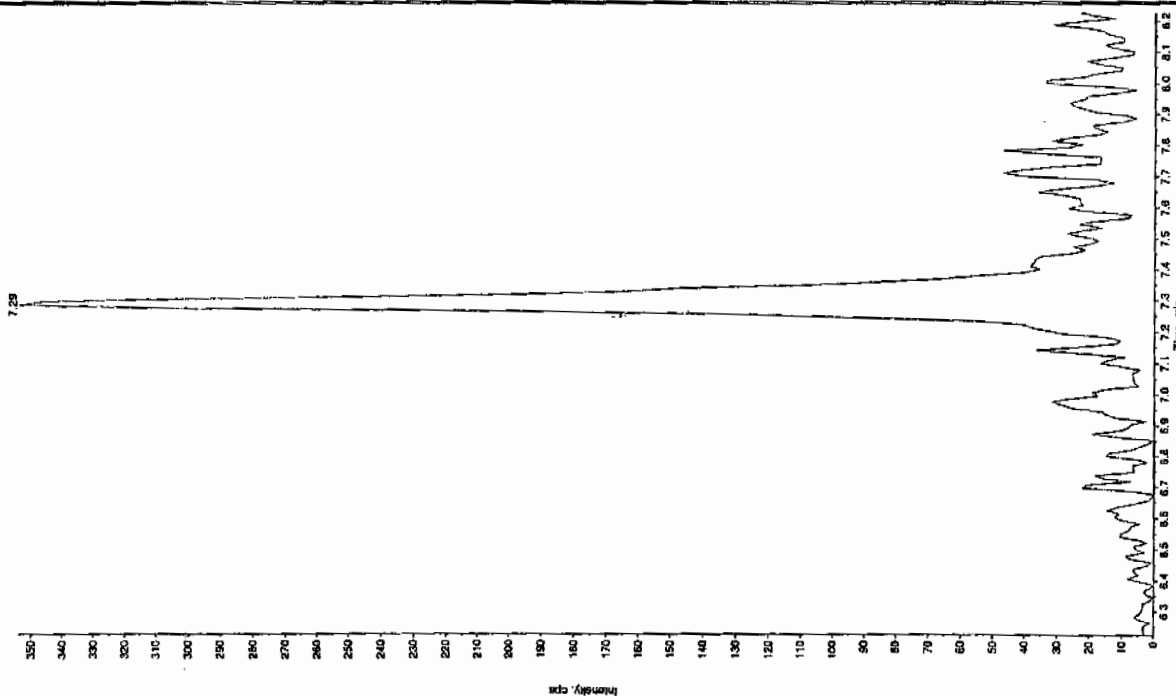
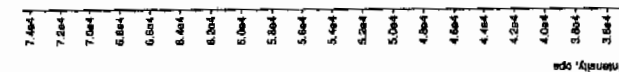
\*Concentration =

|                  |   |   |   |                 |
|------------------|---|---|---|-----------------|
| Instrument Value | X | $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ | X | Dilution Factor |
|------------------|---|---|---|-----------------|

See 2/11/10

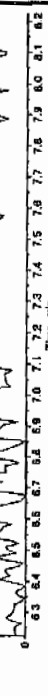
Sample Name: "245114015" Sample ID: "94425034.1" File: "EX502100034.will"  
Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
Comment: "LCX832125" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 2/10/2010 ng/mL  
Acq. Date: 5:05:48 PM  
Acq. Time: 5:05:48 PM  
Modified: No



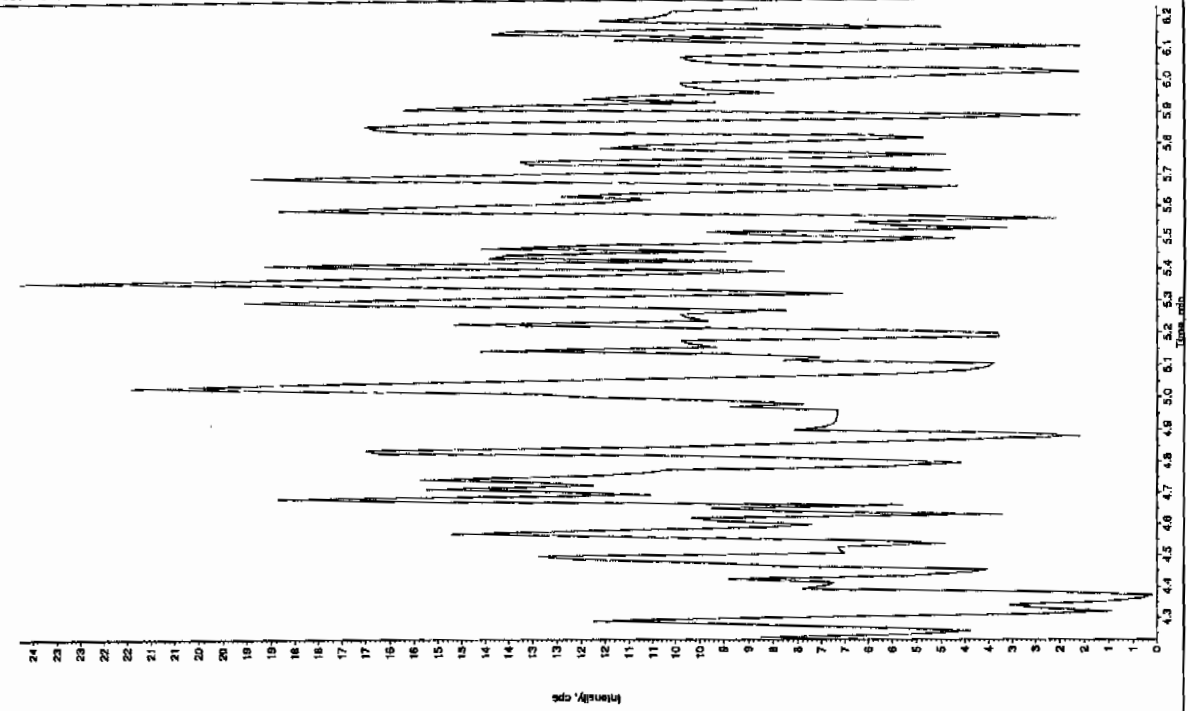
Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 2/10/2010 ng/mL  
Acq. Date: 5:05:48 PM  
Acq. Time: 5:05:48 PM  
Modified: No

See 02/11/10



Sample Name: "245114015" Sample ID: "9442502121ER" File: "EX502100034.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "165.046.0 amu"  
 Comment: "LCX832125" Annotation: ""

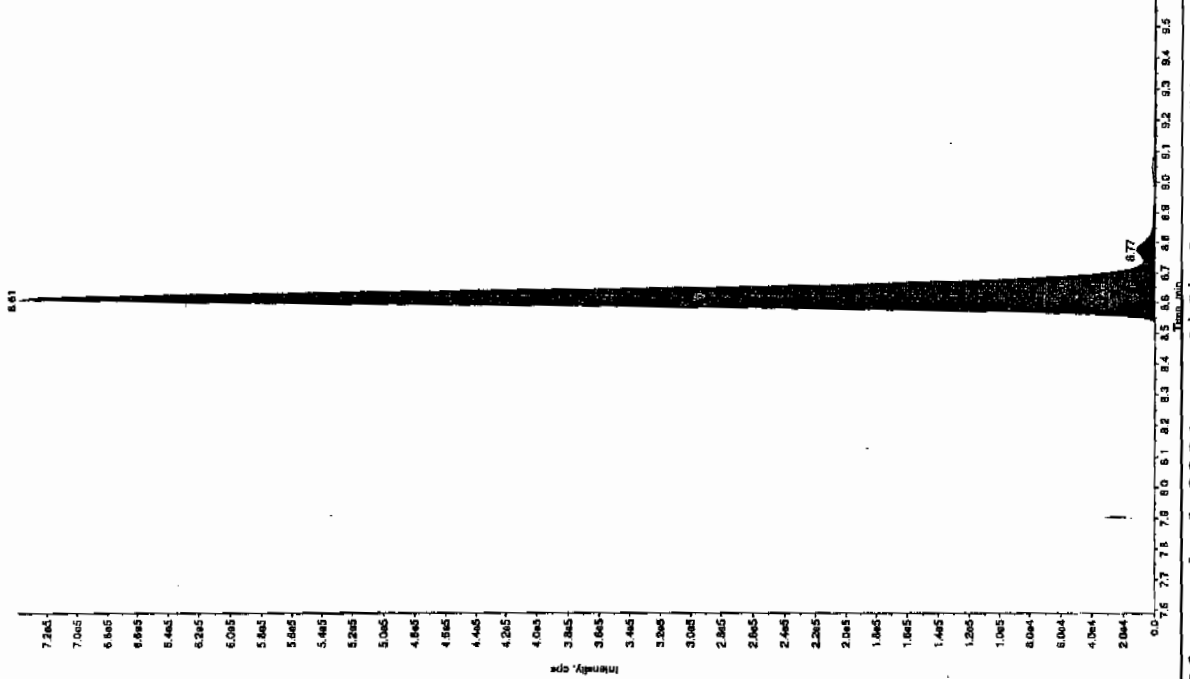
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 5:05:48 PM  
 Modified: No



Sample Name: "245114015" Sample ID: "9442502121ER" File: "EX502100034.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1151.9 amu"  
 Comment: "LCX832125" Annotation: ""

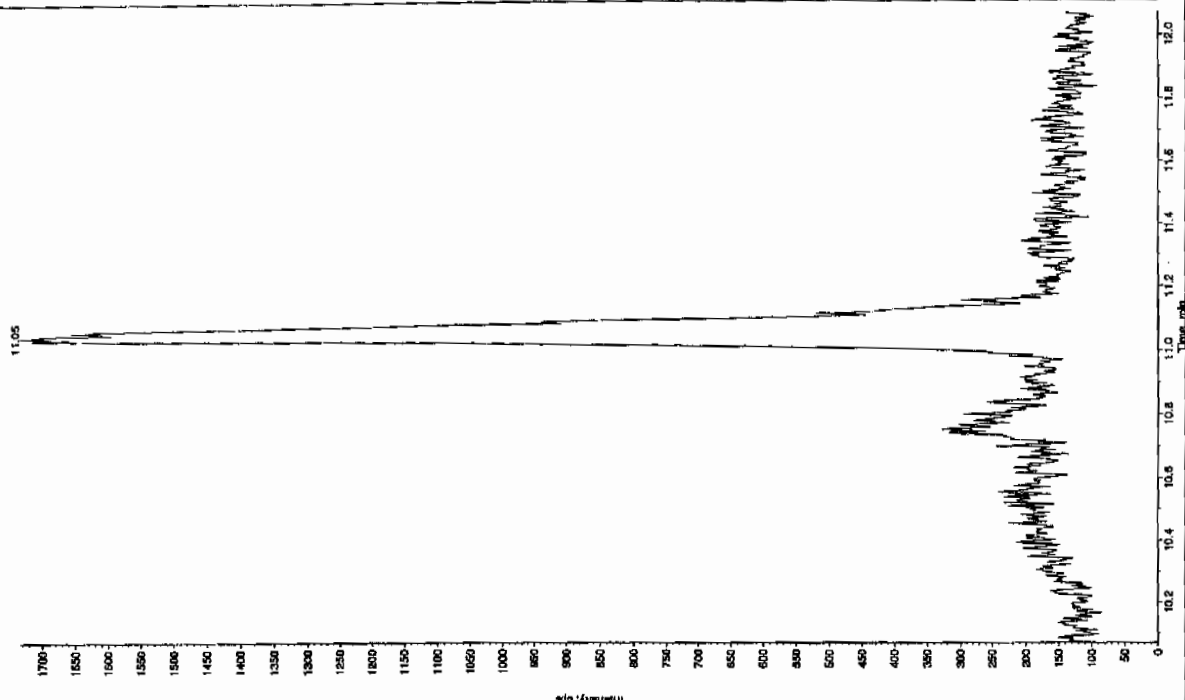
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 312. ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 5:05:48 PM  
 Modified: No

Proc. Algorithm: IntCalQuan - IOA  
 Min. Peak Height: 166.00 cps  
 Min. Peak Width: 3.00 sec  
 Smoothing Width: 15.0 Points  
 RT Window: 15.0 sec  
 Expected RT: 5.39 min  
 Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.61 min  
 Area: 2.98e+006 counts  
 Height: 7.39e+005 cps  
 Start Time: 5.45 min  
 End Time: 5.96 min



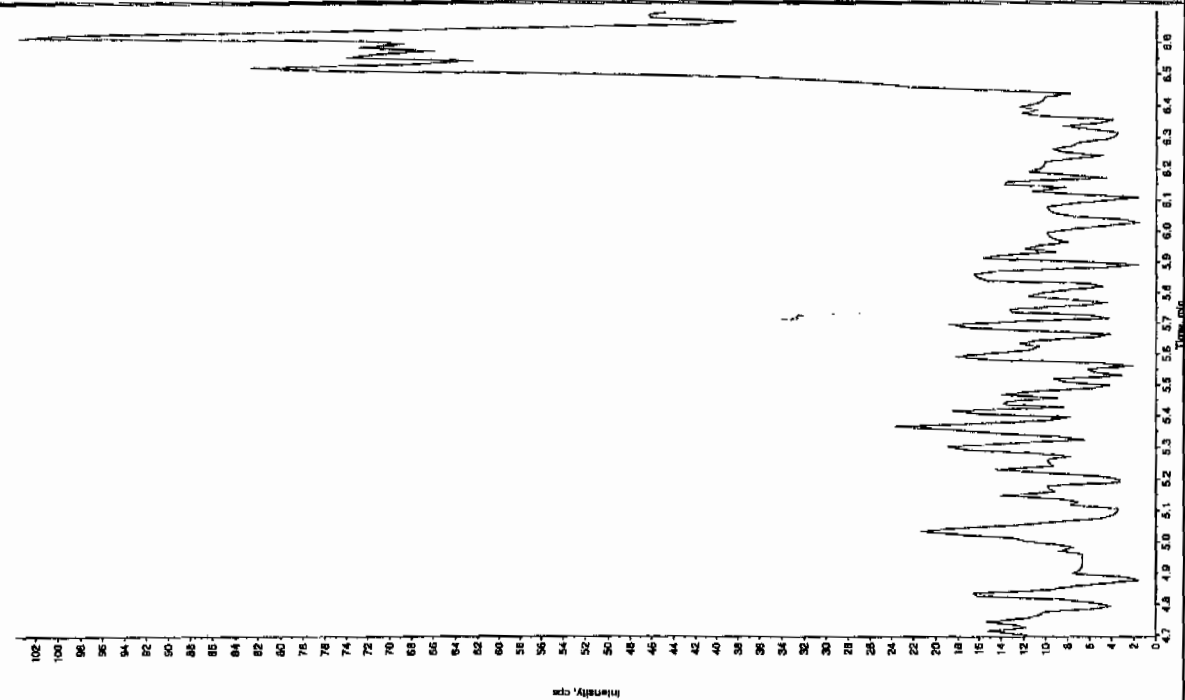
Sample Name: "245114015" Sample ID: "944250JLER" File: "EX50210034.will"  
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): 353.19, 0.0 amu  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 5:05:48 PM  
 Modified: No



Sample Name: "245114015" Sample ID: "944250JLER" File: "EX50210034.will"  
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): 168.046, 0.0 amu  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 5:05:48 PM  
 Modified: No



# STANDARDS DATA

**SW846 8321A Modified-Explosives  
Calibration Standard Concentration Levels**

|                                | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | Level 7 | CCV  |
|--------------------------------|---------|---------|---------|---------|---------|---------|---------|------|
| 3,4-Dinitrotoluene (Surrogate) | 12.5    | 25      | 100     | 200     | 400     | 500     |         | 300  |
| <b>Primary Analytes</b>        |         |         |         |         |         |         |         |      |
| HMX                            | 25      | 50      | 200     | 400     | 800     | 1000    | na      | 600  |
| RDX                            | 25      | 50      | 200     | 400     | 800     | 1000    | na      | 600  |
| DNX                            | 25      | 50      | 200     | 400     | 800     | 1000    | na      | 600  |
| MINX                           | 25      | 50      | 200     | 400     | 800     | 1000    | na      | 600  |
| TNX                            | 25      | 50      | 200     | 400     | 800     | 1000    | na      | 600  |
| 1,3,5-Trinitrobenzene          | 25      | 50      | 200     | 400     | 800     | 1000    | na      | 600  |
| 1,3-Dinitrobenzene             | 25      | 50      | 200     | 400     | 800     | 1000    | na      | 600  |
| Nitrobenzene                   | 25      | 50      | 200     | 400     | 800     | 1000    | na      | 600  |
| Tetryl                         | 25      | 50      | 200     | 400     | 800     | 1000    | na      | 600  |
| Nitroglycerin                  | 50      | 100     | 200     | 400     | 800     | 1000    | na      | 600  |
| 2,4,6-Trinitrotoluene          | 25      | 50      | 200     | 400     | 800     | 1000    | na      | 600  |
| 2-Amino-4,6-dinitrotoluene     | 25      | 50      | 200     | 400     | 800     | 1000    | na      | 600  |
| 4-Amino-2,6-dinitrotoluene     | 25      | 50      | 200     | 400     | 800     | 1000    | na      | 600  |
| 2,4-Dinitrotoluene             | 25      | 50      | 200     | 400     | 800     | 1000    | na      | 600  |
| 2,6-Dinitrotoluene             | 25      | 50      | 200     | 400     | 800     | 1000    | na      | 600  |
| 2-Nitrotoluene                 | 25      | 50      | 200     | 400     | 800     | 1000    | na      | 600  |
| 4-Nitrotoluene                 | 25      | 50      | 200     | 400     | 800     | 1000    | an      | 600  |
| 3-Nitrotoluene                 | 25      | 50      | 200     | 400     | 800     | 1000    | na      | 600  |
| PETN                           | 25      | 50      | 200     | 400     | 800     | 1000    | na      | 600  |
| Picric Acid                    | 200     | 400     | 1600    | 3200    | 6400    | 8000    | na      | 4800 |
| 3,4-Dinitrotoluene (Surrogate) | 25      | 50      | 125     | 250     | 375     | 500     | 1000    | 250  |
| <b>Secondary Analytes</b>      |         |         |         |         |         |         |         |      |
| 2,4-Diamino-6-nitrotoluene     | 50      | 100     | 250     | 500     | 750     | 1000    | 2000    | 500  |
| 2,6-Diamino-4-nitrotoluene     | 50      | 100     | 250     | 500     | 750     | 1000    | 2000    | 500  |
| 3,5-Dinitroaniline             | 50      | 100     | 250     | 500     | 750     | 1000    | 2000    | 500  |
| TATB                           | 50      | 100     | 250     | 500     | 750     | 1000    | 2000    | 500  |
| tris(o-Cresyl)phosphate        | 50      | 100     | 250     | 500     | 750     | 1000    | 2000    | 500  |

All values are ug/L without the prep factor

Calibration Levels 8321A-Modified-EXPL.xls (08/09A)

Calibration Levels 8321A-Modified-EXPL.xls



# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1324

Lab Code: GEL

Run Date: 08-FEB-10 10-FEB-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Average RF

| Parname                    | 1           | 2           | 3           | 4           | 5           | 6           | Ave RF | RSD    | Q |
|----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------|--------|---|
| Calibration Level:         | EXP0208003a | EXP0208004a | EXP0208005a | EXP0208006a | EXP0208007a | EXP0208008a |        |        |   |
| Data File:                 |             |             |             |             |             |             |        |        |   |
| 1,3,5-Trinitrobenzene      | 3.548       | 3.943       | 4.247       | 3.451       | 3.361       | 3.547       | 3.683  | 9.244  |   |
| 1,3-Dinitrobenzene-d4      | 6.149       | 6.436       | 6.465       | 6.633       | 6.717       | 6.174       | 6.429  | 3.612  |   |
| 2,4,6-Trinitrotoluene      | .299        | .308        | .311        | .323        | .348        | .347        | 0.323  | 6.431  |   |
| 2,4-Dinitrotoluene         | .243        | .236        | .232        | .24         | .256        | .258        | 0.244  | 4.271  |   |
| 2,6-Dinitrotoluene         | 1.071       | 1.092       | 1.008       | 1.066       | 1.112       | 1.095       | 1.074  | 3.4    |   |
| 2,6-Dinitrotoluene-d3      | 34.376      | 37.613      | 37.768      | 39.993      | 37.032      | 34.734      | 36.919 | 5.669  |   |
| 2-Amino-4,6-dinitrotoluene | .361        | .359        | .391        | .411        | .422        | .432        | 0.396  | 7.897  |   |
| 3,4-Dinitrotoluene         | .793        | .884        | .838        | .907        | .976        | 1           | 0.900  | 8.794  |   |
| 4-Amino-2,6-dinitrotoluene | .279        | .278        | .264        | .289        | .311        | .303        | 0.287  | 6.027  |   |
| HMX                        | 3.402       | 3.005       | 4.021       | 3.584       | 3.432       | 3.392       | 3.473  | 9.511  |   |
| Nitrobenzene               | .773        | .761        | .821        | .856        | .825        | .812        | 0.808  | 4.332  |   |
| RDX                        | 2.405       | 2.171       | 2.783       | 2.361       | 2.379       | 2.47        | 2.428  | 8.269  |   |
| m-Dinitrobenzene           | 1.257       | 1.065       | 1.193       | 1.226       | 1.214       | 1.259       | 1.202  | 5.994  |   |
| m-Nitrotoluene             | .103        | .107        | .082        | .087        | .09         | .089        | 0.093  | 10.689 |   |
| o-Nitrotoluene             | .173        | .148        | .144        | .152        | .156        | .157        | 0.155  | 6.405  |   |
| p-Nitrotoluene             | .071        | .091        | .069        | .074        | .076        | .075        | 0.076  | 10.145 |   |

Q column used to flag RSD values outside of Limit (>20%)

\* Values outside of QC Limit

# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1324

Lab Code: GEL

Run Date: 08-FEB-10 10-FEB-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: 2nd Order

| Calibration Level: | 1           | 2           | 3           | 4           | 5           | 6           | X     | X^2      | Intercept | COD   | Q |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------|----------|-----------|-------|---|
| Data File:         | EXP0208003a | EXP0208004a | EXP0208005a | EXP0208006a | EXP0208007a | EXP0208008a |       |          |           |       |   |
| Parname:           |             |             |             |             |             |             |       |          |           |       |   |
| PETN               | 1686.42     | 3643.3      | 12841.7     | 23262.7     | 39238.6     | 44182       | 1.544 | -0002977 | 21.056    | .9994 |   |
| Tetryl             | 213.659     | 359.657     | 1210.76     | 2567.13     | 4763.44     | 5400.44     | .962  | -0000981 | 8.004     | .9996 |   |

Quadratic Fit:  $y = Ax^2 + Bx + C$   
 where  $X^2$  column above is coefficient A  
 $X$  column above is coefficient B  
 intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

\* Values outside of QC Limit

# Quantify Calibration Report

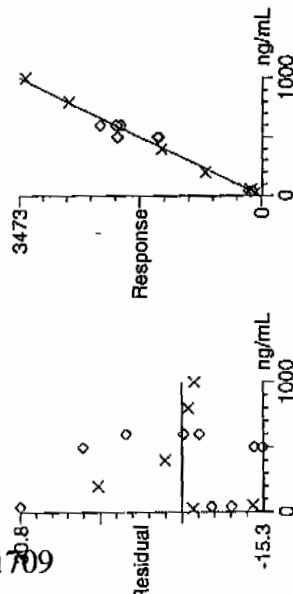
EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

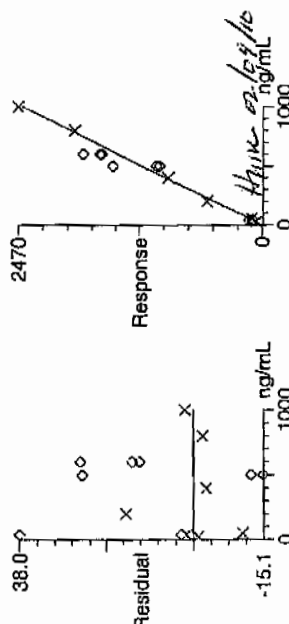
Method: C:\MASSLYNX\New\_Exp.PRO\MethDB\020810expa.mdb, Time: Tue Feb 09 09:17:48 2010

Calibration: Untitled, Time: Tue Feb 09 10:19:05 2010

Compound name: HMX  
 Response Factor: 3.4728  
 RF SD: 0.330307, % Relative SD: 9.51126  
 Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF



Compound name: RDX  
 Response Factor: 2.42814  
 RF SD: 0.200785, % Relative SD: 8.26908  
 Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF



Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

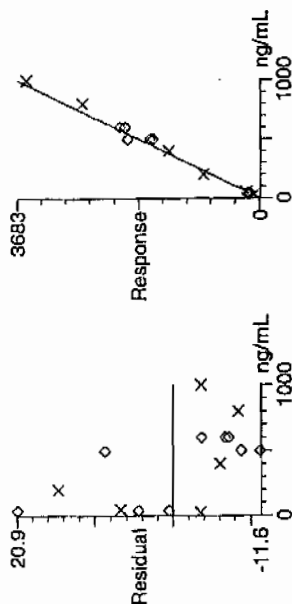
Compound name: 135-Trinitrobenzene

Response Factor: 3.68306

RRF SD: 0.340458, % Relative SD: 9.2439

Response type: Internal Std (Ref 4), Area \* (IS Conc. / IS Area)

Curve type: RF



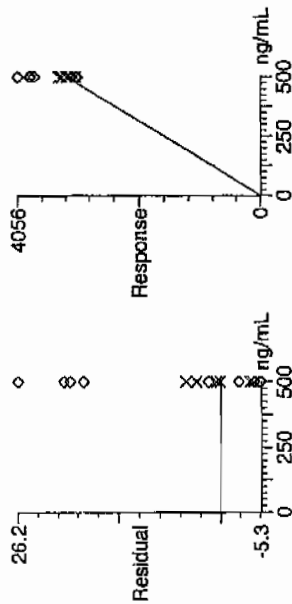
Compound name: 13-Dinitrobenzene-d4

Response Factor: 6.42915

RRF SD: 0.232214, % Relative SD: 3.6119

Response type: External Std, Area

Curve type: RF



Quantify Calibration Report  
 3EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO1020810expA.qld, Time: Tue Feb 09 10:19:05 2010

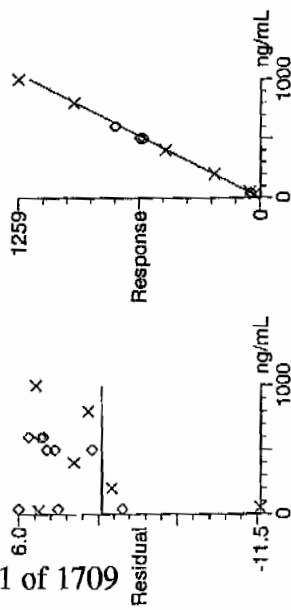
Compound name: 13-Dinitrobenzene

Response Factor: 1.2024

RF SD: 0.0720671, % Relative SD: 5.99362

Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )

Curve type: RF



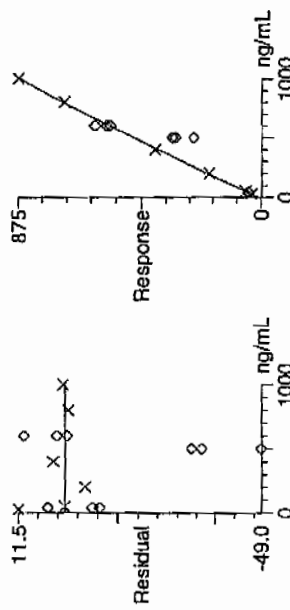
Compound name: Tetra

Coefficient of Determination: 0.999624

Calibration curve:  $-9.80877e-005 * x^2 + 0.962233 * x + 8.00395$

Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )

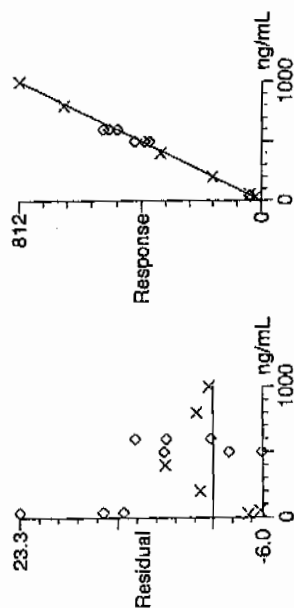
Curve type: 2nd Order, Origin: Exclude, Weighting: Null, Axis trans: None



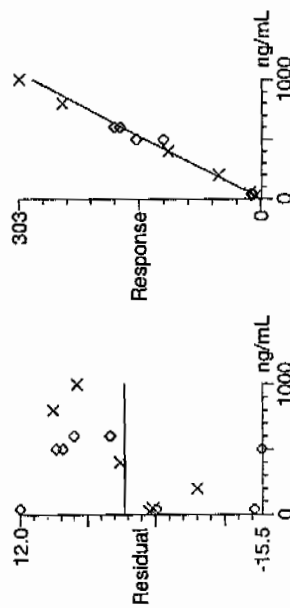
Quantify Calibration Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Compound name: Nitrobenzene  
Response Factor: 0.807771  
RRF SD: 0.034992, % Relative SD: 4.33192  
Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



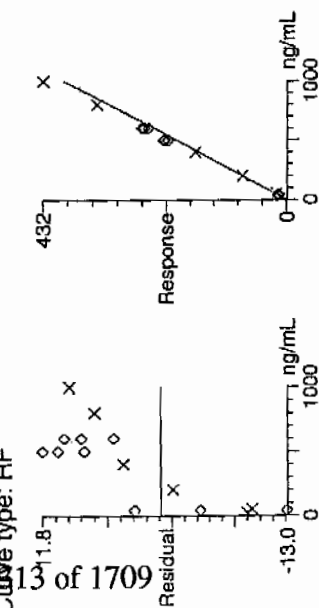
Compound name: 4-Amino-26-dinitrotoluene  
Response Factor: 0.287245  
RRF SD: 0.0173125, % Relative SD: 6.02707  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



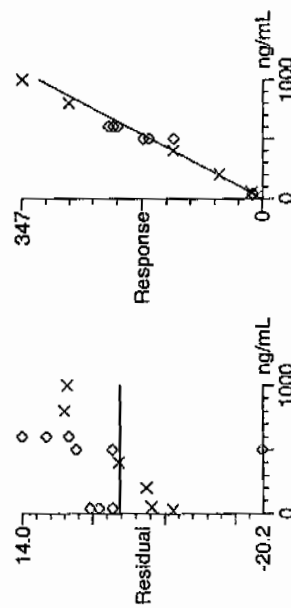
**Quantify Calibration Report**  
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Compound name: 2-Amino-46-dinitrotoluene  
 Response Factor: 0.39603  
 RRF SD: 0.0312733, % Relative SD: 7.8967  
 Response type: Internal Std (Ref 14), Area \* (IS Conc. / IS Area)  
 Curve type: RF



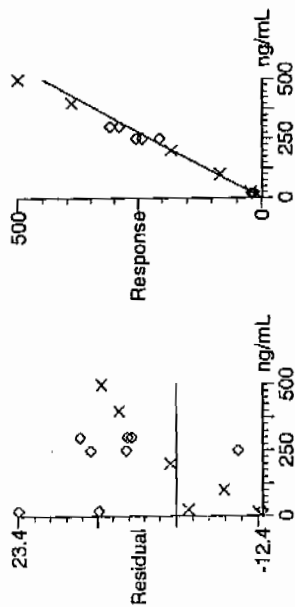
Compound name: 246-Trinitrotoluene  
 Response Factor: 0.322663  
 RRF SD: 0.0207501, % Relative SD: 6.43088  
 Response type: Internal Std (Ref 14), Area \* (IS Conc. / IS Area)  
 Curve type: RF



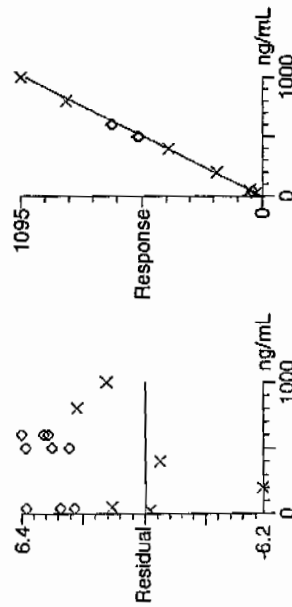
**Quantify Calibration Report**  
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Compound name: 34-dinitrotoluene  
 Response Factor: 0.899992  
 RRF SD: 0.0791463, % Relative SD: 8.79411  
 Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF



Compound name: 26-dinitrotoluene  
 Response Factor: 1.07409  
 RRF SD: 0.0365192, % Relative SD: 3.40002  
 Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF





# Quantify Calibration Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Feb 09 10:21:18 2010, Page 7 of 9

Dataset: C:\MASSLYNX\New\_Exp\PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

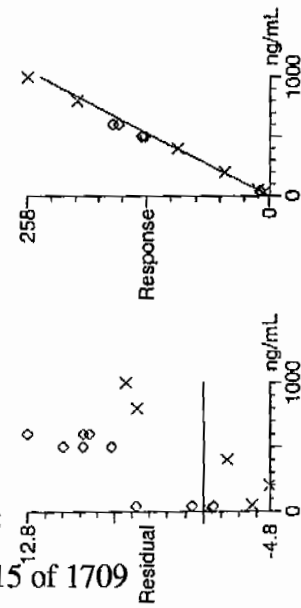
Compound name: 24-dinitrotoluene

Response Factor: 0.244052

RRF SD: 0.010423, % Relative SD: 4.27082

Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )

Curve type: RF



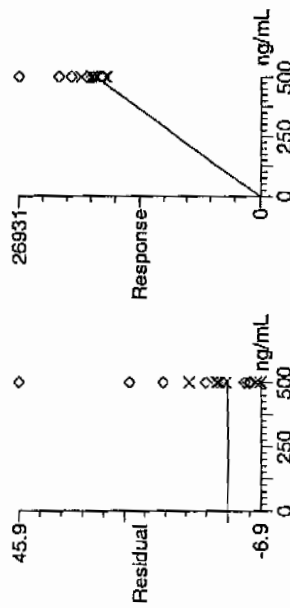
Compound name: 26-dinitrotoluene-d3

Response Factor: 36.9194

RRF SD: 2.09302, % Relative SD: 5.66917

Response type: External Std, Area

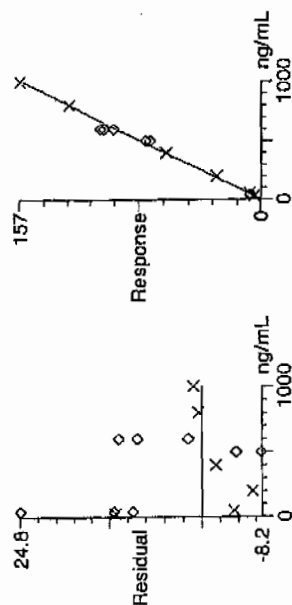
Curve type: RF



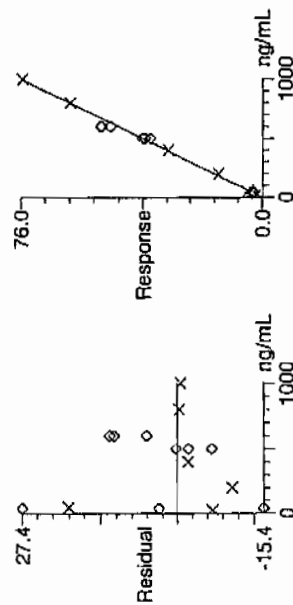
**Quantify Calibration Report**  
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Compound name: 2-Nitrotoluene  
 Response Factor: 0.155048  
 RRF SD: 0.00993156, % Relative SD: 6.40546  
 Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF



Compound name: 4-Nitrotoluene  
 Response Factor: 0.0760026  
 RRF SD: 0.00771034, % Relative SD: 10.1448  
 Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF



# Quantify Calibration Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Feb 09 10:21:18 2010, Page 9 of 9

Dataset: C:\MASSLYNX\New\_Exp\PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

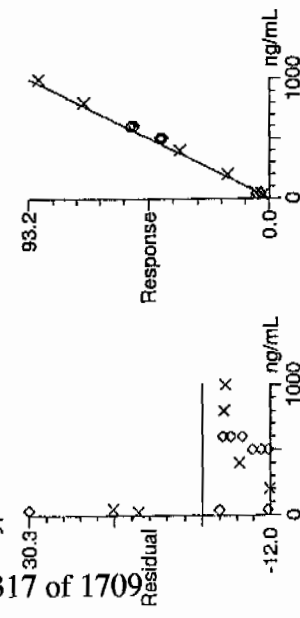
Compound name: 3-Nitrotoluene

Response Factor: 0.0931713

RF SD: 0.0099588, % Relative SD: 10.6887

Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )

Curve type: RF



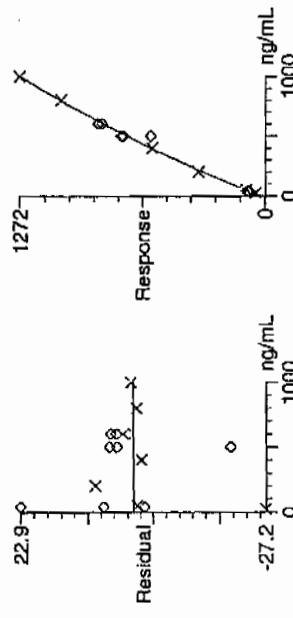
Compound name: PETN

Coefficient of Determination: 0.999420

Calibration curve:  $-0.000297734 \cdot x^2 + 1.54409 \cdot x + 21.0556$

Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: Null, Axis trans: None



7

# Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1324

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0208010a

Analysis Date: 08-FEB-10 19:10

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found   | Recovery | Q |
|----------------------------|------|---------|----------|---|
| 1,3,5-Trinitrobenzene      | 600  | 577.44  | 96       |   |
| 1,3-Dinitrobenzene-d4      | 500  | 477.774 | 96       |   |
| 2,4,6-Trinitrotoluene      | 600  | 643.695 | 107      |   |
| 2,4-Dinitrotoluene         | 600  | 652.405 | 109      |   |
| 2,6-Dinitrotoluene         | 600  | 631.529 | 105      |   |
| 2,6-Dinitrotoluene-d3      | 500  | 481.745 | 96       |   |
| 2-Amino-4,6-dinitrotoluene | 600  | 657.981 | 110      |   |
| 3,4-Dinitrotoluene         | 300  | 321.546 | 107      |   |
| 4-Amino-2,6-dinitrotoluene | 600  | 609.28  | 102      |   |
| HMX                        | 600  | 598.223 | 100      |   |
| Nitrobenzene               | 600  | 634.828 | 106      |   |
| PETN                       | 600  | 620.504 | 103      |   |
| RDX                        | 600  | 679.292 | 113      |   |
| Tetryl                     | 600  | 611.62  | 102      |   |
| m-Dinitrobenzene           | 600  | 625.274 | 104      |   |
| m-Nitrotoluene             | 600  | 570.29  | 95       |   |
| o-Nitrotoluene             | 600  | 651.604 | 109      |   |
| p-Nitrotoluene             | 600  | 672.143 | 112      |   |

## Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\data\EXP0208010a

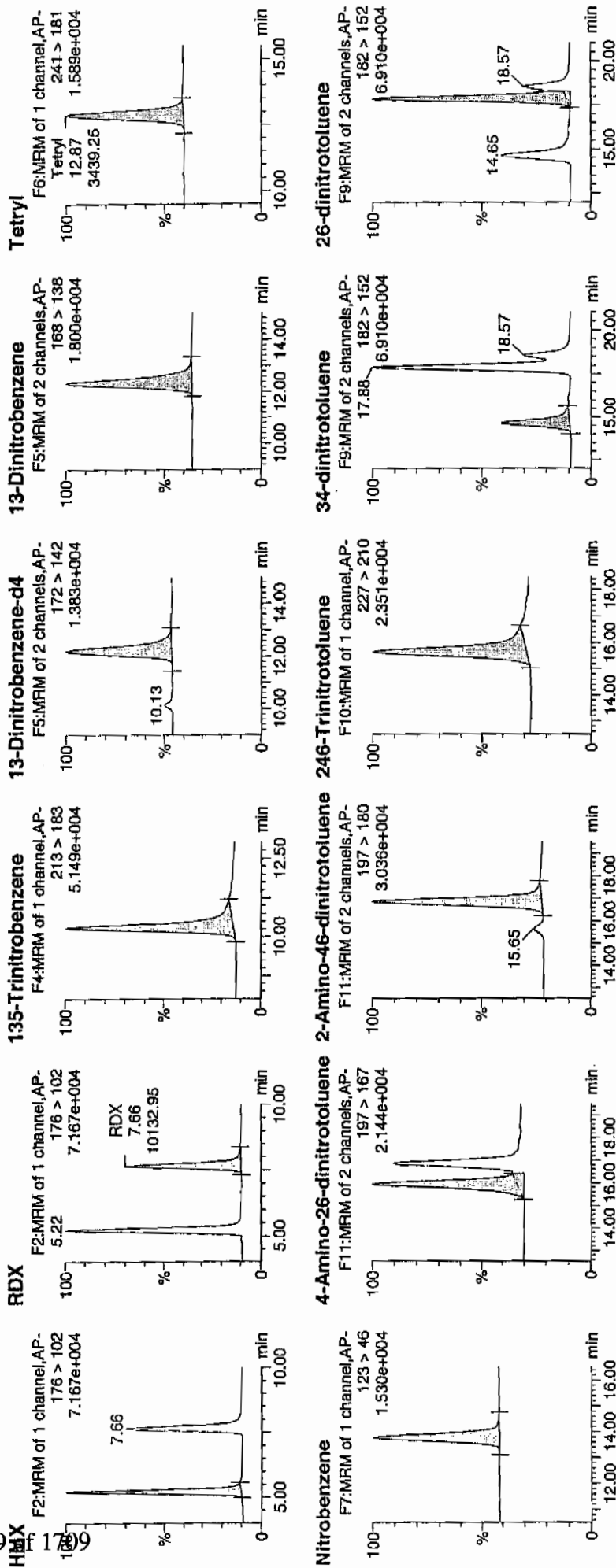
Date: 08-Feb-2010

Time: 19:10:05

ID: WXX100208-07ICV

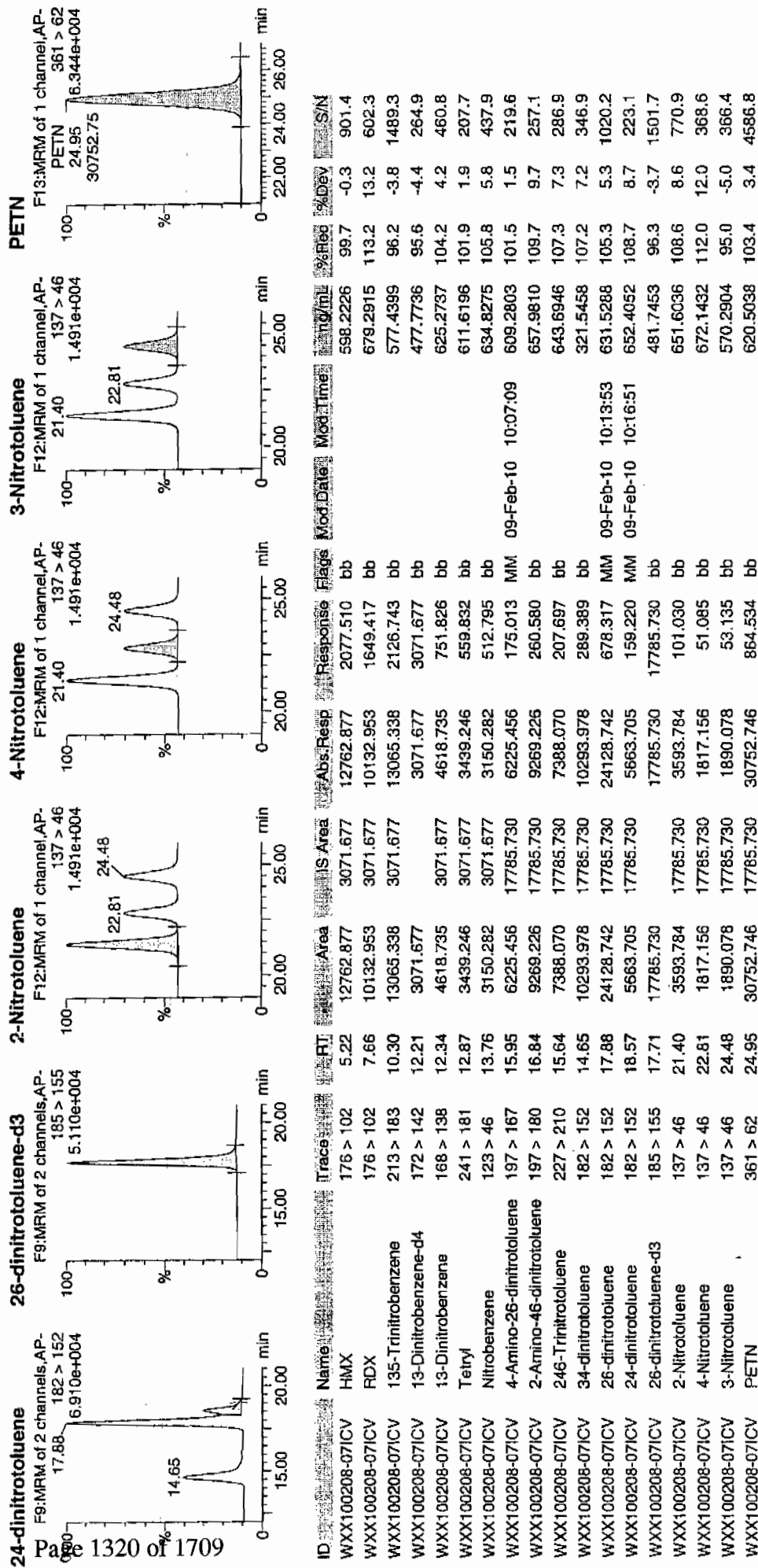
Vol: 1:1,B

*Handwritten:* 2/9/10



*Handwritten:* 2/9/10

Dataset: C:\MASSLYNX\New\_Exp\_PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 02/08/10  
 Time of Injection: 1910  
 Standard Number: WXX100208-07ICV  
 Data File: EXP0208010a

|              |       |
|--------------|-------|
| HMX          | 99.7  |
| RDX          | 113.2 |
| 135-TNB      | 96.2  |
| 13-DNB       | 104.2 |
| Tetryl       | 101.9 |
| Nitrobenzene | 105.8 |
| 4A-26-DNT    | 101.5 |
| 2A-46-DNT    | 109.7 |
| 246-TNT      | 107.3 |
| 34-DNT(surr) | 107.2 |
| 26-DNT       | 105.3 |
| 24-DNT       | 108.7 |
| 2-NT         | 108.6 |
| 4-NT         | 112.0 |
| 3-NT         | 95.0  |
| PETN         | 103.4 |

*1077  
2/9/10*

Total 1679.7

Average 105.0

*WXX100208-07ICV*

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1324

Lab Code: GEL

Run Date: 08-FEB-10.10-FEB-10

LCMSMS Instrument ID: LCMSMS4

Method: 8321A Modified

HPLC Column: YMC J-Sphere ODS-H8O

Calibration Type: 2nd Order

| Calibration Level:         | 19               | 20               | 21               | 22               | 23               | 24               | 25               | X      | X^2   | Intercept | COD   | Q |
|----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------|-------|-----------|-------|---|
| Data File:                 | EXS02100003.wiff | EXS02100004.wiff | EXS02100005.wiff | EXS02100006.wiff | EXS02100007.wiff | EXS02100008.wiff | EXS02100009.wiff |        |       |           |       |   |
| Parname:                   |                  |                  |                  |                  |                  |                  |                  |        |       |           |       |   |
| 2,4-Diamino-6-nitrotoluene | 62900            | 124000           | 301000           | 592000           | 960000           | 1300000          | 2710000          | -6720  | 1230  | .065      | .9999 |   |
| 2,6-Diamino-4-nitrotoluene | 85500            | 186000           | 505000           | 947000           | 1490000          | 1970000          | 3940000          | -11700 | 1990  | -.006     | .9999 |   |
| 3,4-Dinitrotoluene         | 248000           | 499000           | 1120000          | 2280000          | 3200000          | 4660000          | 8360000          | -52800 | 10300 | -1.89     | .9996 |   |
| 3,5-Dinitroaniline         | 284000           | 552000           | 1300000          | 2460000          | 3910000          | 5270000          | 9270000          | -56200 | 5670  | -.496     | .9995 |   |
| TATB                       | 63400            | 125000           | 315000           | 638000           | 950000           | 1280000          | 2460000          | -7670  | 1320  | -.044     | 1     |   |
| tris(o-cresyl) phosphate   | 1130000          | 2180000          | 5190000          | 9740000          | 13800000         | 18000000         | 30100000         | 153000 | 20500 | -2.78     | 1     |   |

Quadratic Fit:  $y = Ax^2 + Bx + C$   
 where  $X^2$  column above is coefficient A  
 X column above is coefficient B  
 intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

\* Values outside of QC Limit



021010ICAL

Peak Name: TATB  
No Internal Standard  
Q1/Q3 Masses: 257.20/204.90 amu

|                                |            |           |      |            |
|--------------------------------|------------|-----------|------|------------|
| Fit                            | Quadratic  | Weighting | None | Iterate No |
| a0                             | -7.67e+003 |           |      |            |
| a1                             | 1.32e+003  |           |      |            |
| a2                             | -0.044     |           |      |            |
| Correlation coefficient 1.0000 |            |           |      |            |
| Use Area                       |            |           |      |            |

Peak Name: 35-Dinitroaniline  
No Internal Standard  
Q1/Q3 Masses: 182.00/46.00 amu

|                                |            |           |      |            |
|--------------------------------|------------|-----------|------|------------|
| Fit                            | Quadratic  | Weighting | None | Iterate No |
| a0                             | -5.62e+004 |           |      |            |
| a1                             | 5.67e+003  |           |      |            |
| a2                             | -0.496     |           |      |            |
| Correlation coefficient 0.9995 |            |           |      |            |
| Use Area                       |            |           |      |            |

Peak Name: 34-Dinitrotoluene  
No Internal Standard  
Q1/Q3 Masses: 182.08/151.90 amu

|                                |            |           |      |            |
|--------------------------------|------------|-----------|------|------------|
| Fit                            | Quadratic  | Weighting | None | Iterate No |
| a0                             | -5.28e+004 |           |      |            |
| a1                             | 1.03e+004  |           |      |            |
| a2                             | -1.89      |           |      |            |
| Correlation coefficient 0.9996 |            |           |      |            |
| Use Area                       |            |           |      |            |

Peak Name: 26-Diamino-4-nitrotoluene  
No Internal Standard  
Q1/Q3 Masses: 165.97/46.00 amu

|                                |            |           |      |            |
|--------------------------------|------------|-----------|------|------------|
| Fit                            | Quadratic  | Weighting | None | Iterate No |
| a0                             | -1.17e+004 |           |      |            |
| a1                             | 1.99e+003  |           |      |            |
| a2                             | -0.00564   |           |      |            |
| Correlation coefficient 0.9999 |            |           |      |            |
| Use Area                       |            |           |      |            |

*Jan 21/1/10*

*Jan 11/10*

021010ICAL

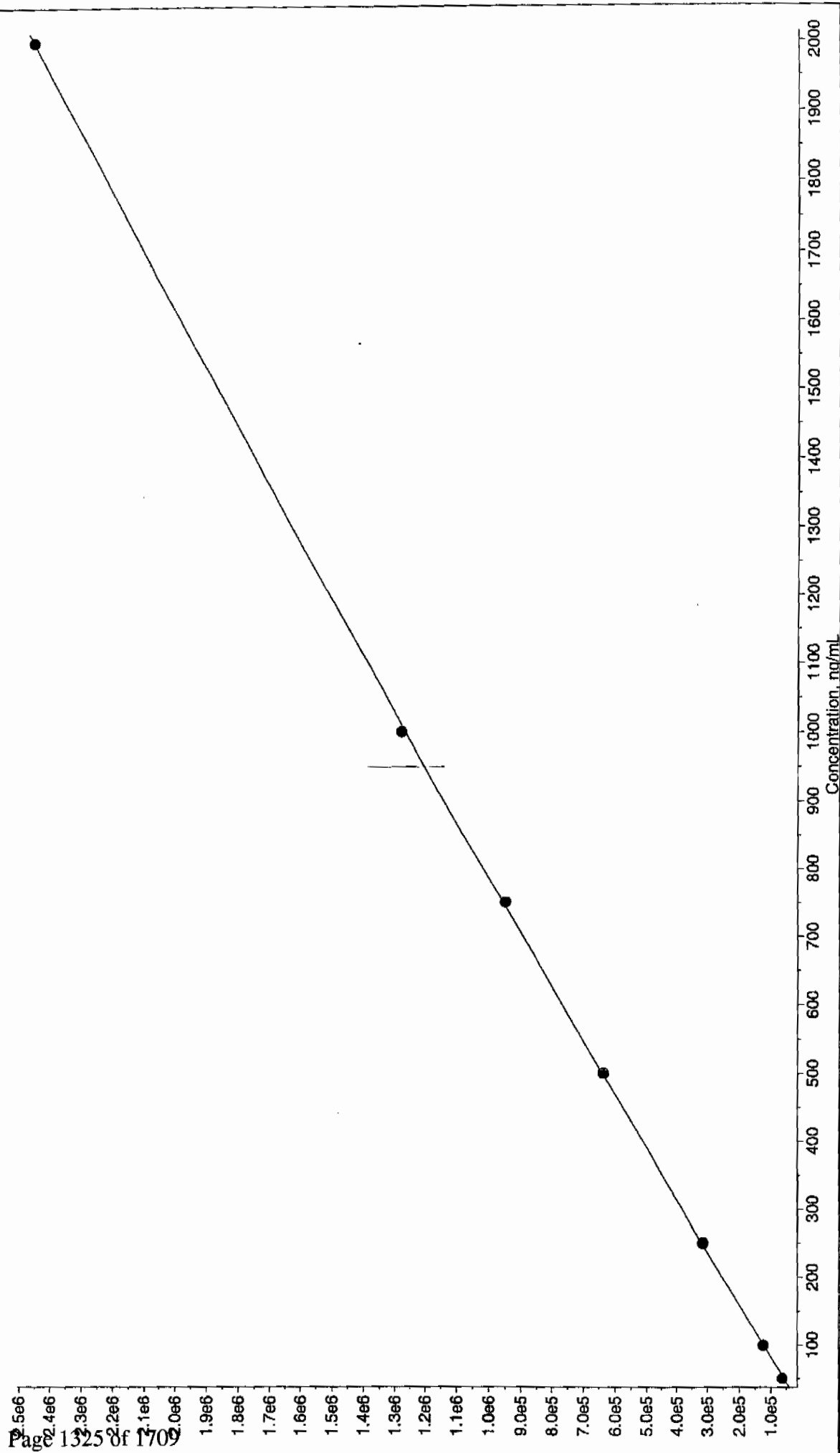
Peak Name: 24-Diamino-6-nitrotoluene  
No Internal Standard  
Q1/Q3 Masses: 165.97/46.00 amu

| Fit                            | Quadratic  | Weighting | None | Iterate No |
|--------------------------------|------------|-----------|------|------------|
| a0                             | -6.72e+003 |           |      |            |
| a1                             | 1.23e+003  |           |      |            |
| a2                             | 0.0647     |           |      |            |
| Correlation coefficient 0.9999 |            |           |      |            |
| Use Area                       |            |           |      |            |

Peak Name: tris(o-cresyl) phosphate  
No Internal Standard  
Q1/Q3 Masses: 369.15/91.00 amu

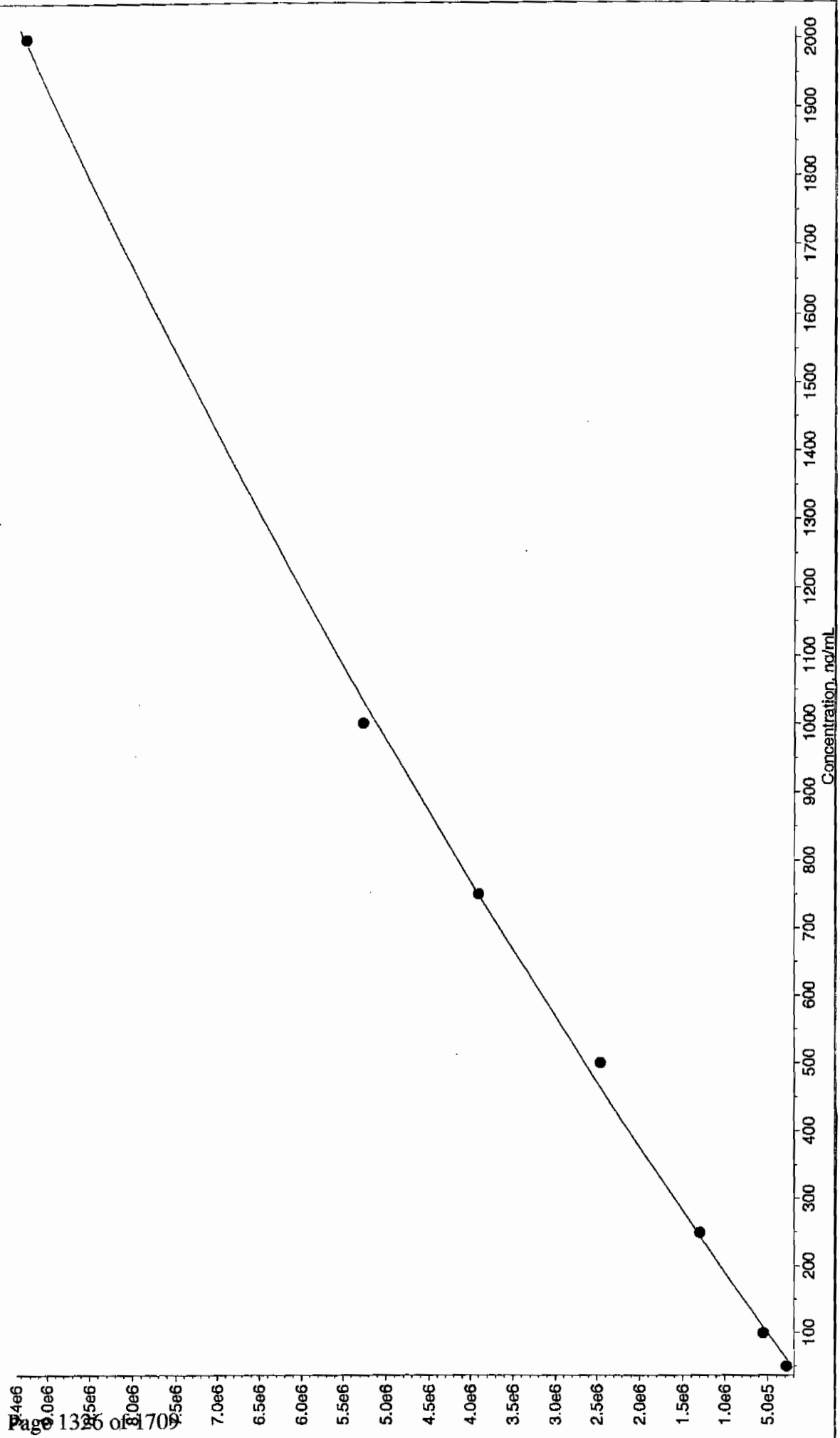
| Fit                            | Quadratic | Weighting | None | Iterate No |
|--------------------------------|-----------|-----------|------|------------|
| a0                             | 1.53e+005 |           |      |            |
| a1                             | 2.05e+004 |           |      |            |
| a2                             | -2.78     |           |      |            |
| Correlation coefficient 1.0000 |           |           |      |            |
| Use Area                       |           |           |      |            |

021010.rdb (TATB): "Quadratic" Regression ("No" weighting):  $y = -0.044 x^2 + 1.32e+003 x + -7.67e+003$  ( $r = 1.0000$ )

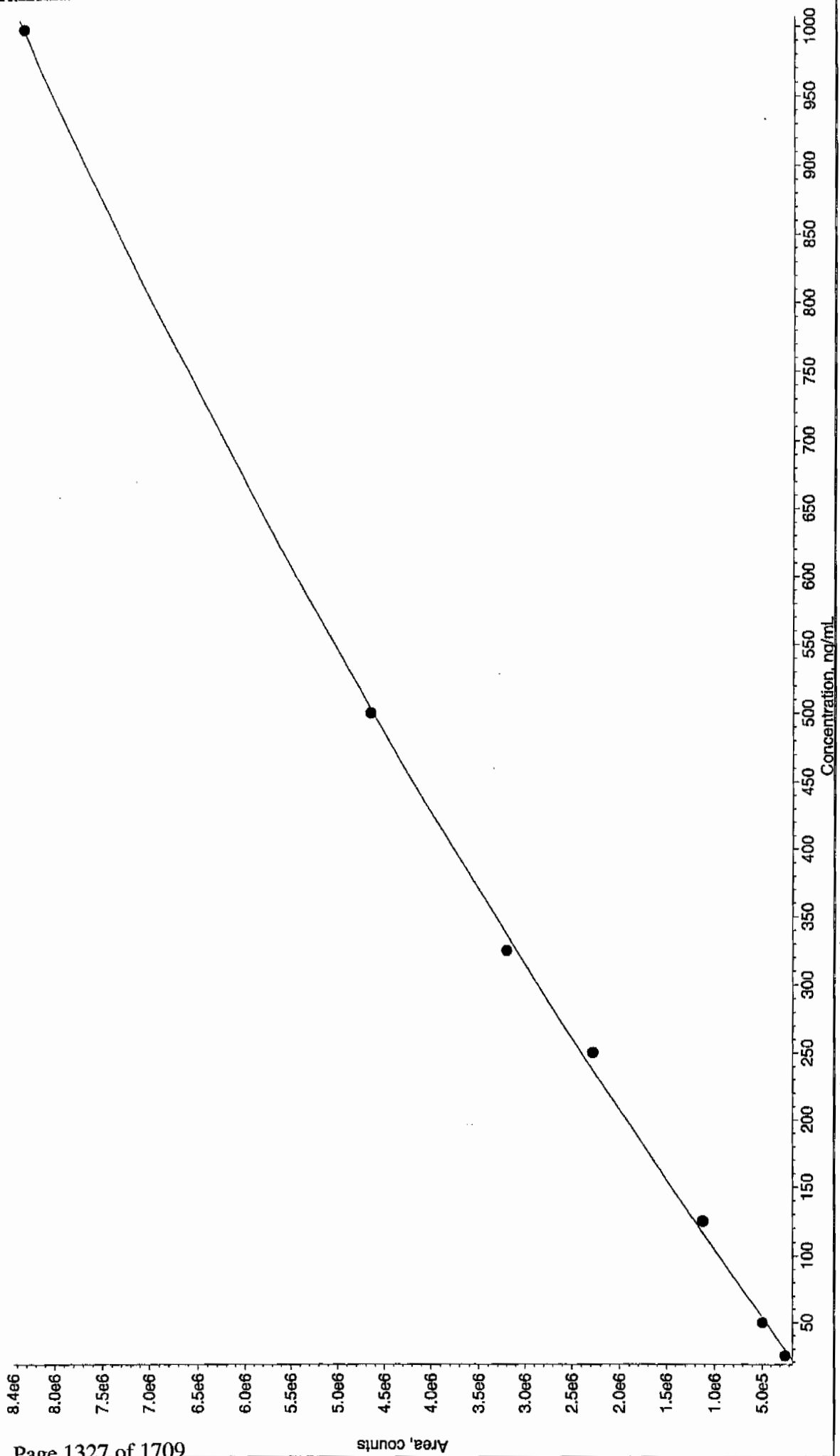


Page 1325 of 1709

021010.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting):  $y = -0.496 x^2 + 5.676x + 5.62e+004$  ( $r = 0.9995$ )

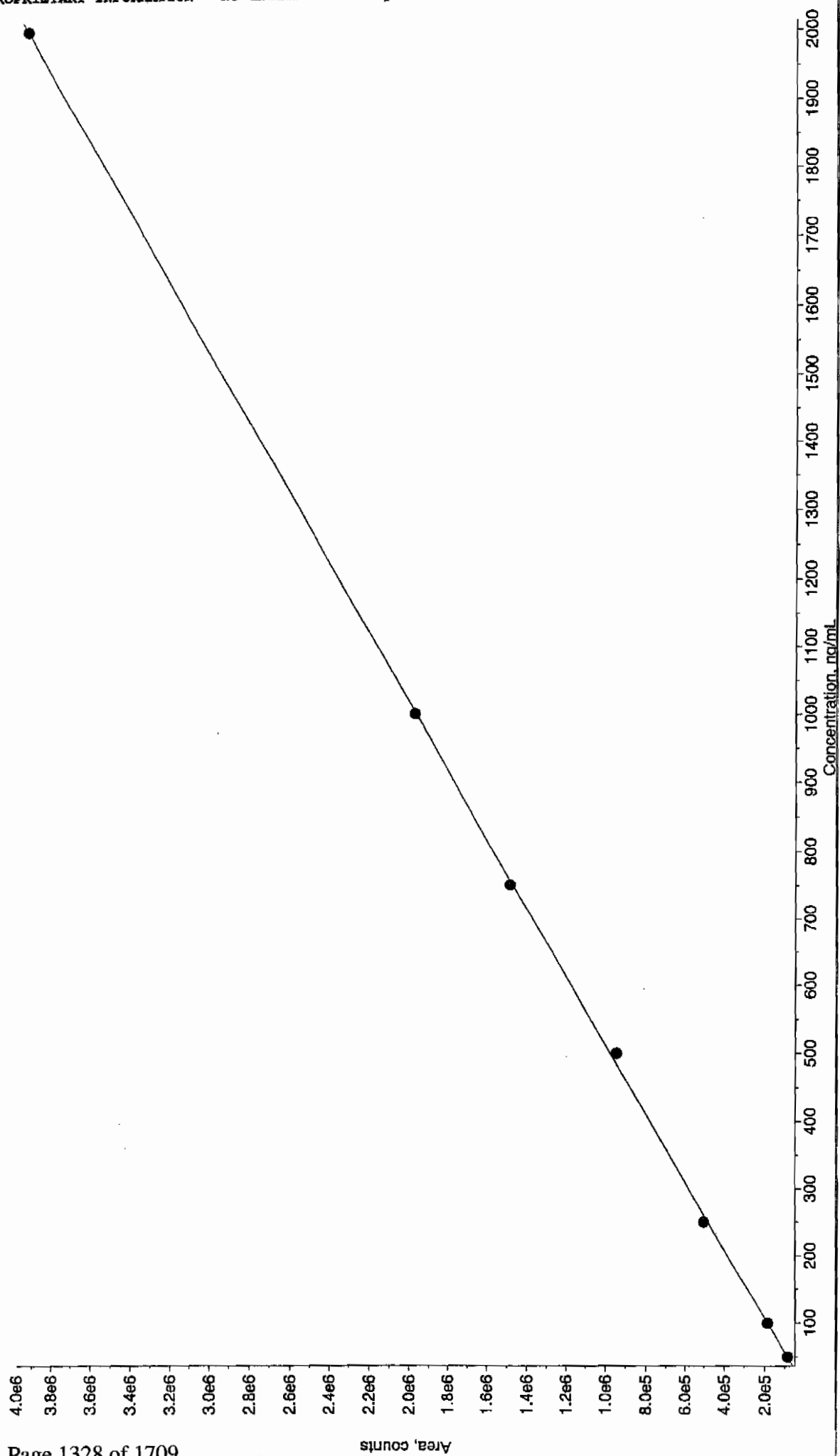


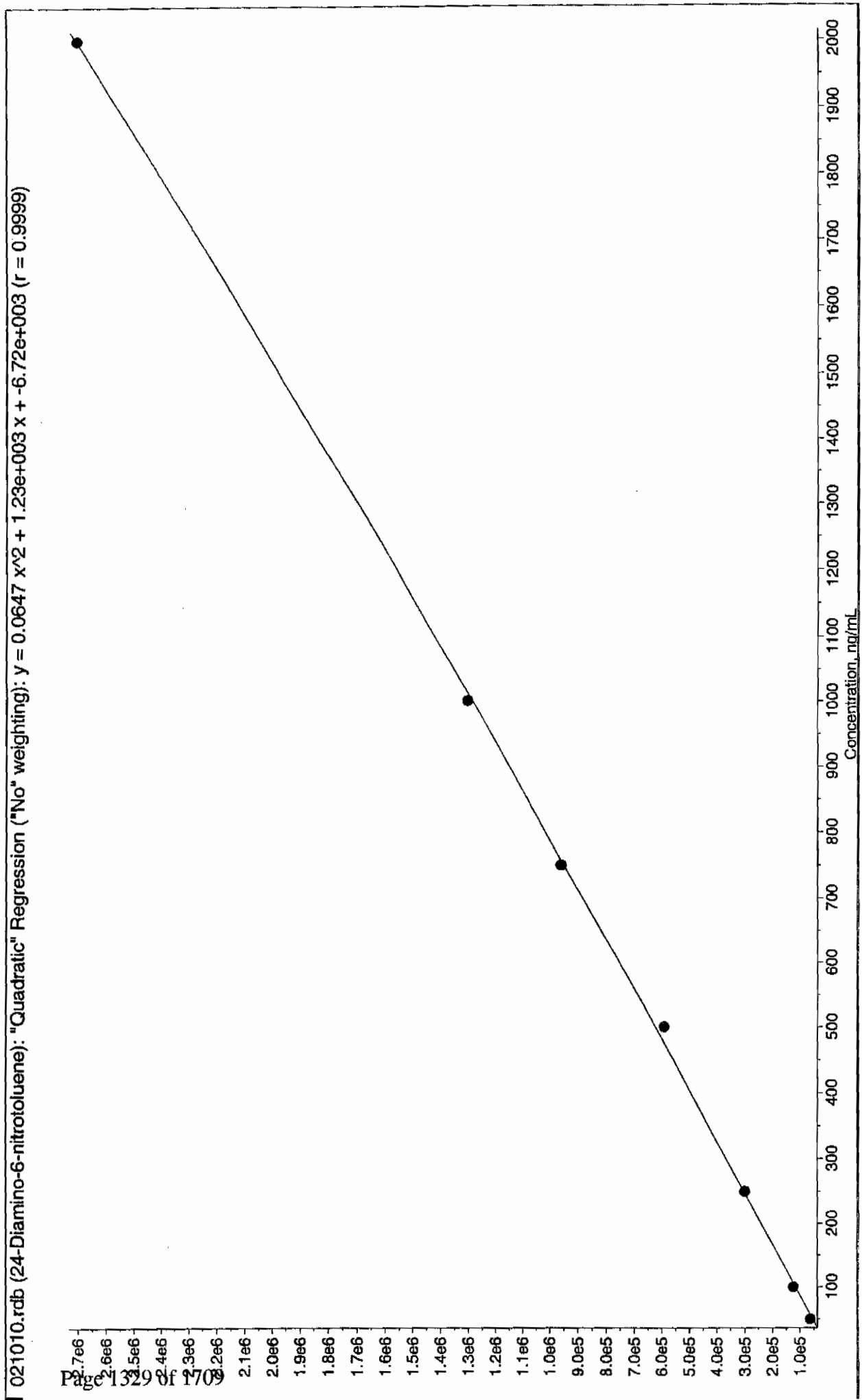
021010.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -1.89 x^2 + 1.03e+004 x + -5.28e+004$  ( $r = 0.9996$ )



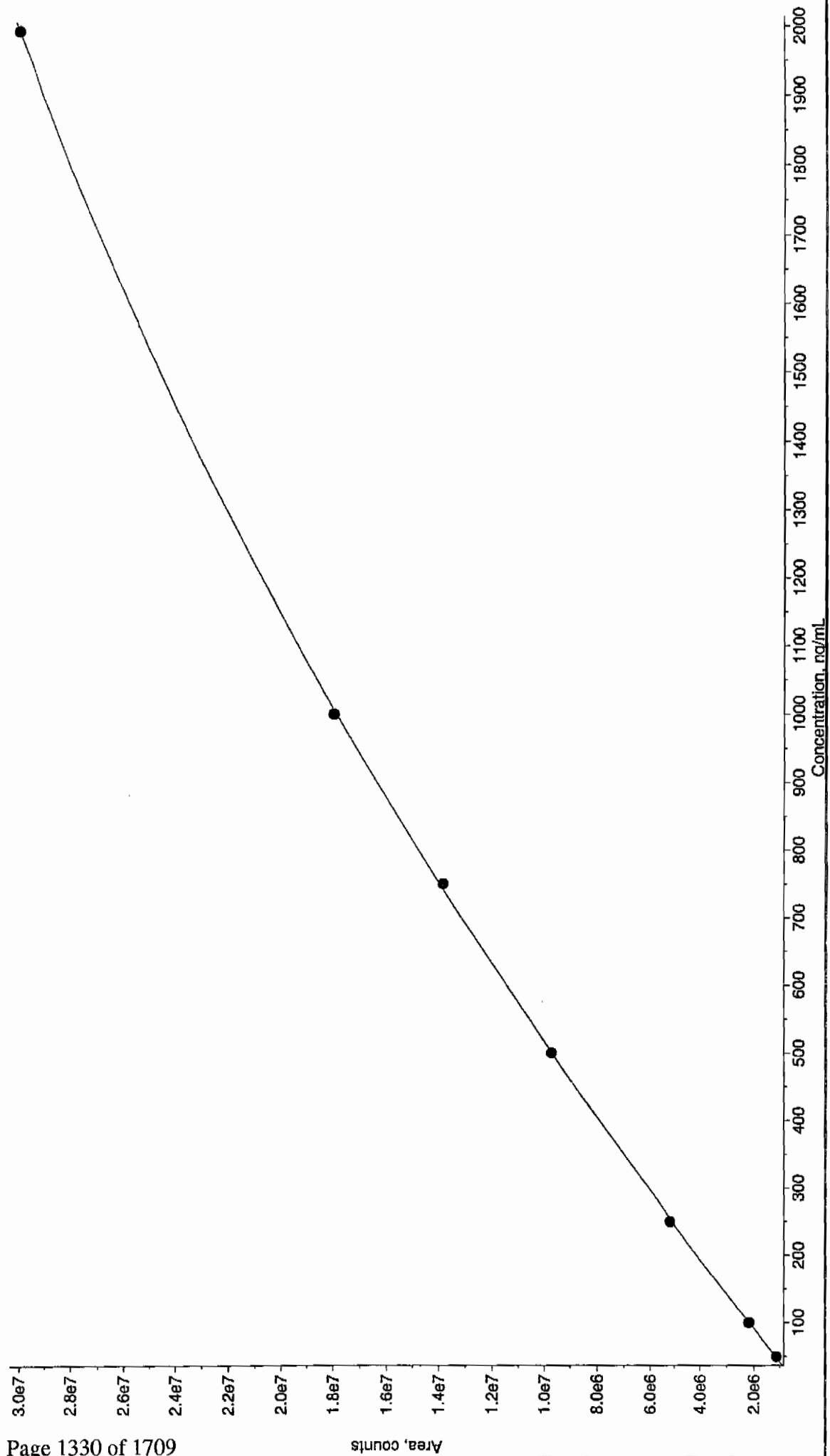
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

021010.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -0.00564 x^2 + 1.99e+003 x + -1.17e+004$  ( $r = 0.9999$ )





021010.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting):  $y = -2.78 \times 10^{-5} x^2 + 2.05 \times 10^{-4} x + 1.53 \times 10^5$  ( $r = 1.0000$ )





# Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1324

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS02100011.wiff

Analysis Date: 10-FEB-10 11:04

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

| Compound                   | True | Found | Recovery | Q |
|----------------------------|------|-------|----------|---|
| 2,4-Diamino-6-nitrotoluene | 500  | 457   | 91       |   |
| 2,6-Diamino-4-nitrotoluene | 500  | 527   | 105      |   |
| 3,4-Dinitrotoluene         | 250  | 227   | 91       |   |
| 3,5-Dinitroaniline         | 500  | 478   | 96       |   |
| TATB                       | 500  | 481   | 96       |   |
| tris(o-cresyl) phosphate   | 500  | 489   | 98       |   |

## Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Before then 2/11/10

Sample Name: "WXX10210-26CV" Sample ID: "111ER" File: "EXS02100011.wif"

Peak Name: "TATB" Mass(es): "257.2/204.8 amu"

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC

Concentration: 500. ng/mL

Calculated Conc: 481. ng/mL

Acq. Date: 2/10/2010

Acq. Time: 11:04:36 AM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 2500.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 7.22 min

Use Relative RT: No

Int. Type: Valley

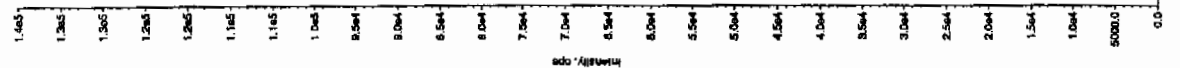
Retention Time: 7.22 min

Area: 6.18e+005 counts

Height: 1.35e+005 cps

Start Time: 7.08 min

End Time: 7.70 min



Sample Name: "WXX10210-26CV" Sample ID: "111ER" File: "EXS02100011.wif"

Peak Name: "35-Dinitrobenz" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC

Concentration: 500. ng/mL

Calculated Conc: 536. ng/mL

Acq. Date: 2/10/2010

Acq. Time: 11:04:36 AM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 2000.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 15.0 sec

Expected RT: 8.45 min

Use Relative RT: No

Int. Type: Valley

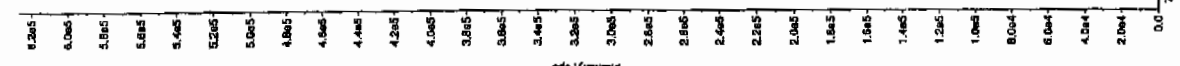
Retention Time: 8.45 min

Area: 2.84e+006 counts

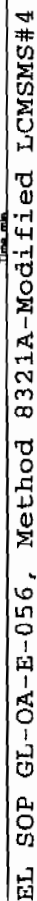
Height: 6.27e+005 cps

Start Time: 8.35 min

End Time: 8.90 min

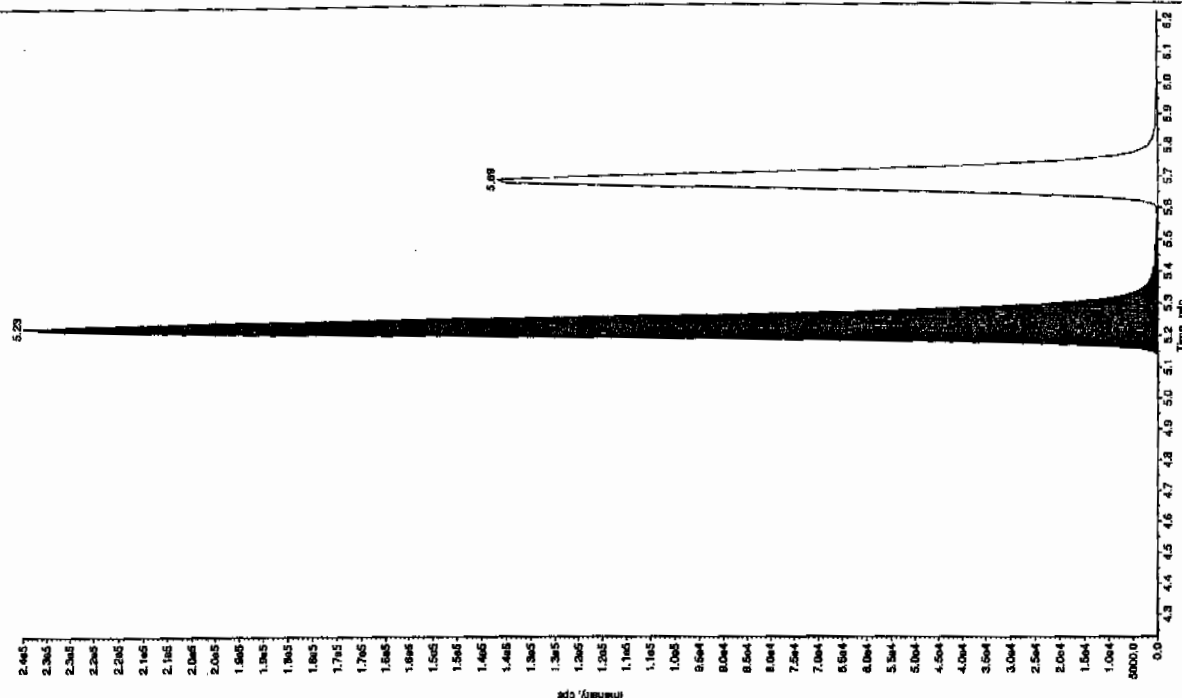


After 2/11/10



Sample Name: "WXX100210-250V" Sample ID: "JTLER" File: "EX502100011.wif"  
 Peak Name: "34-Dihydrofluorene" Mass(es): "182.1751.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 271.0 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 11:04:36 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 3.00 sec  
 Smoothing Width: 30.0 points  
 Expected RT: 5.23 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.23 min  
 Area: 1.03e+006 counts  
 Height: 2.35e+005 cps  
 Start Time: 5.12 min  
 End Time: 5.33 min



Sample Name: "WXX100210-250V" Sample ID: "JTLER" File: "EX502100011.wif"  
 Peak Name: "34-Dihydrofluorene" Mass(es): "182.1751.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 250. ng/mL  
 Calculated Conc: 227. ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 11:04:36 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1450.00 cps  
 Min. Peak Width: 3.00 sec  
 Smoothing Width: 30.0 points  
 Expected RT: 8.59 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.59 min  
 Area: 2.19e+006 counts  
 Height: 5.58e+005 cps  
 Start Time: 8.52 min  
 End Time: 8.75 min



Sample Name: "WXX100210-281CV" Sample ID: "11ER" File: "EX02100011.wif"  
 Peak Name: "24-Diamino-6-nitrochlorine" Mass(es): "166.046.0 amu"  
 Comment: "LCMS-EXP\_C" Annotation: ""

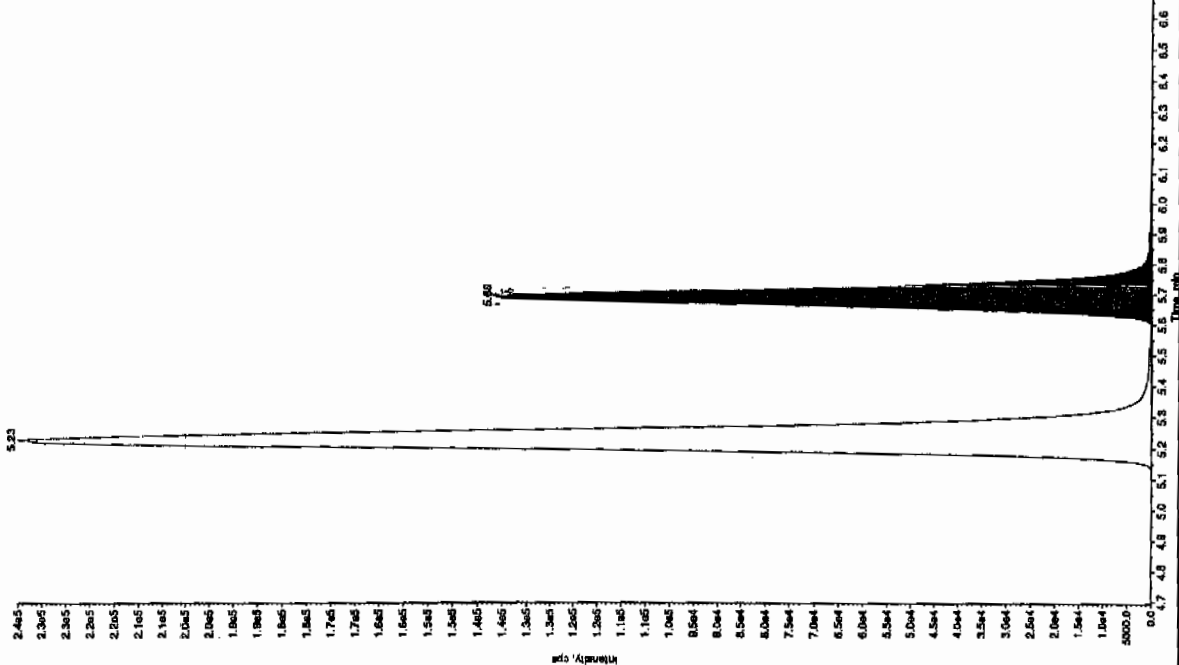
Sample Index: 1

Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 489. ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 11:04:36 AM

Modified: No

Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.69 min  
 Use Relative RT: No

Tot. Type: Valley  
 Retention Time: 5.69 min  
 Area: 5.68e+005 counts  
 Height: 1.37e+005 cps  
 Start Time: 5.57 min  
 End Time: 6.05 min



Sample Name: "WXX100210-281CV" Sample ID: "11ER" File: "EX02100011.wif"  
 Peak Name: "16(0-cresyl) phosphate" Mass(es): "359.191.0 amu"  
 Comment: "LCMS-EXP\_C" Annotation: ""

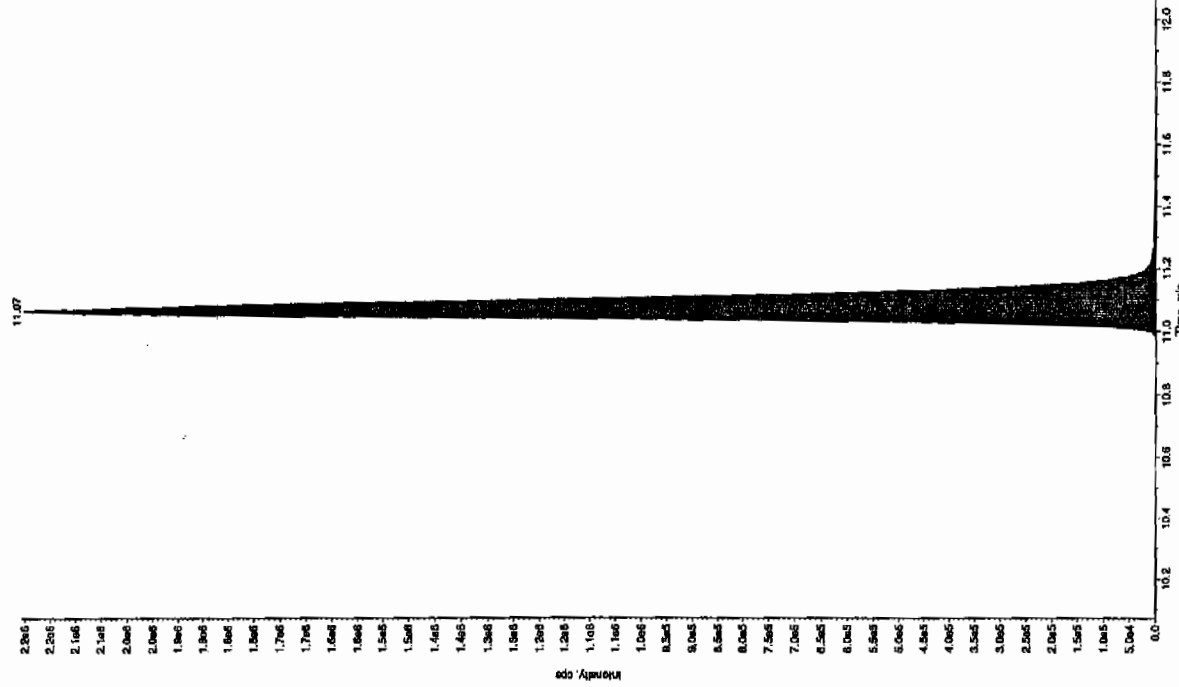
Sample Index: 1

Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 489. ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 11:04:36 AM

Modified: No

Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 11.1 min  
 Use Relative RT: No

Tot. Type: Valley  
 Retention Time: 11.1 min  
 Area: 5.52e+006 counts  
 Height: 2.21e+006 cps  
 Start Time: 11.0 min  
 End Time: 11.4 min



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1324

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208012a

Analysis Date: 08-FEB-10 20:09

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found   | Recovery | Q |
|----------------------------|------|---------|----------|---|
| 1,3,5-Trinitrobenzene      | 40   | 40.21   | 101      |   |
| 1,3-Dinitrobenzene-d4      | 500  | 487.883 | 98       |   |
| 2,4,6-Trinitrotoluene      | 40   | 41.689  | 104      |   |
| 2,4-Dinitrotoluene         | 40   | 40.338  | 101      |   |
| 2,6-Dinitrotoluene         | 40   | 41.76   | 104      |   |
| 2,6-Dinitrotoluene-d3      | 500  | 475.508 | 95       |   |
| 2-Amino-4,6-dinitrotoluene | 40   | 38.358  | 96       |   |
| 3,4-Dinitrotoluene         | 20   | 17.528  | 88       |   |
| 4-Amino-2,6-dinitrotoluene | 40   | 38.578  | 96       |   |
| HMX                        | 40   | 37.759  | 94       |   |
| Nitrobenzene               | 40   | 49.333  | 123      |   |
| PETN                       | 40   | 39.026  | 98       |   |
| RDX                        | 40   | 41.043  | 103      |   |
| Tetryl                     | 40   | 37.278  | 93       |   |
| m-Dinitrobenzene           | 40   | 39.387  | 98       |   |
| m-Nitrotoluene             | 40   | 35.357  | 88       |   |
| o-Nitrotoluene             | 40   | 44.694  | 112      |   |
| p-Nitrotoluene             | 40   | 41.348  | 103      |   |

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Feb 09 10:21:18 2010, Page 23 of 77

Dataset: C:\MASSLYNX\New\_Exp\PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\Data\EXP0208012a

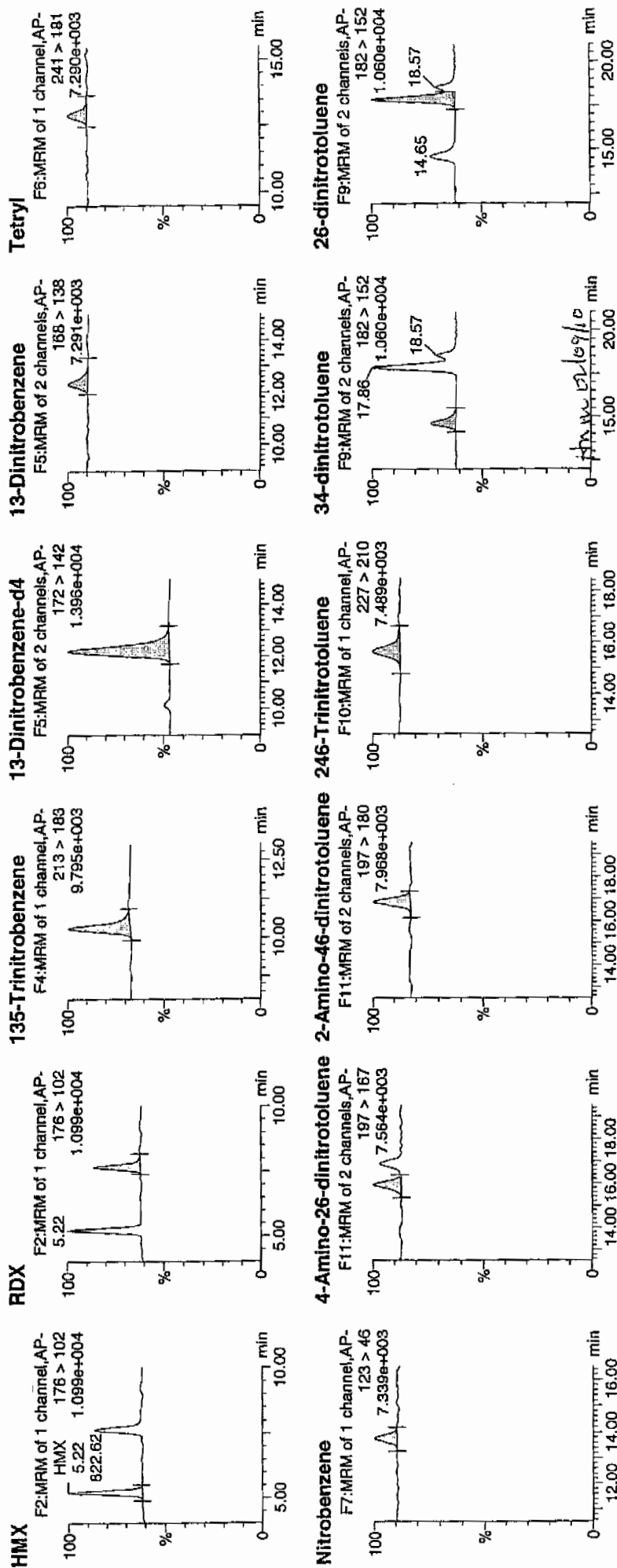
Date: 08-Feb-2010

Time: 20:09:03

ID: WXX100208-08CRI

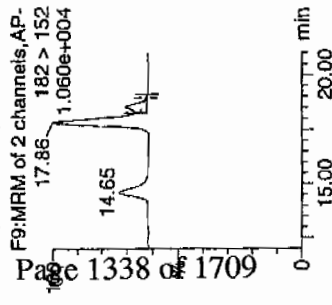
Vial: 1:1,C

WXX  
2/9/10

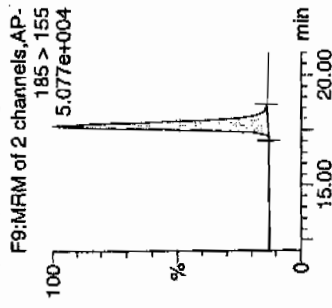


Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

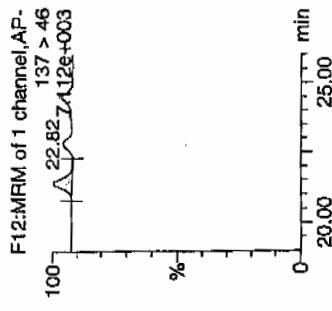
24-dinitrotoluene



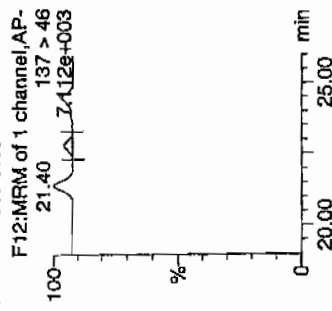
26-dinitrotoluene-d3



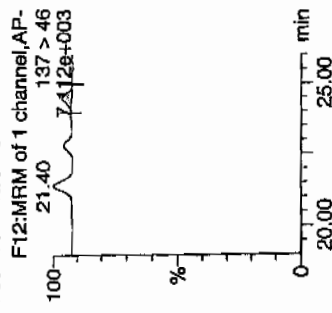
2-Nitrotoluene



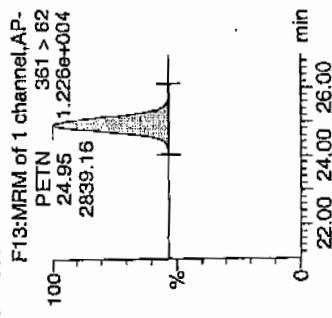
4-Nitrotoluene



3-Nitrotoluene



PETN



| ID              | Name                      | Trace     | RT    | Area      | IS:Area   | Abs:Resp  | Response  | Flags | Mod:Time           | Mod:Date | ng/ml    | %Rec  | %Dev  | S/N    |
|-----------------|---------------------------|-----------|-------|-----------|-----------|-----------|-----------|-------|--------------------|----------|----------|-------|-------|--------|
| WXX100208-08CRI | HMX                       | 176 > 102 | 5.22  | 822.619   | 3136.673  | 822.619   | 131.129   | bb    |                    |          | 37.7589  | 94.4  | -5.6  | 95.4   |
| WXX100208-08CRI | RDX                       | 176 > 102 | 7.66  | 625.184   | 3136.673  | 625.184   | 99.657    | bb    |                    |          | 41.0425  | 102.6 | 2.6   | 61.5   |
| WXX100208-08CRI | 135-Trinitrobenzene       | 213 > 183 | 10.30 | 929.059   | 3136.673  | 929.059   | 148.096   | bb    |                    |          | 40.2102  | 100.5 | 0.5   | 111.3  |
| WXX100208-08CRI | 13-Dinitrobenzene-d4      | 172 > 142 | 12.20 | 3136.673  |           | 3136.673  | 3136.673  | bb    |                    |          | 487.8832 | 97.6  | -2.4  | 122.8  |
| WXX100208-08CRI | 13-Dinitrobenzene         | 168 > 138 | 12.34 | 297.097   | 3136.673  | 297.097   | 47.359    | bb    |                    |          | 39.3869  | 98.5  | -1.5  | 19.3   |
| WXX100208-08CRI | Tetryl                    | 241 > 181 | 12.92 | 274.384   | 3136.673  | 274.384   | 43.738    | bb    |                    |          | 37.2783  | 93.2  | -6.8  | 24.6   |
| WXX100208-08CRI | Nitrobenzene              | 123 > 46  | 13.76 | 249.993   | 3136.673  | 249.993   | 39.850    | bb    |                    |          | 49.3333  | 123.3 | 23.3  | 23.5   |
| WXX100208-08CRI | 4-Amino-26-dinitrotoluene | 197 > 167 | 15.92 | 389.077   | 17555.461 | 389.077   | 11.081    | MM    | 09-Feb-10 10:07:17 |          | 38.5781  | 96.4  | -3.6  | 24.6   |
| WXX100208-08CRI | 2-Amino-46-dinitrotoluene | 197 > 180 | 16.86 | 533.368   | 17555.461 | 533.368   | 15.191    | bb    |                    |          | 38.3580  | 95.9  | -4.1  | 43.1   |
| WXX100208-08CRI | 246-Trinitrotoluene       | 227 > 210 | 15.64 | 472.299   | 17555.461 | 472.299   | 13.452    | bb    |                    |          | 41.6894  | 104.2 | 4.2   | 65.7   |
| WXX100208-08CRI | 34-dinitrotoluene         | 182 > 152 | 14.65 | 553.874   | 17555.461 | 553.874   | 15.775    | bb    |                    |          | 17.5279  | 87.6  | -12.4 | 33.8   |
| WXX100208-08CRI | 26-dinitrotoluene         | 182 > 152 | 17.86 | 1574.877  | 17555.461 | 1574.877  | 44.854    | MM    | 09-Feb-10 10:14:02 |          | 41.7604  | 104.4 | 4.4   | 116.4  |
| WXX100208-08CRI | 24-dinitrotoluene         | 182 > 152 | 18.57 | 345.648   | 17555.461 | 345.648   | 9.844     | MM    | 09-Feb-10 10:17:05 |          | 40.3376  | 100.8 | 0.8   | 25.5   |
| WXX100208-08CRI | 26-dinitrotoluene-d3      | 185 > 155 | 17.71 | 17555.461 |           | 17555.461 | 17555.461 | bb    |                    |          | 475.5082 | 95.1  | -4.9  | 2857.9 |
| WXX100208-08CRI | 2-Nitrotoluene            | 137 > 46  | 21.40 | 243.311   | 17555.461 | 243.311   | 6.930     | bb    |                    |          | 44.6944  | 111.7 | 11.7  | 27.5   |
| WXX100208-08CRI | 4-Nitrotoluene            | 137 > 46  | 22.82 | 110.338   | 17555.461 | 110.338   | 3.143     | bb    |                    |          | 41.3480  | 103.4 | 3.4   | 12.6   |
| WXX100208-08CRI | 3-Nitrotoluene            | 137 > 46  | 24.51 | 115.663   | 17555.461 | 115.663   | 3.294     | bb    |                    |          | 35.3566  | 88.4  | -11.6 | 14.1   |
| WXX100208-08CRI | PETN                      | 361 > 62  | 24.95 | 2839.157  | 17555.461 | 2839.157  | 80.863    | bb    |                    |          | 39.0264  | 97.6  | -2.4  | 1037.0 |



# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 02/08/10  
 Time of Injection 2009  
 Standard Number WXX100208-08CRI  
 Data File EXP0208012a

|              |       |
|--------------|-------|
| HMX          | 94.4  |
| RDX          | 102.6 |
| 135-TNB      | 100.5 |
| 13-DNB       | 98.5  |
| Tetryl       | 93.2  |
| Nitrobenzene | 123.3 |
| 4A-26-DNT    | 96.4  |
| 2A-46-DNT    | 95.9  |
| 246-TNT      | 104.2 |
| 34-DNT(surr) | 87.6  |
| 26-DNT       | 104.4 |
| 24-DNT       | 100.8 |
| 2-NT         | 111.7 |
| 4-NT         | 103.4 |
| 3-NT         | 88.4  |
| PETN         | 97.6  |

*not  
2/9/10*

Total 1602.9

Average 100.2

*HMM-02109/10*

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1324

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208023a

Analysis Date: 09-FEB-10 01:33

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found   | Recovery | Q |
|----------------------------|------|---------|----------|---|
| 1,3,5-Trinitrobenzene      | 600  | 554.897 | 92       |   |
| 1,3-Dinitrobenzene-d4      | 500  | 508.101 | 102      |   |
| 2,4,6-Trinitrotoluene      | 600  | 663.13  | 111      |   |
| 2,4-Dinitrotoluene         | 600  | 649.62  | 108      |   |
| 2,6-Dinitrotoluene         | 600  | 630.157 | 105      |   |
| 2,6-Dinitrotoluene-d3      | 500  | 523.831 | 105      |   |
| 2-Amino-4,6-dinitrotoluene | 600  | 647.652 | 108      |   |
| 3,4-Dinitrotoluene         | 300  | 319.699 | 107      |   |
| 4-Amino-2,6-dinitrotoluene | 600  | 634.612 | 106      |   |
| HMX                        | 600  | 662.759 | 110      |   |
| Nitrobenzene               | 600  | 657.025 | 110      |   |
| PETN                       | 600  | 606.078 | 101      |   |
| RDX                        | 600  | 749.058 | 125      | * |
| Tetryl                     | 600  | 660.942 | 110      |   |
| m-Dinitrobenzene           | 600  | 626.395 | 104      |   |
| m-Nitrotoluene             | 600  | 578.428 | 96       |   |
| o-Nitrotoluene             | 600  | 666.647 | 111      |   |
| p-Nitrotoluene             | 600  | 667.754 | 111      |   |

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208023a

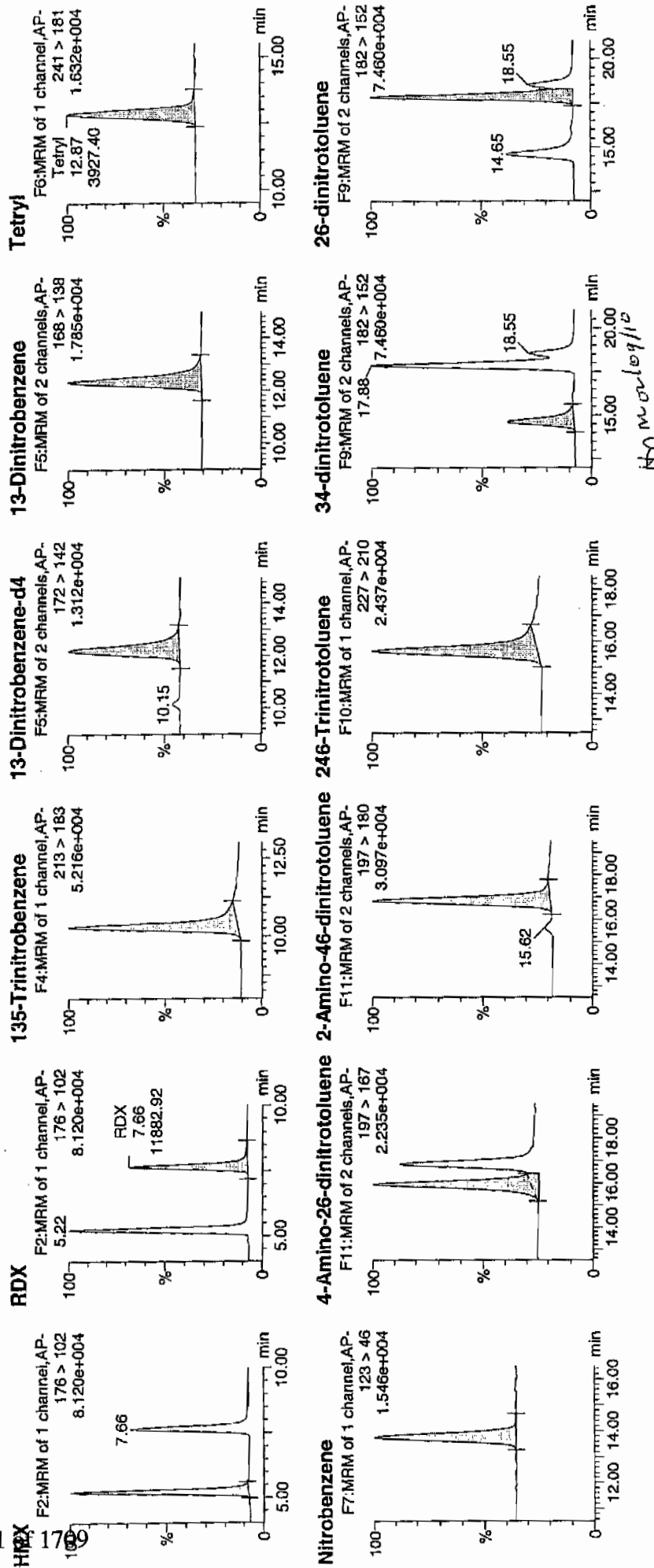
Date: 09-Feb-2010

Time: 01:33:25

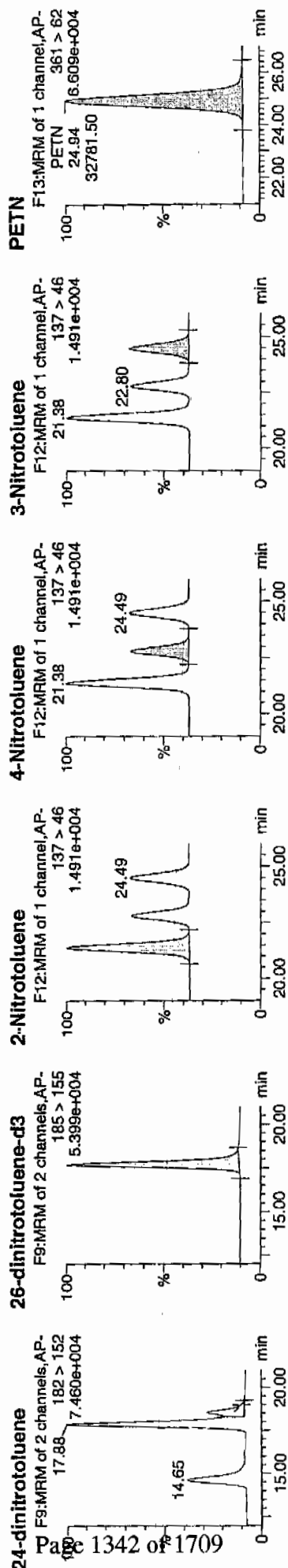
ID: WXX100208-07CCV

View: 1:1,B

10/10  
2/9/10



Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



| ID              | Name                      | Trace     | RT    | Area      | IS Area   | Abs Resp  | Response  | Flags | Mod Date  | Mod Time | IndmL    | % Rec | % Dev | S/N    |
|-----------------|---------------------------|-----------|-------|-----------|-----------|-----------|-----------|-------|-----------|----------|----------|-------|-------|--------|
| WXX100208-07CCV | HMX                       | 176 > 102 | 5.22  | 15037.290 | 3266.656  | 15037.290 | 2301.634  | bb    |           |          | 662.7595 | 110.5 | 10.5  | 1639.6 |
| WXX100208-07CCV | RDX                       | 176 > 102 | 7.66  | 11882.921 | 3266.656  | 11882.921 | 1818.820  | bb    |           |          | 749.0581 | 124.8 | 24.8  | 1082.1 |
| WXX100208-07CCV | 135-Trinitrobenzene       | 213 > 183 | 10.28 | 13352.233 | 3266.656  | 13352.233 | 2043.716  | bb    |           |          | 554.8968 | 92.5  | -7.5  | 1376.9 |
| WXX100208-07CCV | 13-Dinitrobenzene-d4      | 172 > 142 | 12.20 | 3266.656  |           | 3266.656  | 3266.656  | bb    |           |          | 508.1010 | 101.6 | 1.6   | 605.5  |
| WXX100208-07CCV | 13-Dinitrobenzene         | 168 > 138 | 12.34 | 4920.726  | 3266.656  | 4920.726  | 753.175   | bb    |           |          | 626.3952 | 104.4 | 4.4   | 650.7  |
| WXX100208-07CCV | Tetryl                    | 241 > 181 | 12.87 | 3927.402  | 3266.656  | 3927.402  | 601.135   | bb    |           |          | 660.9418 | 110.2 | 10.2  | 338.7  |
| WXX100208-07CCV | Nitrobenzene              | 123 > 46  | 13.76 | 3467.394  | 3266.656  | 3467.394  | 530.725   | bb    |           |          | 657.0246 | 109.5 | 9.5   | 301.8  |
| WXX100208-07CCV | 4-Amino-26-dinitrotoluene | 197 > 167 | 15.95 | 7050.759  | 19339.496 | 7050.759  | 182.289   | MM    | 09-Feb-10 | 10:08:16 | 634.6121 | 105.8 | 5.8   | 309.2  |
| WXX100208-07CCV | 2-Amino-46-dinitrotoluene | 197 > 180 | 16.84 | 9920.775  | 19339.496 | 9920.775  | 256.490   | bb    |           |          | 647.6525 | 107.9 | 7.9   | 941.2  |
| WXX100208-07CCV | 246-Trinitrotoluene       | 227 > 210 | 15.64 | 8276.058  | 19339.496 | 8276.058  | 213.968   | bb    |           |          | 663.1304 | 110.5 | 10.5  | 495.8  |
| WXX100208-07CCV | 34-dinitrotoluene         | 182 > 152 | 14.65 | 11128.977 | 19339.496 | 11128.977 | 287.727   | bb    |           |          | 319.6991 | 106.6 | 6.6   | 327.6  |
| WXX100208-07CCV | 26-dinitrotoluene         | 182 > 152 | 17.88 | 26179.654 | 19339.496 | 26179.654 | 676.844   | MM    | 09-Feb-10 | 10:14:49 | 630.1572 | 105.0 | 5.0   | 989.4  |
| WXX100208-07CCV | 24-dinitrotoluene         | 182 > 152 | 18.55 | 6132.196  | 19339.496 | 6132.196  | 158.541   | MM    | 09-Feb-10 | 10:18:07 | 649.6200 | 108.3 | 8.3   | 212.0  |
| WXX100208-07CCV | 26-dinitrotoluene-d3      | 185 > 155 | 17.71 | 19339.496 |           | 19339.496 | 19339.496 | bb    |           |          | 523.8307 | 104.8 | 4.8   | 1406.1 |
| WXX100208-07CCV | 2-Nitrotoluene            | 137 > 46  | 21.38 | 3997.954  | 19339.496 | 3997.954  | 103.362   | bb    |           |          | 666.6469 | 111.1 | 11.1  | 1102.1 |
| WXX100208-07CCV | 4-Nitrotoluene            | 137 > 46  | 22.80 | 1963.000  | 19339.496 | 1963.000  | 50.751    | bb    |           |          | 667.7539 | 111.3 | 11.3  | 513.0  |
| WXX100208-07CCV | 3-Nitrotoluene            | 137 > 46  | 24.49 | 2084.521  | 19339.496 | 2084.521  | 53.893    | bb    |           |          | 578.4278 | 96.4  | -3.6  | 524.4  |
| WXX100208-07CCV | PETN                      | 361 > 62  | 24.94 | 32781.500 | 19339.496 | 32781.500 | 847.527   | bb    |           |          | 606.0775 | 101.0 | 1.0   | 5719.1 |

# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 02/09/10  
 Time of Injection: 0133  
 Standard Number: WXX100208-07CCV  
 Data File: EXP0208023a

|              |  |       |
|--------------|--|-------|
| HMX          |  | 110.5 |
| RDX          |  | 124.8 |
| 135-TNB      |  | 92.5  |
| 13-DNB       |  | 104.4 |
| Tetryl       |  | 110.2 |
| Nitrobenzene |  | 109.5 |
| 4A-26-DNT    |  | 105.8 |
| 2A-46-DNT    |  | 107.9 |
| 246-TNT      |  | 110.5 |
| 34-DNT(surr) |  | 106.6 |
| 26-DNT       |  | 105.0 |
| 24-DNT       |  | 108.3 |
| 2-NT         |  | 111.1 |
| 4-NT         |  | 111.3 |
| 3-NT         |  | 96.4  |
| PETN         |  | 101.0 |

*MAP  
2/9/10*

Total 1715.8

Average 107.2

*MAP on 2/9/10*

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1324

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208025a

Analysis Date: 09-FEB-10 02:32

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found   | Recovery | Q |
|----------------------------|------|---------|----------|---|
| 1,3,5-Trinitrobenzene      | 40   | 48.344  | 121      |   |
| 1,3-Dinitrobenzene-d4      | 500  | 473.5   | 95       |   |
| 2,4,6-Trinitrotoluene      | 40   | 40.42   | 101      |   |
| 2,4-Dinitrotoluene         | 40   | 41.928  | 105      |   |
| 2,6-Dinitrotoluene         | 40   | 42.477  | 106      |   |
| 2,6-Dinitrotoluene-d3      | 500  | 478.268 | 96       |   |
| 2-Amino-4,6-dinitrotoluene | 40   | 34.805  | 87       |   |
| 3,4-Dinitrotoluene         | 20   | 22.301  | 112      |   |
| 4-Amino-2,6-dinitrotoluene | 40   | 34.146  | 85       |   |
| HMX                        | 40   | 52.317  | 131      | * |
| Nitrobenzene               | 40   | 45.327  | 113      |   |
| PETN                       | 40   | 49.164  | 123      |   |
| RDX                        | 40   | 55.212  | 138      | * |
| Tetryl                     | 40   | 41.653  | 104      |   |
| m-Dinitrobenzene           | 40   | 42.381  | 106      |   |
| m-Nitrotoluene             | 40   | 52.115  | 130      | * |
| o-Nitrotoluene             | 40   | 49.924  | 125      |   |
| p-Nitrotoluene             | 40   | 50.961  | 127      |   |

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Quantify Sample Report  
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\Data\EXP0208025a

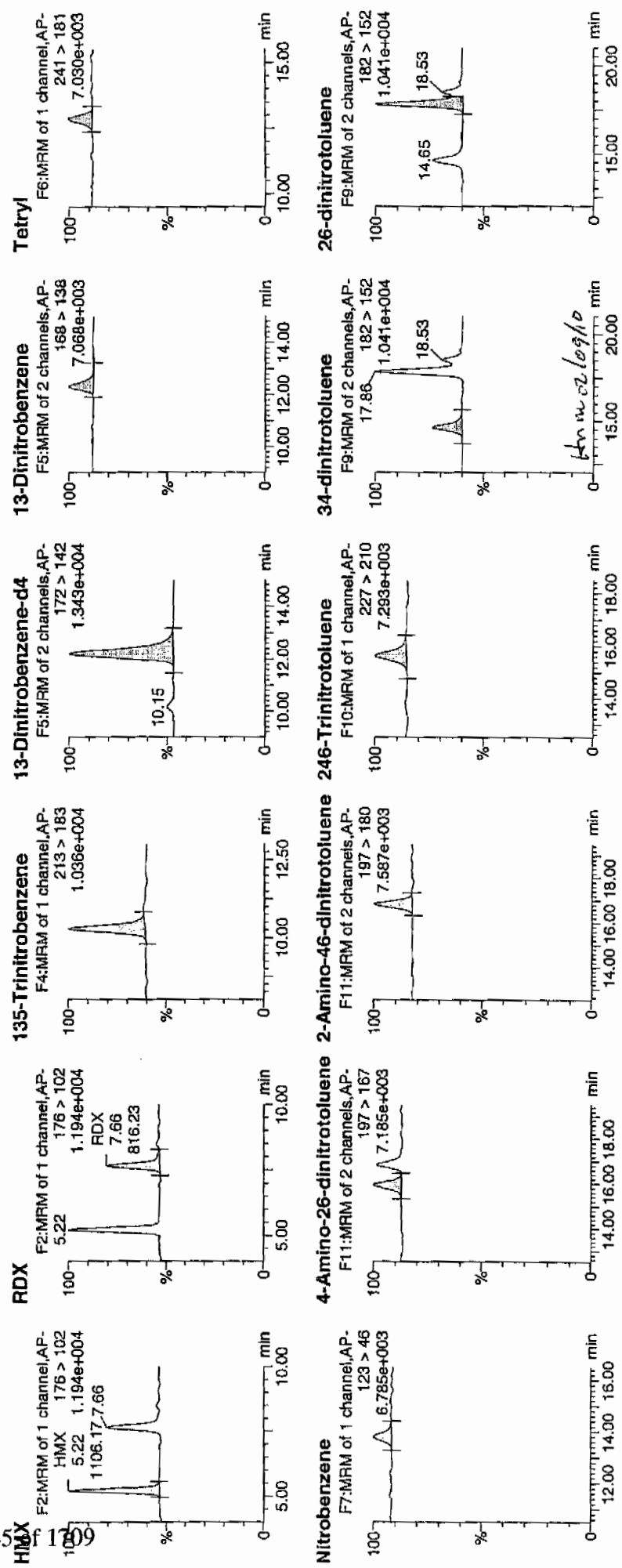
Date: 09-Feb-2010

Time: 02:32:22

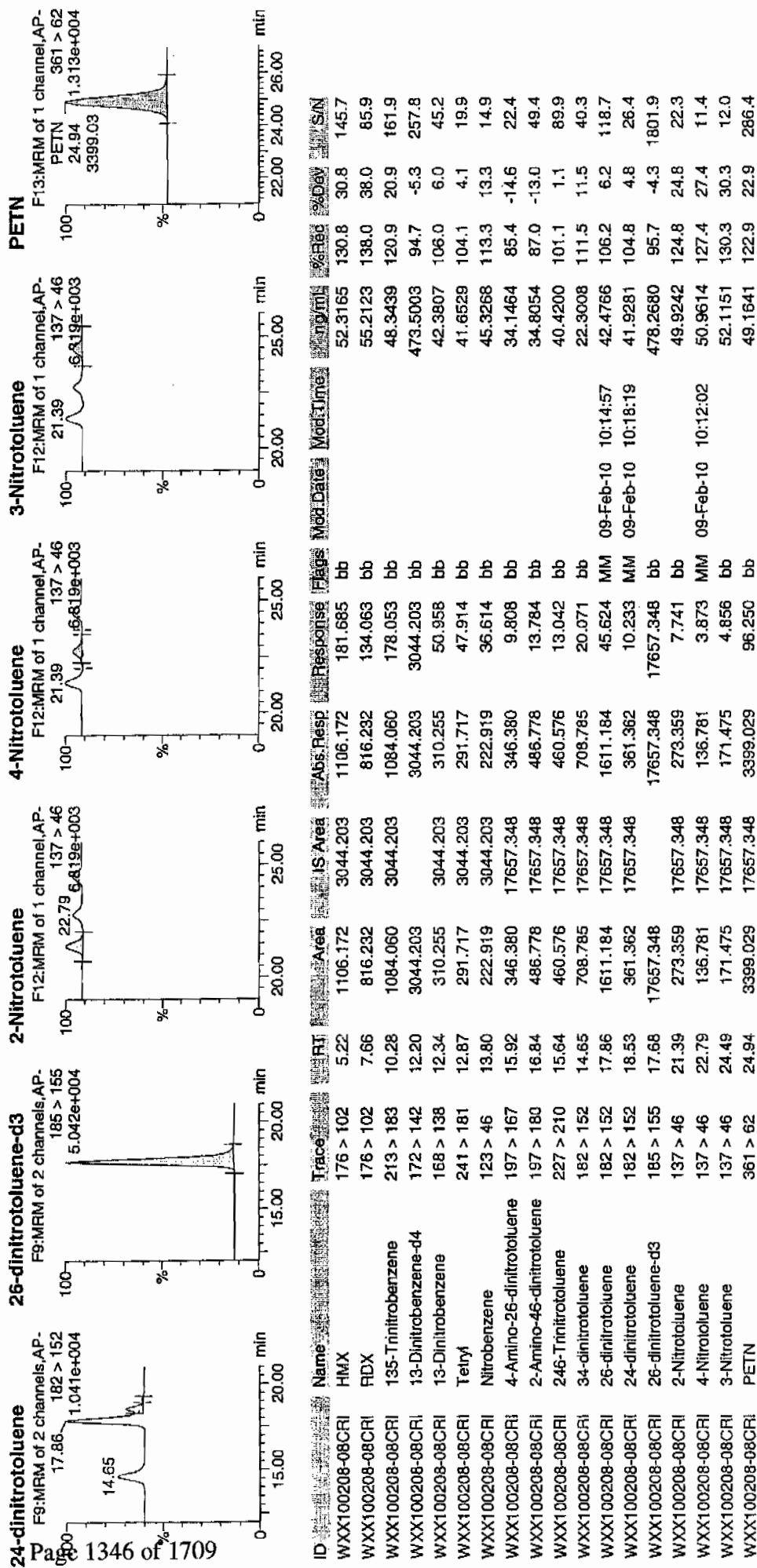
ID: WXX100208-08CRI

View: 1:1,C

WAT  
 2/9/10



Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010





# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 02/09/10  
 Time of Injection 0232  
 Standard Number WXX100208-08CRI  
 Data File EXP0208025a

|              |       |
|--------------|-------|
| HMX          | 130.8 |
| RDX          | 138.0 |
| 135-TNB      | 120.9 |
| 13-DNB       | 106.0 |
| Tetryl       | 104.1 |
| Nitrobenzene | 113.3 |
| 4A-26-DNT    | 85.4  |
| 2A-46-DNT    | 87.0  |
| 246-TNT      | 101.1 |
| 34-DNT(surr) | 111.5 |
| 26-DNT       | 106.2 |
| 24-DNT       | 104.8 |
| 2-NT         | 124.8 |
| 4-NT         | 127.4 |
| 3-NT         | 130.3 |
| PETN         | 122.9 |

*not  
2/9/10*

Total 1814.5

Average 113.4

*from 02/09/10*

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1324

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208036a

Analysis Date: 09-FEB-10 07:57

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found   | Recovery | Q |
|----------------------------|------|---------|----------|---|
| 1,3,5-Trinitrobenzene      | 600  | 557.726 | 93       |   |
| 1,3-Dinitrobenzene-d4      | 500  | 507.978 | 102      |   |
| 2,4,6-Trinitrotoluene      | 600  | 683.818 | 114      |   |
| 2,4-Dinitrotoluene         | 600  | 677.06  | 113      |   |
| 2,6-Dinitrotoluene         | 600  | 638.573 | 106      |   |
| 2,6-Dinitrotoluene-d3      | 500  | 505.031 | 101      |   |
| 2-Amino-4,6-dinitrotoluene | 600  | 628.37  | 105      |   |
| 3,4-Dinitrotoluene         | 300  | 343.206 | 114      |   |
| 4-Amino-2,6-dinitrotoluene | 600  | 610.088 | 102      |   |
| HMX                        | 600  | 580.276 | 97       |   |
| Nitrobenzene               | 600  | 601.509 | 100      |   |
| PETN                       | 600  | 627.319 | 105      |   |
| RDX                        | 600  | 669.645 | 112      |   |
| Tetryl                     | 600  | 596.357 | 99       |   |
| m-Dinitrobenzene           | 600  | 631.512 | 105      |   |
| m-Nitrotoluene             | 600  | 558.007 | 93       |   |
| o-Nitrotoluene             | 600  | 611.096 | 102      |   |
| p-Nitrotoluene             | 600  | 633.085 | 106      |   |

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208036a

Date: 09-Feb-2010

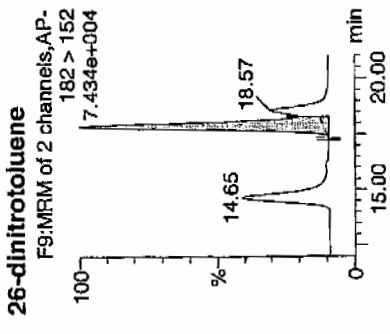
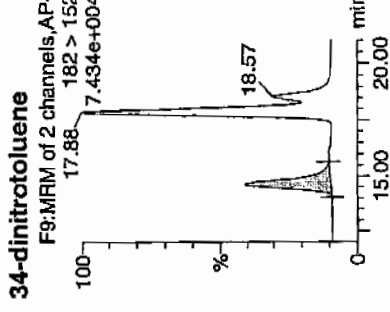
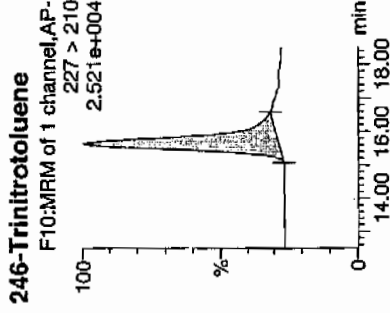
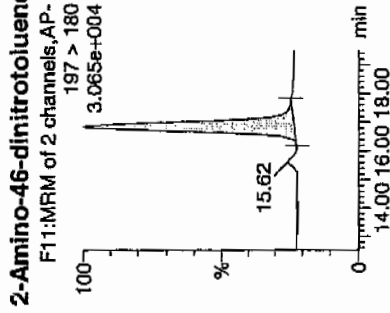
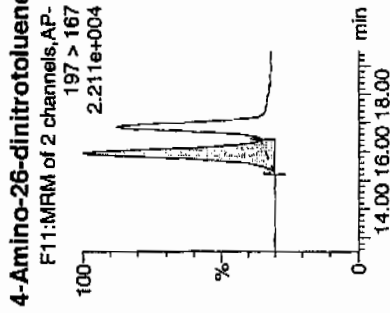
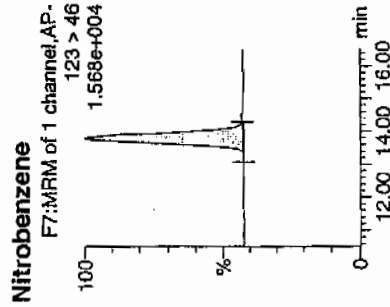
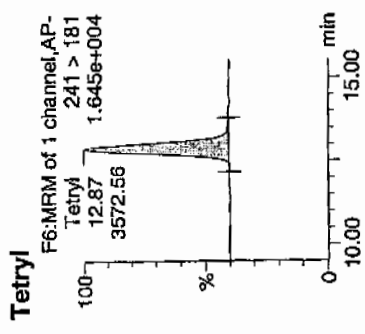
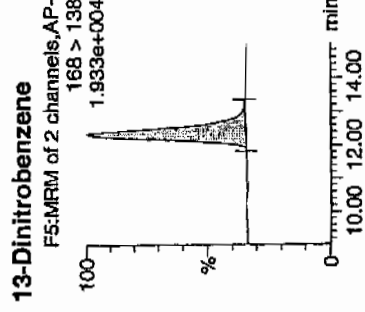
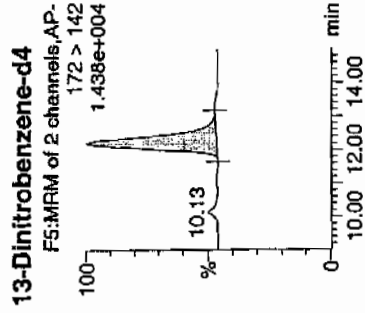
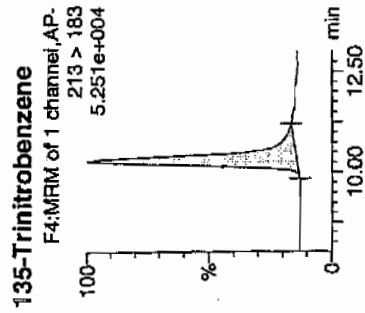
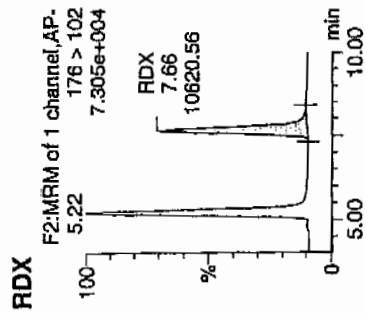
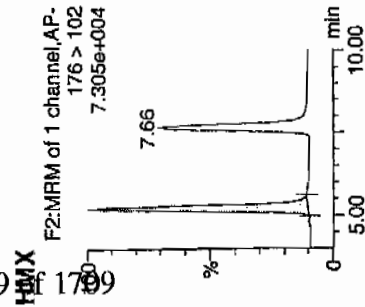
Time: 07:57:19

ID: WXX100208-07CCV

Vial: 1:1,B

49

HMX



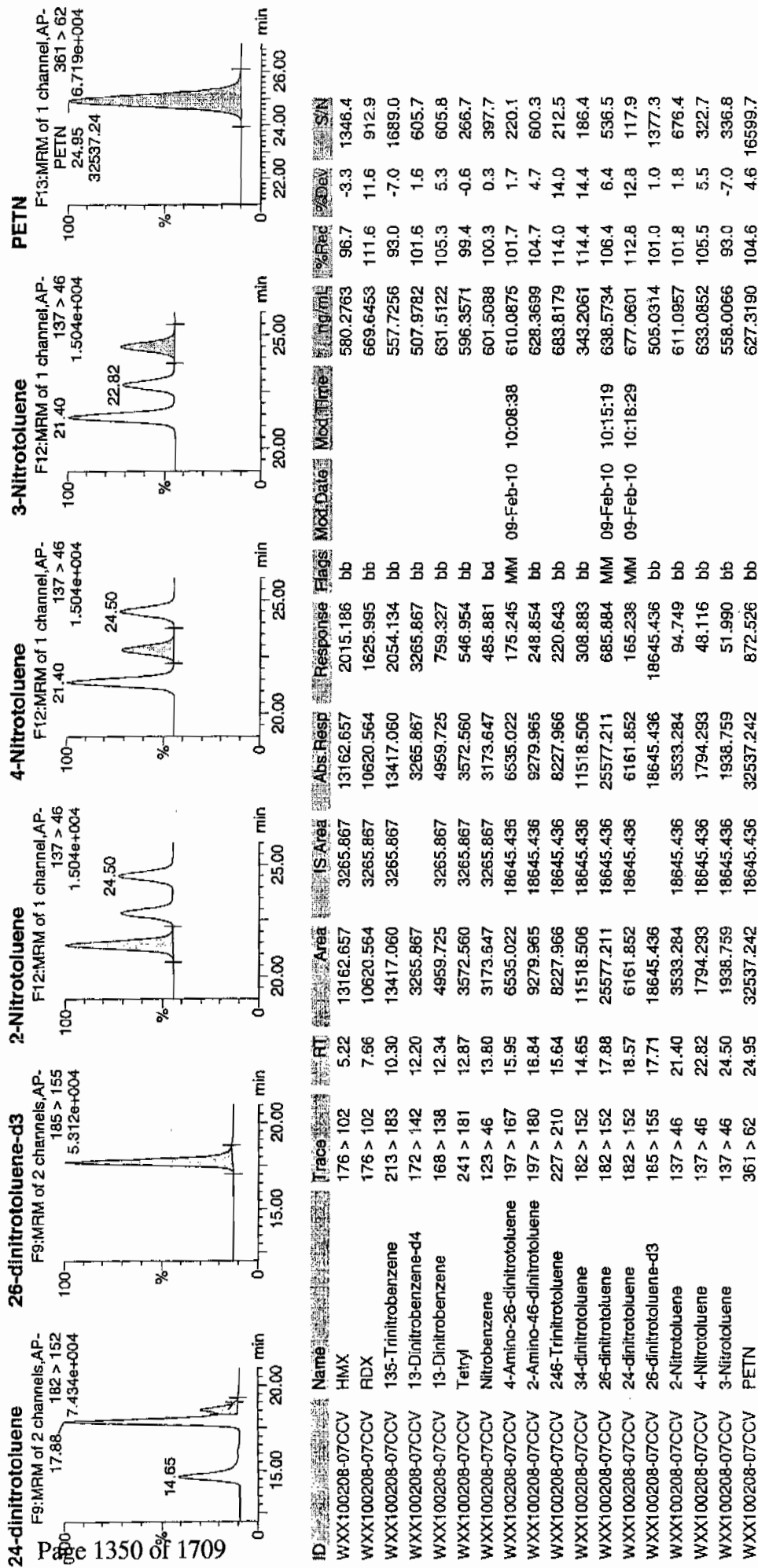
HW 5/10/10

# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Feb 09 10:21:18 2010, Page 72 of 77

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 02/09/10  
 Time of Injection: 0757  
 Standard Number: WXX100208-07CCV  
 Data File: EXP0208036a

|              |       |
|--------------|-------|
| HMX          | 96.7  |
| RDX          | 111.6 |
| 135-TNB      | 93.0  |
| 13-DNB       | 105.3 |
| Tetryl       | 99.4  |
| Nitrobenzene | 100.3 |
| 4A-26-DNT    | 101.7 |
| 2A-46-DNT    | 104.7 |
| 246-TNT      | 114.0 |
| 34-DNT(surr) | 114.4 |
| 26-DNT       | 106.4 |
| 24-DNT       | 112.8 |
| 2-NT         | 101.8 |
| 4-NT         | 105.5 |
| 3-NT         | 93.0  |
| PETN         | 104.6 |

*Handwritten:* 104.1  
2/9/10

Total 1665.2

Average 104.1

*Handwritten:* Harmonized

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1324

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208038a

Analysis Date: 09-FEB-10 08:56

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found   | Recovery | Q |
|----------------------------|------|---------|----------|---|
| 1,3,5-Trinitrobenzene      | 40   | 41.878  | 105      |   |
| 1,3-Dinitrobenzene-d4      | 500  | 600.974 | 120      |   |
| 2,4,6-Trinitrotoluene      | 40   | 41.161  | 103      |   |
| 2,4-Dinitrotoluene         | 40   | 39.718  | 99       |   |
| 2,6-Dinitrotoluene         | 40   | 41.46   | 104      |   |
| 2,6-Dinitrotoluene-d3      | 500  | 511.208 | 102      |   |
| 2-Amino-4,6-dinitrotoluene | 40   | 41.059  | 103      |   |
| 3,4-Dinitrotoluene         | 20   | 24.686  | 123      |   |
| 4-Amino-2,6-dinitrotoluene | 40   | 44.787  | 112      |   |
| HMX                        | 40   | 36.25   | 91       |   |
| Nitrobenzene               | 40   | 44.383  | 111      |   |
| PETN                       | 40   | 42.434  | 106      |   |
| RDX                        | 40   | 40.143  | 100      |   |
| Tetryl                     | 40   | 36.6    | 92       |   |
| m-Dinitrobenzene           | 40   | 41.257  | 103      |   |
| m-Nitrotoluene             | 40   | 38.786  | 97       |   |
| o-Nitrotoluene             | 40   | 43.692  | 109      |   |
| p-Nitrotoluene             | 40   | 33.849  | 85       |   |

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208038a

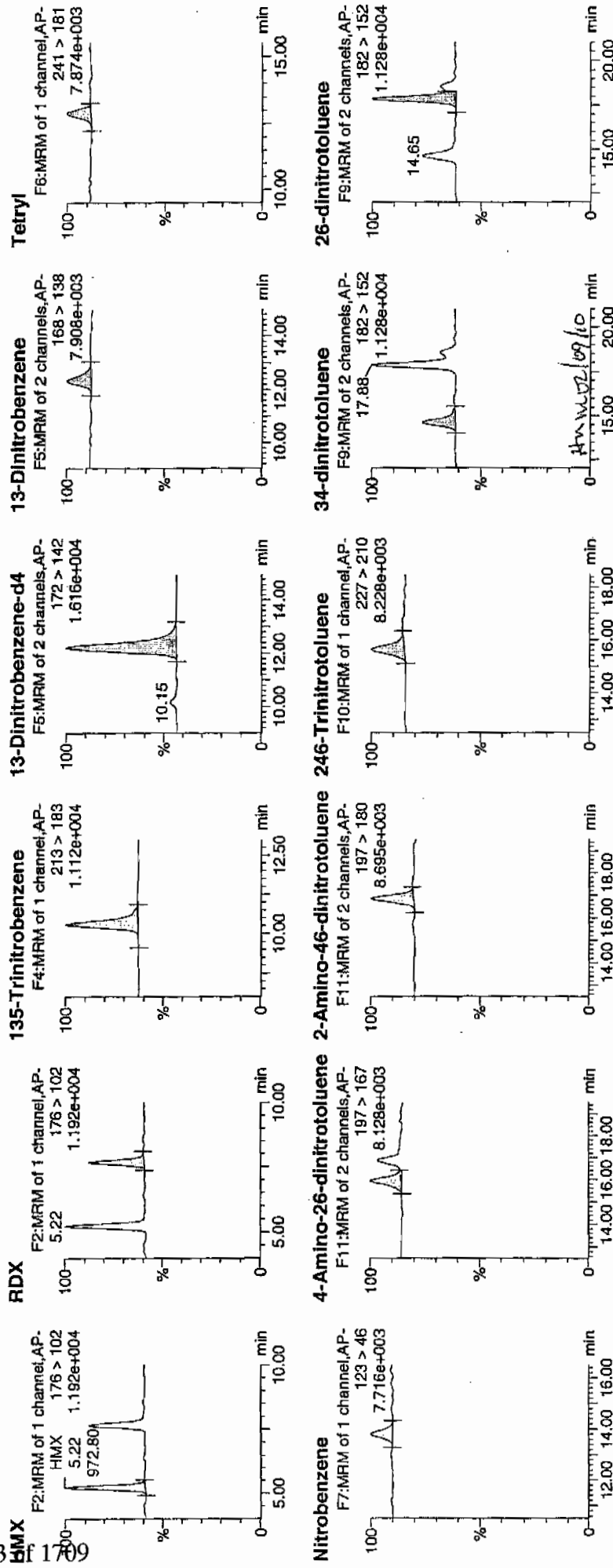
Date: 09-Feb-2010

Time: 08:56:17

ID: WXX100208-08CRI

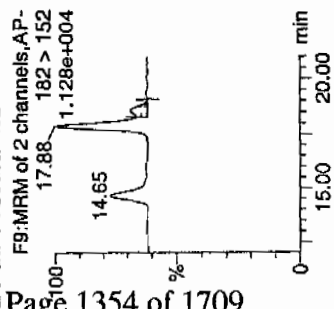
Vial: 1:1,C

NOT  
2/9/10

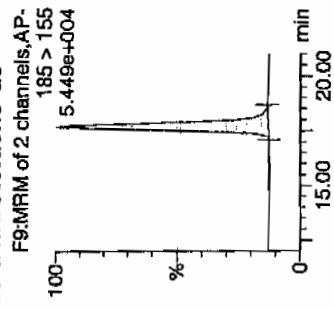


Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

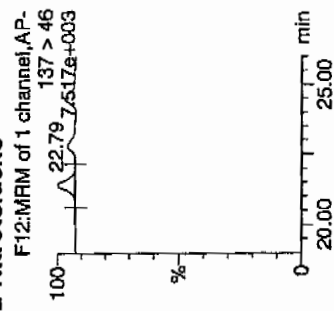
## 24-dinitrotoluene



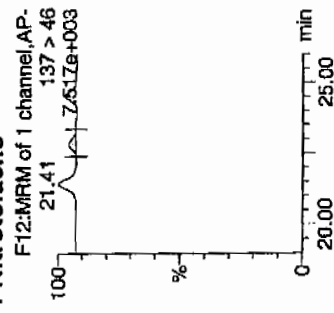
## 26-dinitrotoluene-d3



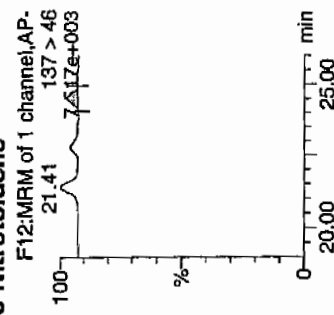
## 2-Nitrotoluene



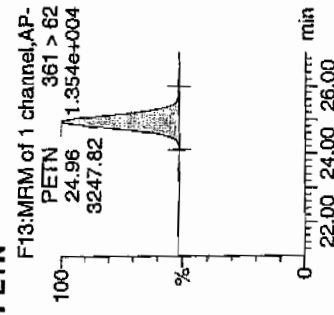
## 4-Nitrotoluene



## 3-Nitrotoluene



## PETN



| ID              | Name                      | Trace     | RT    | Area      | IS Area   | Abs. Resp. | Response  | Flags | Mod. Date | Mod. Time | ng/ml    | % Rec | % Dev | S/N    |
|-----------------|---------------------------|-----------|-------|-----------|-----------|------------|-----------|-------|-----------|-----------|----------|-------|-------|--------|
| WXX100208-08CRI | HMZ                       | 176 > 102 | 5.22  | 972.801   | 3863.752  | 972.801    | 125.888   | bb    |           |           | 36.2497  | 90.6  | -9.4  | 111.9  |
| WXX100208-08CRI | RDX                       | 176 > 102 | 7.66  | 753.223   | 3863.752  | 753.223    | 97.473    | bb    |           |           | 40.1430  | 100.4 | 0.4   | 77.4   |
| WXX100208-08CRI | 135-Trinitrobenzene       | 213 > 183 | 10.28 | 1191.883  | 3863.752  | 1191.883   | 154.239   | bb    |           |           | 41.8780  | 104.7 | 4.7   | 118.4  |
| WXX100208-08CRI | 13-Dinitrobenzene-d4      | 172 > 142 | 12.20 | 3863.752  |           | 3863.752   | 3863.752  | bb    |           |           | 600.9743 | 120.2 | 20.2  | 435.6  |
| WXX100208-08CRI | 13-Dinitrobenzene         | 168 > 138 | 12.34 | 383.336   | 3863.752  | 383.336    | 49.607    | bb    |           |           | 41.2566  | 103.1 | 3.1   | 20.7   |
| WXX100208-08CRI | Tetryl                    | 241 > 181 | 12.87 | 332.982   | 3863.752  | 332.982    | 43.090    | bb    |           |           | 36.6002  | 91.5  | -8.5  | 27.6   |
| WXX100208-08CRI | Nitrobenzene              | 123 > 46  | 13.80 | 277.043   | 3863.752  | 277.043    | 35.852    | bb    |           |           | 44.3833  | 111.0 | 11.0  | 19.4   |
| WXX100208-08CRI | 4-Amino-26-dinitrotoluene | 197 > 167 | 15.92 | 485.610   | 18873.490 | 485.610    | 12.865    | MM    | 09-Feb-10 | 10:08:44  | 44.7871  | 112.0 | 12.0  | 52.7   |
| WXX100208-08CRI | 2-Amino-46-dinitrotoluene | 197 > 180 | 16.84 | 613.793   | 18873.490 | 613.793    | 16.261    | bb    |           |           | 41.0593  | 102.6 | 2.6   | 87.6   |
| WXX100208-08CRI | 246-Trinitrotoluene       | 227 > 210 | 15.64 | 501.319   | 18873.490 | 501.319    | 13.281    | bb    |           |           | 41.1607  | 102.9 | 2.9   | 66.2   |
| WXX100208-08CRI | 34-dinitrotoluene         | 182 > 152 | 14.65 | 838.618   | 18873.490 | 838.618    | 22.217    | bb    |           |           | 24.6856  | 123.4 | 23.4  | 48.7   |
| WXX100208-08CRI | 26-dinitrotoluene         | 182 > 152 | 17.88 | 1680.954  | 18873.490 | 1680.954   | 44.532    | MM    | 09-Feb-10 | 10:15:31  | 41.4604  | 103.7 | 3.7   | 121.8  |
| WXX100208-08CRI | 24-dinitrotoluene         | 182 > 152 | 18.59 | 365.888   | 18873.490 | 365.888    | 9.693     | MM    | 09-Feb-10 | 10:18:38  | 39.7177  | 99.3  | -0.7  | 22.8   |
| WXX100208-08CRI | 26-dinitrotoluene-d3      | 185 > 155 | 17.71 | 18873.490 |           | 18873.490  | 18873.490 | bb    |           |           | 511.2084 | 102.2 | 2.2   | 1598.8 |
| WXX100208-08CRI | 2-Nitrotoluene            | 137 > 46  | 21.41 | 255.711   | 18873.490 | 255.711    | 6.774     | bb    |           |           | 43.6918  | 109.2 | 9.2   | 36.6   |
| WXX100208-08CRI | 4-Nitrotoluene            | 137 > 46  | 22.79 | 97.109    | 18873.490 | 97.109     | 2.573     | bb    |           |           | 33.8492  | 84.6  | -15.4 | 15.6   |
| WXX100208-08CRI | 3-Nitrotoluene            | 137 > 46  | 24.53 | 136.407   | 18873.490 | 136.407    | 3.614     | bb    |           |           | 38.7858  | 97.0  | -3.0  | 22.9   |
| WXX100208-08CRI | PETN                      | 361 > 62  | 24.96 | 3247.825  | 18873.490 | 3247.825   | 86.042    | bb    |           |           | 42.4344  | 106.1 | 6.1   | 522.7  |



GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 02/09/10  
 Time of Injection 0856  
 Standard Number WXX100208-08CRI  
 Data File EXP0208038a

|              |       |
|--------------|-------|
| HMX          | 90.6  |
| RDX          | 100.4 |
| 135-TNB      | 104.7 |
| 13-DNB       | 103.1 |
| Tetryl       | 91.5  |
| Nitrobenzene | 111.0 |
| 4A-26-DNT    | 112.0 |
| 2A-46-DNT    | 102.6 |
| 246-TNT      | 102.9 |
| 34-DNT(surr) | 123.4 |
| 26-DNT       | 103.7 |
| 24-DNT       | 99.3  |
| 2-NT         | 109.2 |
| 4-NT         | 84.6  |
| 3-NT         | 97.0  |
| PETN         | 106.1 |

*not  
2/9/10*

Total 1642.1

Average 102.6

*from average*

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1324

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208049a

Analysis Date: 09-FEB-10 14:20

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found   | Recovery | Q |
|----------------------------|------|---------|----------|---|
| 1,3,5-Trinitrobenzene      | 600  | 581.172 | 97       |   |
| 1,3-Dinitrobenzene-d4      | 500  | 549.978 | 110      |   |
| 2,4,6-Trinitrotoluene      | 600  | 711.282 | 119      |   |
| 2,4-Dinitrotoluene         | 600  | 646.244 | 108      |   |
| 2,6-Dinitrotoluene         | 600  | 631.864 | 105      |   |
| 2,6-Dinitrotoluene-d3      | 500  | 554.109 | 111      |   |
| 2-Amino-4,6-dinitrotoluene | 600  | 637.752 | 106      |   |
| 3,4-Dinitrotoluene         | 300  | 327.767 | 109      |   |
| 4-Amino-2,6-dinitrotoluene | 600  | 652.073 | 109      |   |
| HMX                        | 600  | 648.743 | 108      |   |
| Nitrobenzene               | 600  | 534.529 | 89       |   |
| PETN                       | 600  | 566.64  | 94       |   |
| RDX                        | 600  | 721.033 | 120      | * |
| Tetryl                     | 600  | 576.02  | 96       |   |
| m-Dinitrobenzene           | 600  | 635.781 | 106      |   |
| m-Nitrotoluene             | 600  | 523.672 | 87       |   |
| o-Nitrotoluene             | 600  | 534.766 | 89       |   |
| p-Nitrotoluene             | 600  | 557.168 | 93       |   |

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208049a

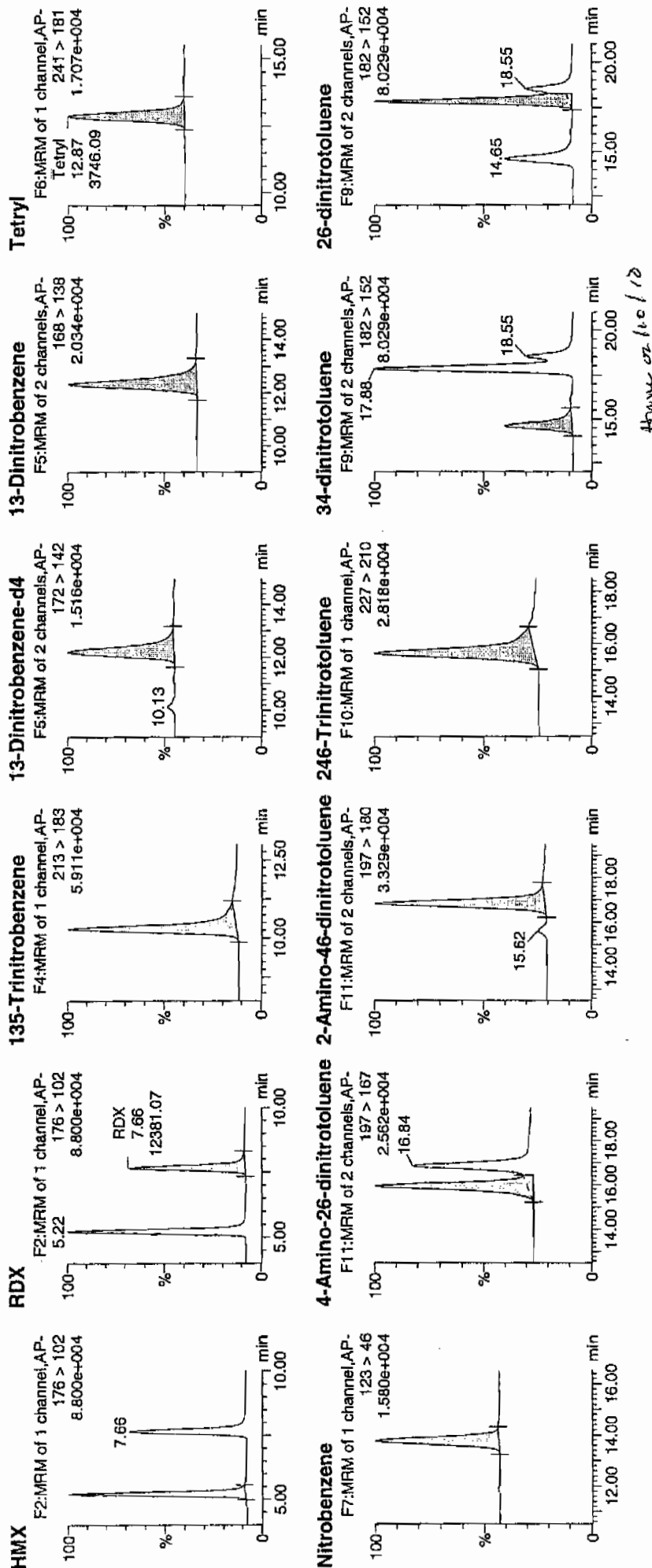
Date: 09-Feb-2010

Time: 14:20:41

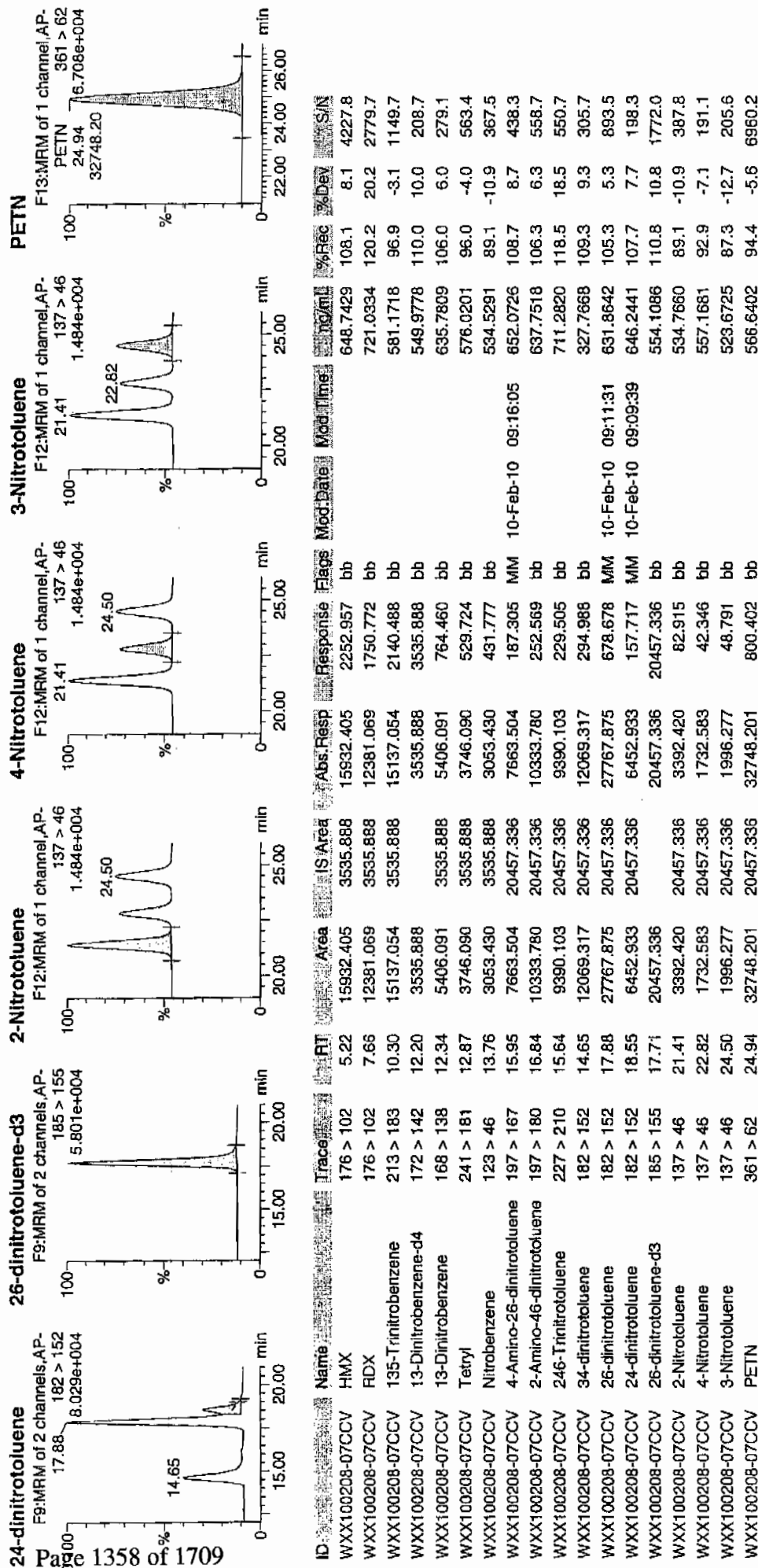
ID: WXX100208-07CCV

Vial: 1:1,B

Page 1357 of 1709



Dataset: C:\MASSLYNX\New\_Exp\PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 02/09/10  
 Time of Injection: 1420  
 Standard Number: WXX100208-07CCV  
 Data File: EXP0208049a

|              |        |
|--------------|--------|
| HMX          | 108.1  |
| RDX          | 120.2  |
| 135-TNB      | 96.9   |
| 13-DNB       | 106.0  |
| Tetryl       | 96.0   |
| Nitrobenzene | 89.1   |
| 4A-26-DNT    | 108.7  |
| 2A-46-DNT    | 106.3  |
| 246-TNT      | 118.5  |
| 34-DNT(surr) | 109.3  |
| 26-DNT       | 105.3  |
| 24-DNT       | 107.7  |
| 2-NT         | 89.1   |
| 4-NT         | 92.9   |
| 3-NT         | 87.3   |
| PETN         | 94.4   |
| Total        | 1635.8 |

not  
2/10/10

Average

102.2

done 02/10/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1324

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208051a

Analysis Date: 09-FEB-10 15:19

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found   | Recovery | Q |
|----------------------------|------|---------|----------|---|
| 1,3,5-Trinitrobenzene      | 40   | 43.499  | 109      |   |
| 1,3-Dinitrobenzene-d4      | 500  | 575.339 | 115      |   |
| 2,4,6-Trinitrotoluene      | 40   | 37.174  | 93       |   |
| 2,4-Dinitrotoluene         | 40   | 39.545  | 99       |   |
| 2,6-Dinitrotoluene         | 40   | 44.458  | 111      |   |
| 2,6-Dinitrotoluene-d3      | 500  | 556.656 | 111      |   |
| 2-Amino-4,6-dinitrotoluene | 40   | 44.445  | 111      |   |
| 3,4-Dinitrotoluene         | 20   | 22.823  | 114      |   |
| 4-Amino-2,6-dinitrotoluene | 40   | 42.665  | 107      |   |
| HMX                        | 40   | 42.028  | 105      |   |
| Nitrobenzene               | 40   | 40.451  | 101      |   |
| PETN                       | 40   | 36.261  | 91       |   |
| RDX                        | 40   | 37.937  | 95       |   |
| Tetryl                     | 40   | 44.71   | 112      |   |
| m-Dinitrobenzene           | 40   | 44.913  | 112      |   |
| m-Nitrotoluene             | 40   | 32.902  | 82       |   |
| o-Nitrotoluene             | 40   | 39.318  | 98       |   |
| p-Nitrotoluene             | 40   | 38.91   | 97       |   |

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208051a

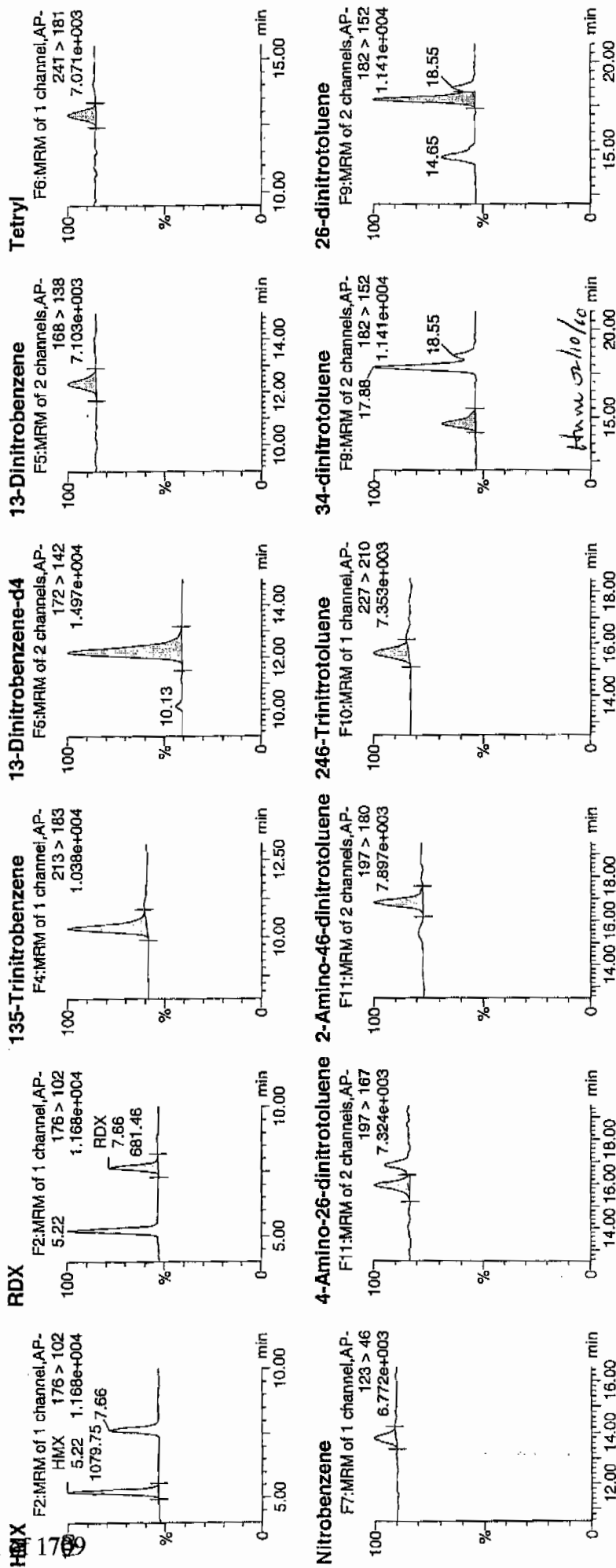
Date: 09-Feb-2010

Time: 15:19:46

ID: WXX100208-08CRI

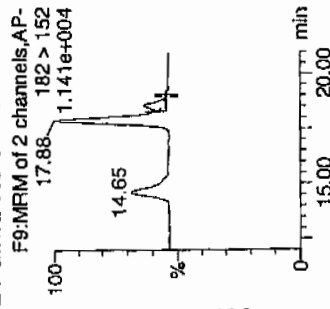
Vol: 1:1,C

WAT  
2/10/10

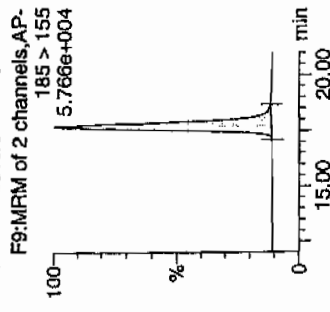


Dataset: C:\MASSLYNX\New\_Exp\PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

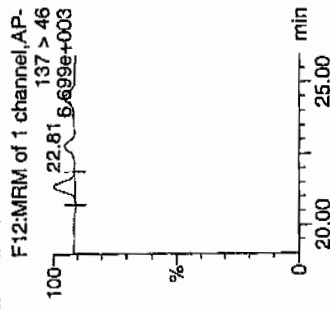
## 24-dinitrotoluene



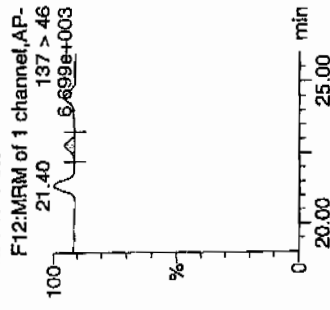
## 26-dinitrotoluene-d3



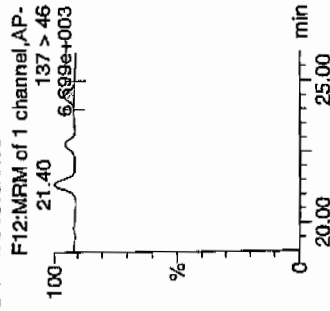
## 2-Nitrotoluene



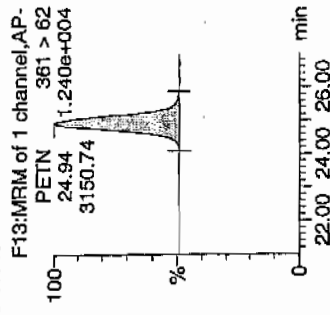
## 4-Nitrotoluene



## 3-Nitrotoluene



## PETN



| ID              | Name                      | Trace     | RT    | Area      | IS Area   | Abs Resp  | Response  | Flags | Mod Date  | Mod Time | IntgM    | %Rec  | %Dev  | SN     |
|-----------------|---------------------------|-----------|-------|-----------|-----------|-----------|-----------|-------|-----------|----------|----------|-------|-------|--------|
| WXX100208-08CRI | HMX                       | 176 > 102 | 5.22  | 1079.752  | 3698.938  | 1079.752  | 145.954   | bb    |           |          | 42.0278  | 105.1 | 5.1   | 142.2  |
| WXX100208-08CRI | RDX                       | 176 > 102 | 7.66  | 681.462   | 3698.938  | 681.462   | 92.116    | bb    |           |          | 37.9368  | 94.8  | -5.2  | 77.8   |
| WXX100208-08CRI | 135-Trinitrobenzene       | 213 > 183 | 10.28 | 1185.200  | 3698.938  | 1185.200  | 160.208   | bb    |           |          | 43.4987  | 108.7 | 8.7   | 112.1  |
| WXX100208-08CRI | 13-Dinitrobenzene-d4      | 172 > 142 | 12.20 | 3698.938  |           | 3698.938  | 3698.938  | bb    |           |          | 575.3388 | 115.1 | 15.1  | 520.0  |
| WXX100208-08CRI | 13-Dinitrobenzene         | 168 > 138 | 12.34 | 399.509   | 3698.938  | 399.509   | 54.003    | bb    |           |          | 44.9130  | 112.3 | 12.3  | 46.9   |
| WXX100208-08CRI | Tetryl                    | 241 > 181 | 12.87 | 376.028   | 3698.938  | 376.028   | 50.829    | bb    |           |          | 44.7099  | 111.8 | 11.8  | 36.6   |
| WXX100208-08CRI | Nitrobenzene              | 123 > 46  | 13.76 | 241.726   | 3698.938  | 241.726   | 32.675    | bb    |           |          | 40.4509  | 101.1 | 1.1   | 30.0   |
| WXX100208-08CRI | 4-Amino-26-dinitrotoluene | 197 > 167 | 15.95 | 503.725   | 20551.385 | 503.725   | 12.255    | MM    | 10-Feb-10 | 09:15:53 | 42.6648  | 106.7 | 6.7   | 25.0   |
| WXX100208-08CRI | 2-Amino-46-dinitrotoluene | 197 > 180 | 16.84 | 723.475   | 20551.385 | 723.475   | 17.602    | bb    |           |          | 44.4451  | 111.1 | 11.1  | 30.7   |
| WXX100208-08CRI | 246-Trinitrotoluene       | 227 > 210 | 15.64 | 493.014   | 20551.385 | 493.014   | 11.995    | bb    |           |          | 37.1739  | 92.9  | -7.1  | 37.3   |
| WXX100208-08CRI | 34-dinitrotoluene         | 182 > 152 | 14.65 | 844.283   | 20551.385 | 844.283   | 20.541    | bb    |           |          | 22.8233  | 114.1 | 14.1  | 68.4   |
| WXX100208-08CRI | 26-dinitrotoluene         | 182 > 152 | 17.88 | 1962.747  | 20551.385 | 1962.747  | 47.752    | MM    | 10-Feb-10 | 09:11:38 | 44.4584  | 111.1 | 11.1  | 212.7  |
| WXX100208-08CRI | 24-dinitrotoluene         | 182 > 152 | 18.55 | 396.684   | 20551.385 | 396.684   | 9.651     | MM    | 10-Feb-10 | 09:09:28 | 39.5450  | 98.9  | -1.1  | 42.0   |
| WXX100208-08CRI | 26-dinitrotoluene-d3      | 185 > 155 | 17.71 | 20551.385 |           | 20551.385 | 20551.385 | bb    |           |          | 556.6560 | 111.3 | 11.3  | 1207.4 |
| WXX100208-08CRI | 2-Nitrotoluene            | 137 > 46  | 21.40 | 250.572   | 20551.385 | 250.572   | 6.096     | bb    |           |          | 39.3183  | 98.3  | -1.7  | 41.5   |
| WXX100208-08CRI | 4-Nitrotoluene            | 137 > 46  | 22.81 | 121.550   | 20551.385 | 121.550   | 2.957     | bb    |           |          | 38.9095  | 97.3  | -2.7  | 20.1   |
| WXX100208-08CRI | 3-Nitrotoluene            | 137 > 46  | 24.48 | 126.001   | 20551.385 | 126.001   | 3.066     | bb    |           |          | 32.9019  | 82.3  | -17.7 | 20.8   |
| WXX100208-08CRI | PETN                      | 361 > 62  | 24.94 | 3150.736  | 20551.385 | 3150.736  | 76.655    | bb    |           |          | 36.2614  | 90.7  | -9.3  | 631.2  |



# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 02/09/10  
 Time of Injection 1519  
 Standard Number WXX100208-08CRI  
 Data File EXP0208051a

|              |       |
|--------------|-------|
| HMX          | 105.1 |
| RDX          | 94.8  |
| 135-TNB      | 108.7 |
| 13-DNB       | 112.3 |
| Tetryl       | 111.8 |
| Nitrobenzene | 101.1 |
| 4A-26-DNT    | 106.7 |
| 2A-46-DNT    | 111.1 |
| 246-TNT      | 92.9  |
| 34-DNT(surr) | 114.1 |
| 26-DNT       | 111.1 |
| 24-DNT       | 98.9  |
| 2-NT         | 98.3  |
| 4-NT         | 97.3  |
| 3-NT         | 82.3  |
| PETN         | 90.7  |

*WXX  
2/10/10*

Total 1637.2

Average 102.3

*4/11/10 02/10/10*  
 ICV Limits 85-115%  
 CRI Limits 70-130%  
 CCV Limits 85-115%  
 No single analyte > +/- 60%

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1324

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208062a

Analysis Date: 09-FEB-10 20:44

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found   | Recovery | Q |
|----------------------------|------|---------|----------|---|
| 1,3,5-Trinitrobenzene      | 600  | 547.737 | 91       |   |
| 1,3-Dinitrobenzene-d4      | 500  | 567.181 | 113      |   |
| 2,4,6-Trinitrotoluene      | 600  | 715.292 | 119      |   |
| 2,4-Dinitrotoluene         | 600  | 646.614 | 108      |   |
| 2,6-Dinitrotoluene         | 600  | 637.73  | 106      |   |
| 2,6-Dinitrotoluene-d3      | 500  | 528.196 | 106      |   |
| 2-Amino-4,6-dinitrotoluene | 600  | 658.061 | 110      |   |
| 3,4-Dinitrotoluene         | 300  | 330.267 | 110      |   |
| 4-Amino-2,6-dinitrotoluene | 600  | 627.96  | 105      |   |
| HMX                        | 600  | 599.91  | 100      |   |
| Nitrobenzene               | 600  | 551.5   | 92       |   |
| PETN                       | 600  | 580.031 | 97       |   |
| RDX                        | 600  | 625.098 | 104      |   |
| Tetryl                     | 600  | 563.424 | 94       |   |
| m-Dinitrobenzene           | 600  | 616.138 | 103      |   |
| m-Nitrotoluene             | 600  | 563.078 | 94       |   |
| o-Nitrotoluene             | 600  | 586.398 | 98       |   |
| p-Nitrotoluene             | 600  | 590.193 | 98       |   |

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208062a

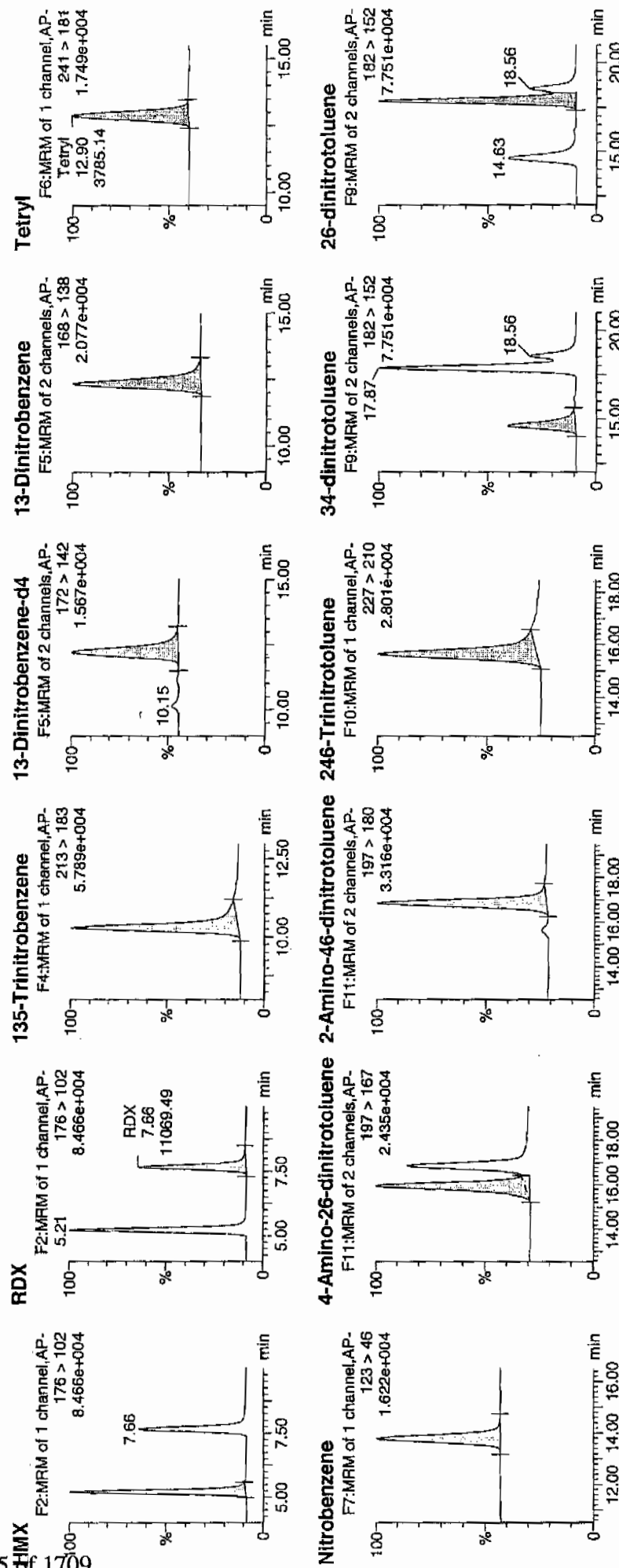
Date: 09-Feb-2010

Time: 20:44:30

ID: WXX100208-07CCV

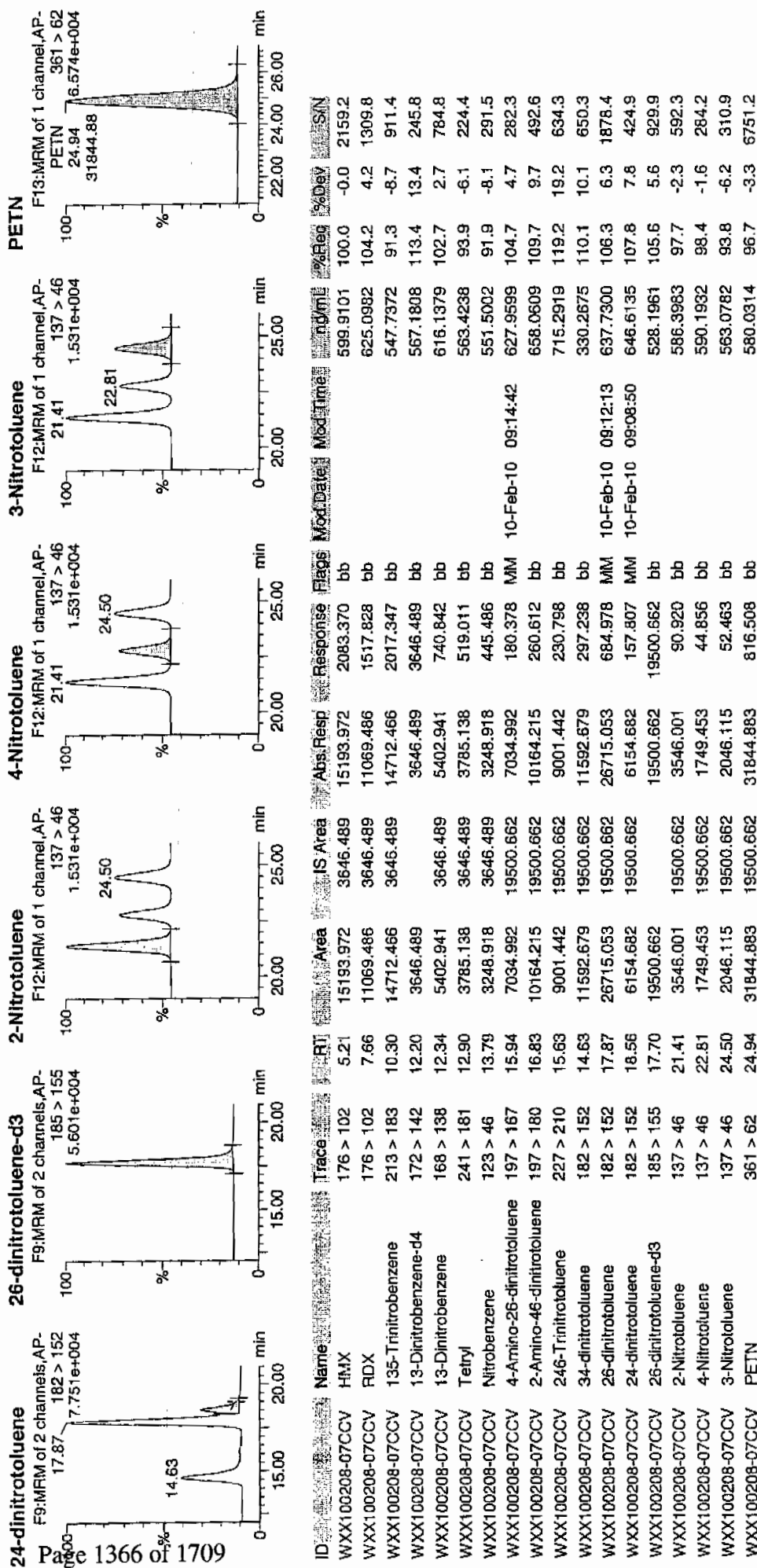
Vial: 1:1,B

MRP  
2/10/10



18.56

Dataset: C:\MASSLYNX\New\_Exp\_PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 02/09/10  
 Time of Injection: 2044  
 Standard Number: WXX100208-07CCV  
 Data File: EXP0208062a

|              |       |
|--------------|-------|
| HMX          | 100.0 |
| RDX          | 104.2 |
| 135-TNB      | 91.3  |
| 13-DNB       | 102.7 |
| Tetryl       | 93.9  |
| Nitrobenzene | 91.9  |
| 4A-26-DNT    | 104.7 |
| 2A-46-DNT    | 109.7 |
| 246-TNT      | 119.2 |
| 34-DNT(surr) | 110.1 |
| 26-DNT       | 106.3 |
| 24-DNT       | 107.8 |
| 2-NT         | 97.7  |
| 4-NT         | 98.4  |
| 3-NT         | 93.8  |
| PETN         | 96.7  |

*not  
2/10/10*

Total 1628.4

Average 101.8

*from 02/10/10*

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1324

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208064a

Analysis Date: 09-FEB-10 21:43

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

| Compound                   | True | Found  | Recovery | Q |
|----------------------------|------|--------|----------|---|
| 1,3,5-Trinitrobenzene      | 40   | 43.241 | 108      |   |
| 1,3-Dinitrobenzene-d4      | 500  | 602.61 | 121      |   |
| 2,4,6-Trinitrotoluene      | 40   | 38.148 | 95       |   |
| 2,4-Dinitrotoluene         | 40   | 39.085 | 98       |   |
| 2,6-Dinitrotoluene         | 40   | 43.106 | 108      |   |
| 2,6-Dinitrotoluene-d3      | 500  | 567.8  | 114      |   |
| 2-Amino-4,6-dinitrotoluene | 40   | 39.591 | 99       |   |
| 3,4-Dinitrotoluene         | 20   | 24.084 | 120      |   |
| 4-Amino-2,6-dinitrotoluene | 40   | 41.143 | 103      |   |
| HMX                        | 40   | 39.239 | 98       |   |
| Nitrobenzene               | 40   | 38.933 | 97       |   |
| PETN                       | 40   | 36.686 | 92       |   |
| RDX                        | 40   | 36.427 | 91       |   |
| Tetryl                     | 40   | 34.123 | 85       |   |
| m-Dinitrobenzene           | 40   | 38.756 | 97       |   |
| m-Nitrotoluene             | 40   | 38.95  | 97       |   |
| o-Nitrotoluene             | 40   | 40.457 | 101      |   |
| p-Nitrotoluene             | 40   | 34.567 | 86       |   |

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208064a

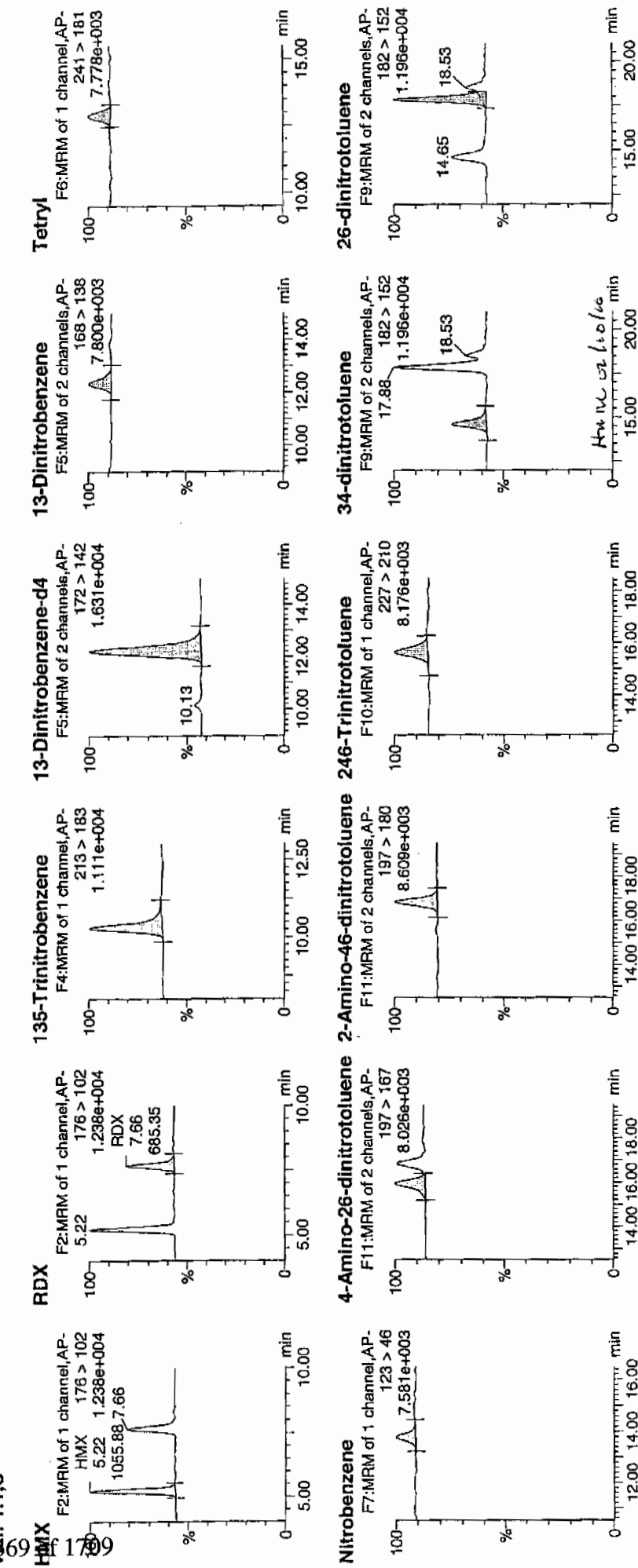
Date: 09-Feb-2010

Time: 21:43:27

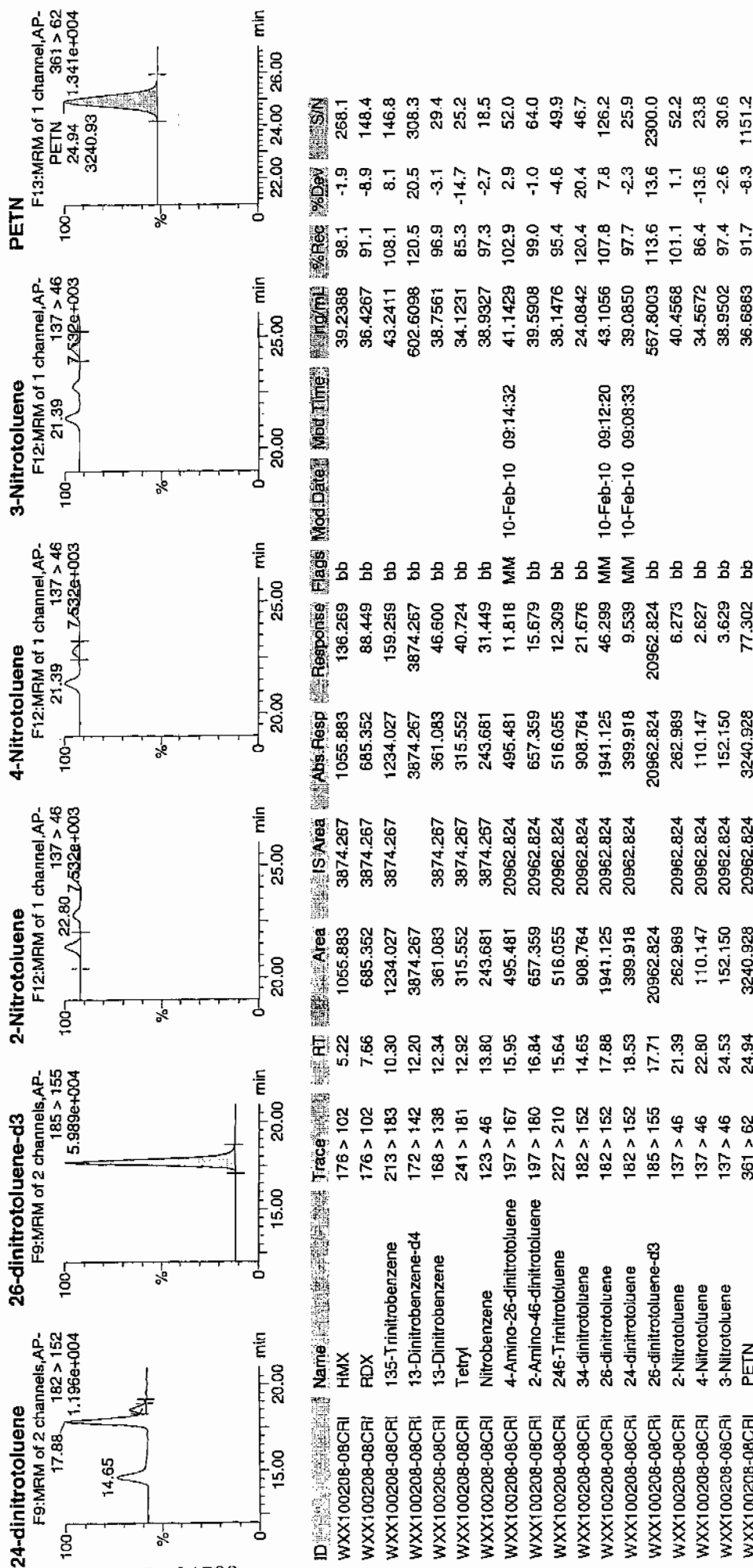
ID: WXX100208-08CRI

Vial: 1:1,C

WAT  
2/10/10



Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010





# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 02/09/10  
 Time of Injection 2143  
 Standard Number WXX100208-08CRI  
 Data File EXP0208064a

|              |       |
|--------------|-------|
| HMX          | 98.1  |
| RDX          | 91.1  |
| 135-TNB      | 108.1 |
| 13-DNB       | 96.9  |
| Tetryl       | 85.3  |
| Nitrobenzene | 97.3  |
| 4A-26-DNT    | 102.9 |
| 2A-46-DNT    | 99.0  |
| 246-TNT      | 95.4  |
| 34-DNT(surr) | 120.4 |
| 26-DNT       | 107.8 |
| 24-DNT       | 97.7  |
| 2-NT         | 101.1 |
| 4-NT         | 86.4  |
| 3-NT         | 97.4  |
| PETN         | 91.7  |

*WXX  
2/10/10*

Total 1576.6

Average 98.5

*4/11/10 or 1/10/10*

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

**7B**  
**Explosives CRI Standard**

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1324

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02100013.wiff

Analysis Date: 10-FEB-10 11:36

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

| Compound                   | True | Found | Recovery | Q |
|----------------------------|------|-------|----------|---|
| 2,4-Diamino-6-nitrotoluene | 100  | 114   | 114      |   |
| 2,6-Diamino-4-nitrotoluene | 100  | 104   | 104      |   |
| 3,4-Dinitrotoluene         | 50   | 51.5  | 103      |   |
| 3,5-Dinitroaniline         | 100  | 107   | 107      |   |
| TATB                       | 100  | 105   | 105      |   |
| tris(o-cresyl) phosphate   | 100  | 98.8  | 99       |   |

**Recovery Limits:**

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

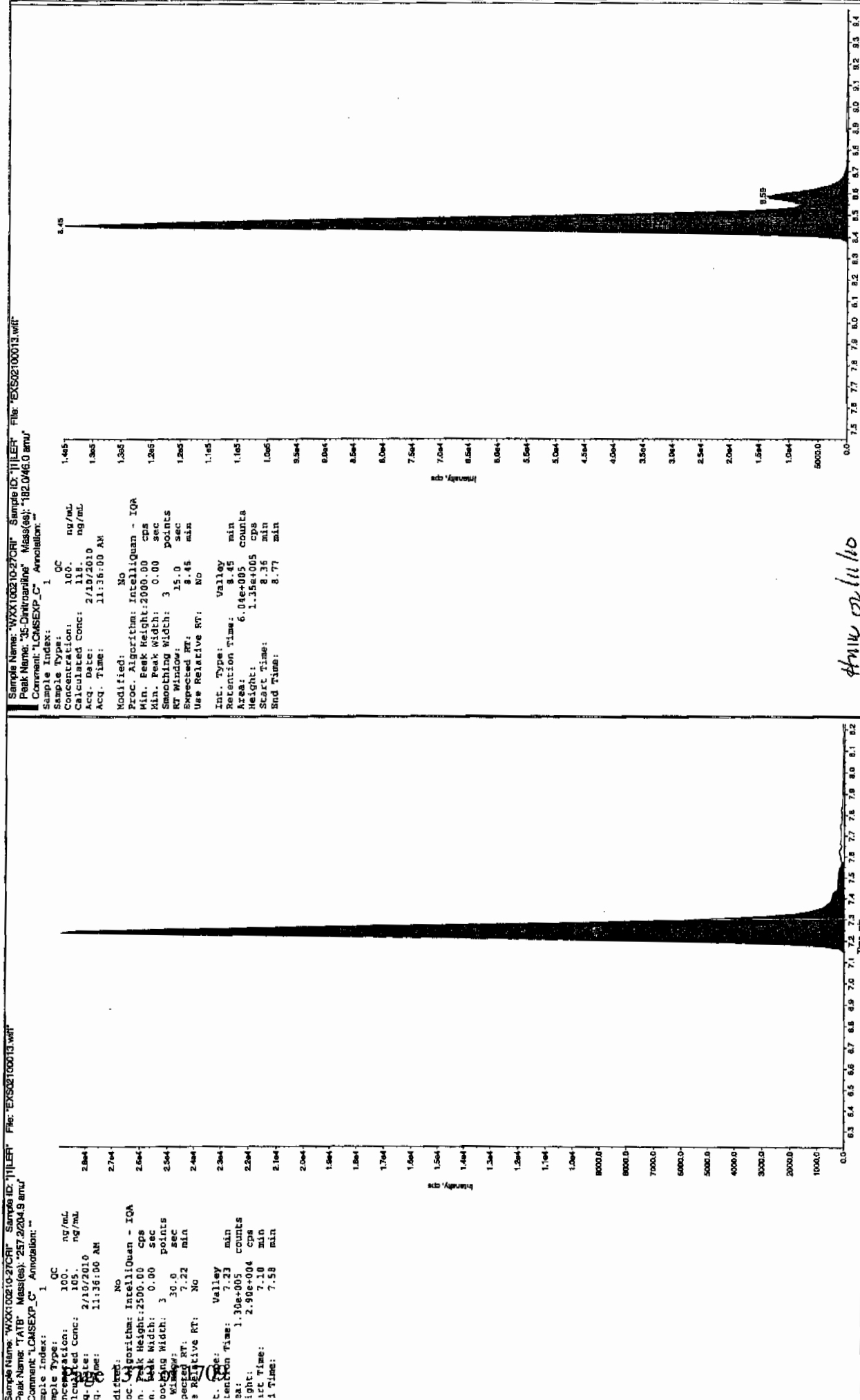
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

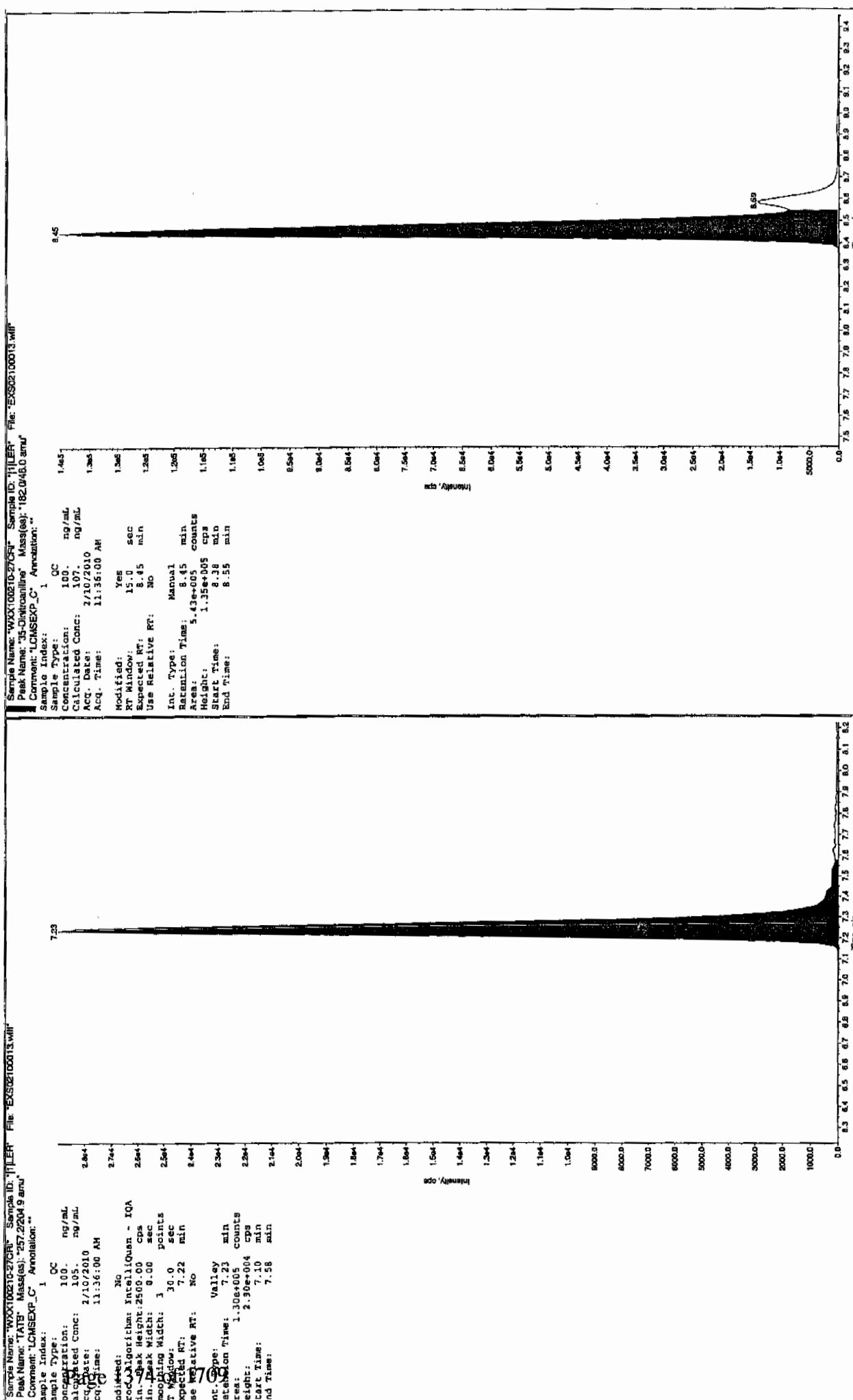
\* Value outside of Recovery Limits

Before Jan 24/10



After Jan 24/10

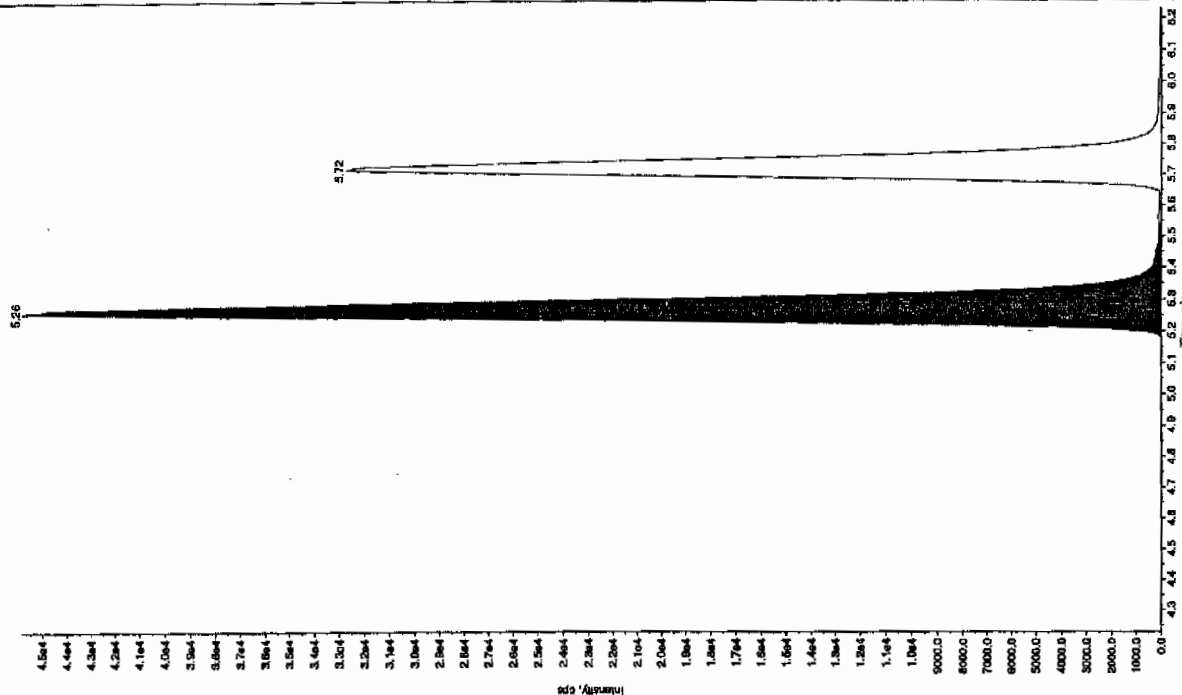
after Jan 21/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

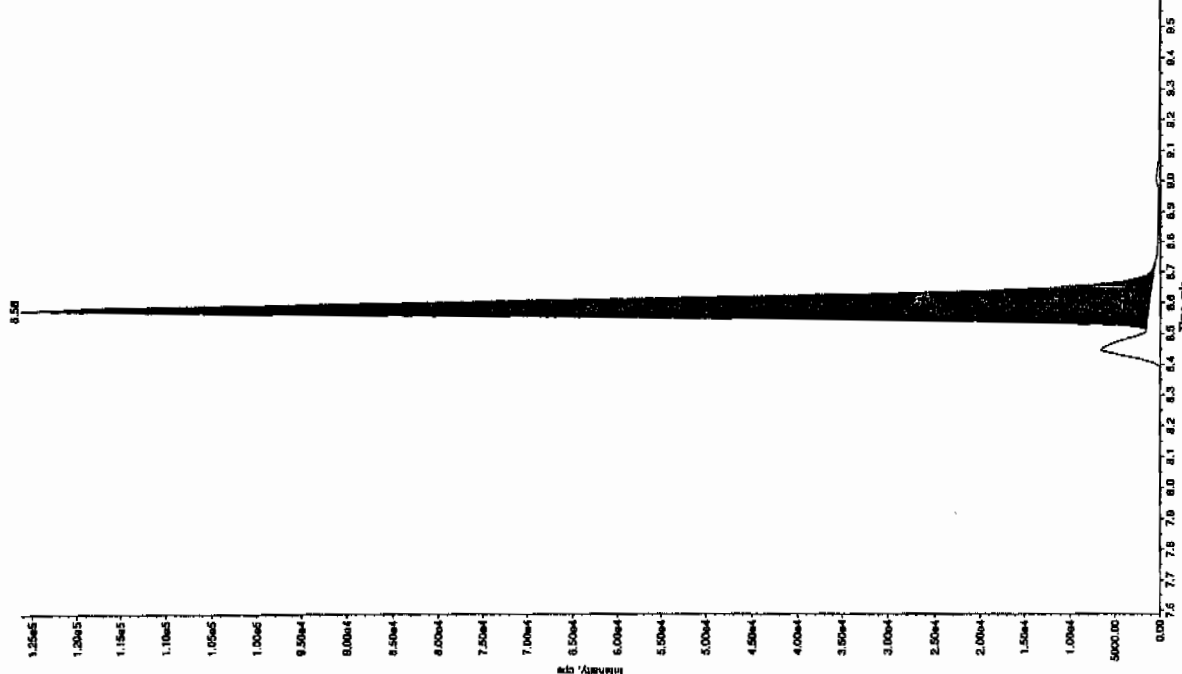
Sample Name: "WXX100210-27CH1" Sample ID: "111ER" File: "EXS02100013.wil"  
 Peak Name: "26-Diamino-4-nitrobenzene" Mass(es): "166.0460 amu"  
 Comment: "LCMSXP\_C" Annotation: ""

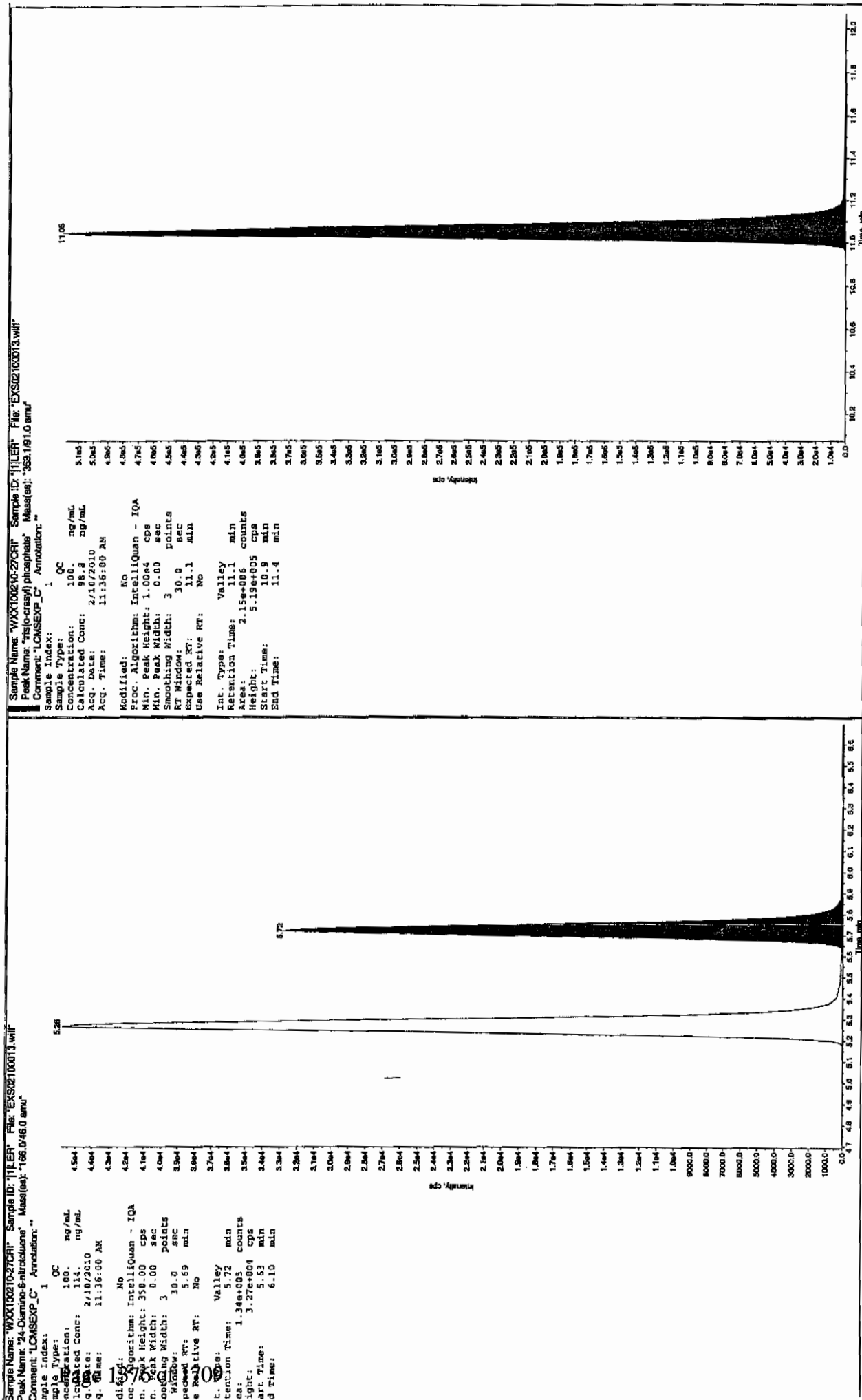
Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 184. ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 11:36:00 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 3.00 sec  
 Smoothing Width: 3.00 points  
 RT Window: 30.0 sec  
 Expected RT: 5.23 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.26 min  
 Peak Height: 1.98e+004 counts  
 Peak Width: 4.58e+000 min  
 Start Time: 5.17 min  
 End Time: 5.54 min



Sample Name: "WXX100210-27CH1" Sample ID: "111ER" File: "EXS02100013.wil"  
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.1519 amu"  
 Comment: "LCMSXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 50.0 ng/mL  
 Calculated Conc: 51.5 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 11:36:00 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 3.00 sec  
 Smoothing Width: 3.00 points  
 RT Window: 15.0 sec  
 Expected RT: 8.59 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.56 min  
 Peak Height: 4.73e+005 counts  
 Peak Width: 1.23e+005 min  
 Start Time: 8.52 min  
 End Time: 8.73 min





7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1324

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02100024.wiff

Analysis Date: 10-FEB-10 14:28

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

| Compound                   | True | Found | Recovery | Q |
|----------------------------|------|-------|----------|---|
| 2,4-Diamino-6-nitrotoluene | 500  | 491   | 98       |   |
| 2,6-Diamino-4-nitrotoluene | 500  | 442   | 88       |   |
| 3,4-Dinitrotoluene         | 250  | 244   | 98       |   |
| 3,5-Dinitroaniline         | 500  | 493   | 99       |   |
| TATB                       | 500  | 521   | 104      |   |
| tris(o-cresyl) phosphate   | 500  | 528   | 106      |   |

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

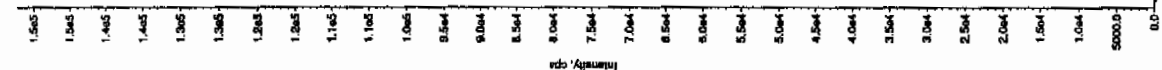
*Dyane Jan 21/11*

Sample Name: "WXX10210-250CV" Sample ID: "J11ER" File: "EX502100024.wif"  
 Peak Name: "TMS" Mass(es): "257.2204.9 amu"  
 Comment: "LONSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 531. ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 2:28:40 PM

Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 2500.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 7.22 min  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 7.23 min  
 Area: 6.69e+005 counts  
 Height: 1.52e+005 cps  
 Start Time: 7.13 min  
 End Time: 7.34 min

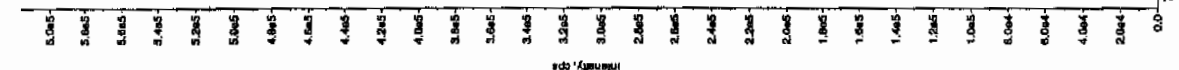


Sample Name: "WXX10210-250CV" Sample ID: "J11ER" File: "EX502100024.wif"  
 Peak Name: "35-Dichloroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LONSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 551. ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 2:28:40 PM

Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 2000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.45 min  
 Use Relative RT: No

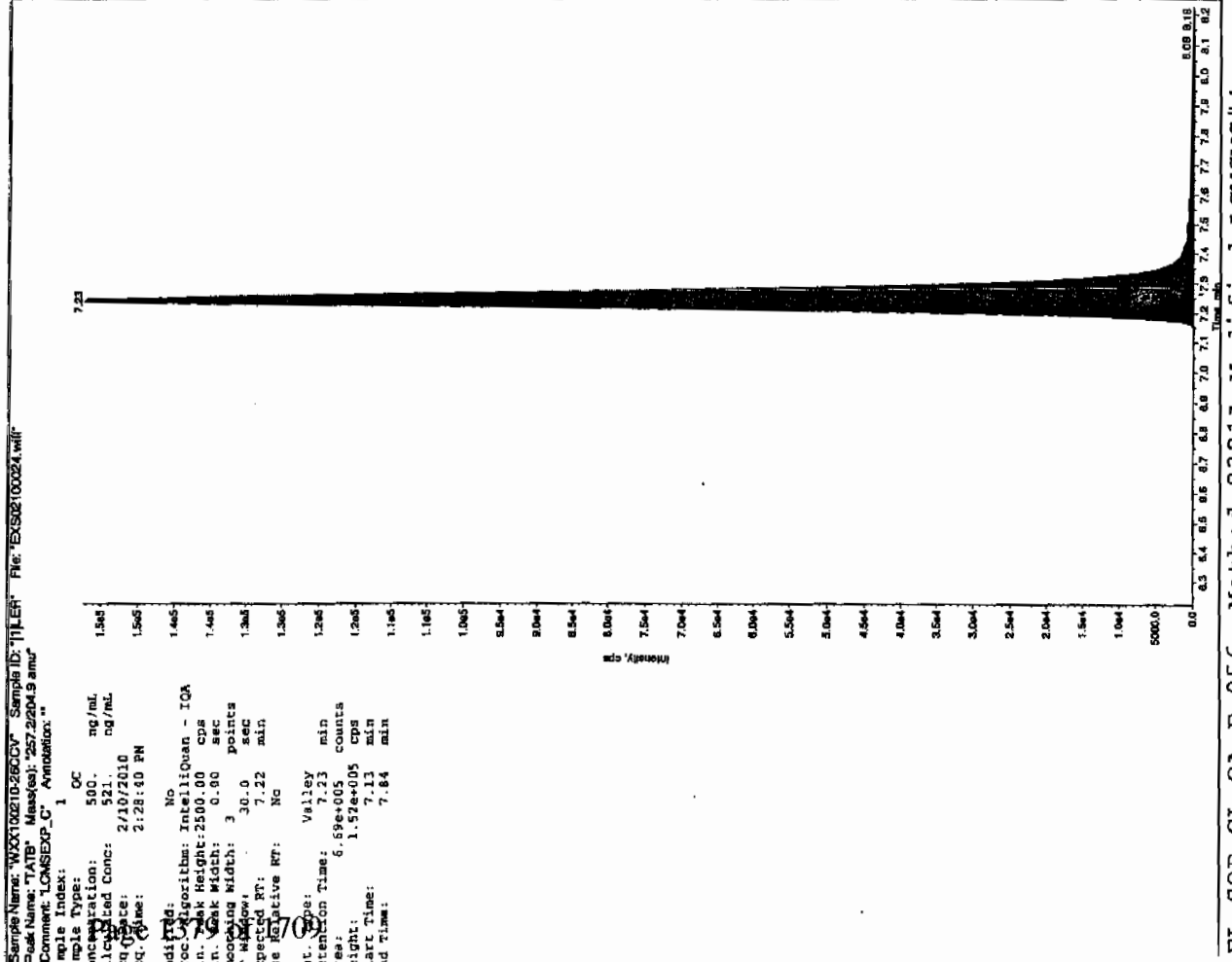
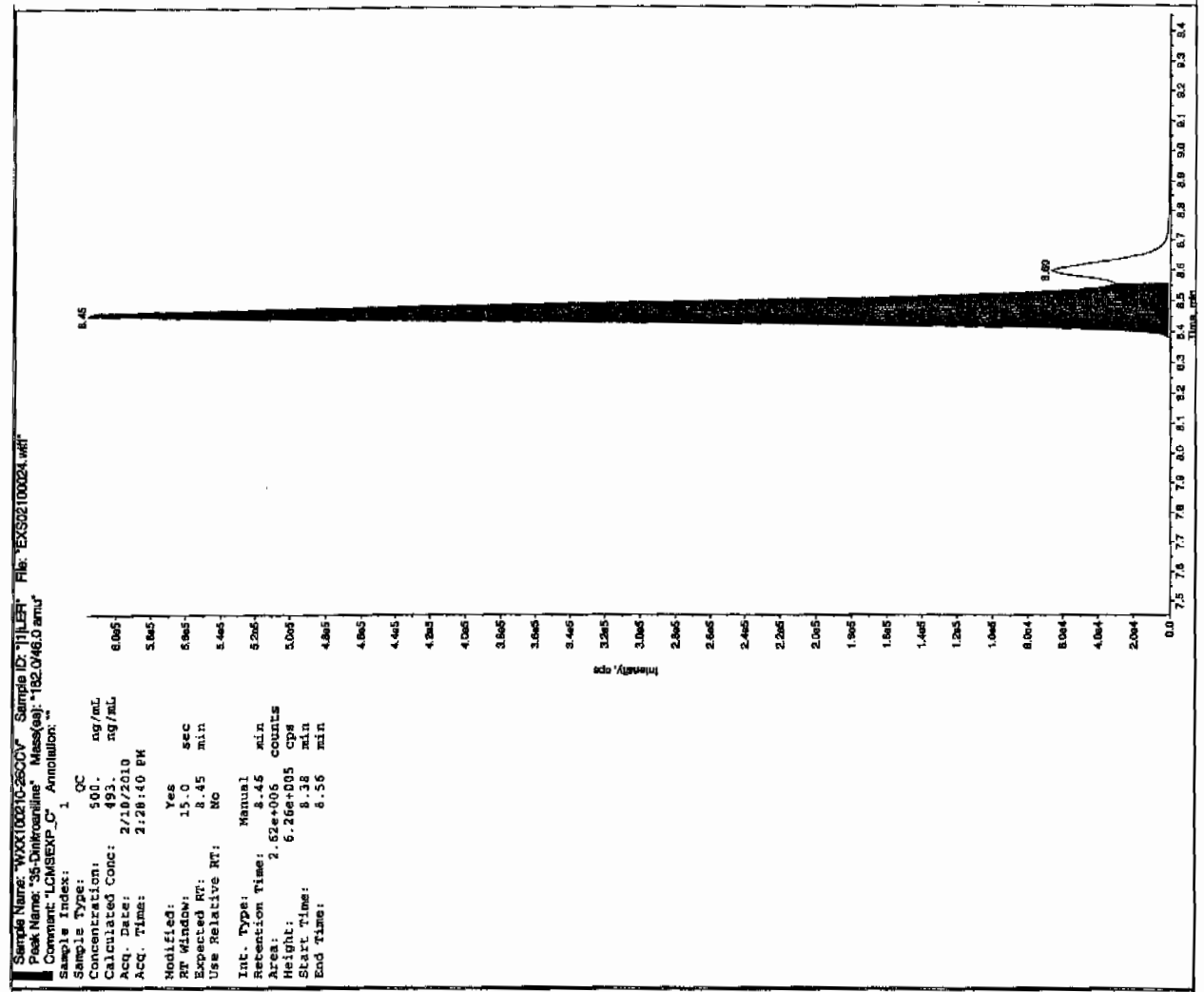
Int. Type: Valley  
 Retention Time: 8.45 min  
 Area: 2.93e+005 counts  
 Height: 6.11e+005 cps  
 Start Time: 8.36 min  
 End Time: 8.54 min



*Anna 2/11/10*

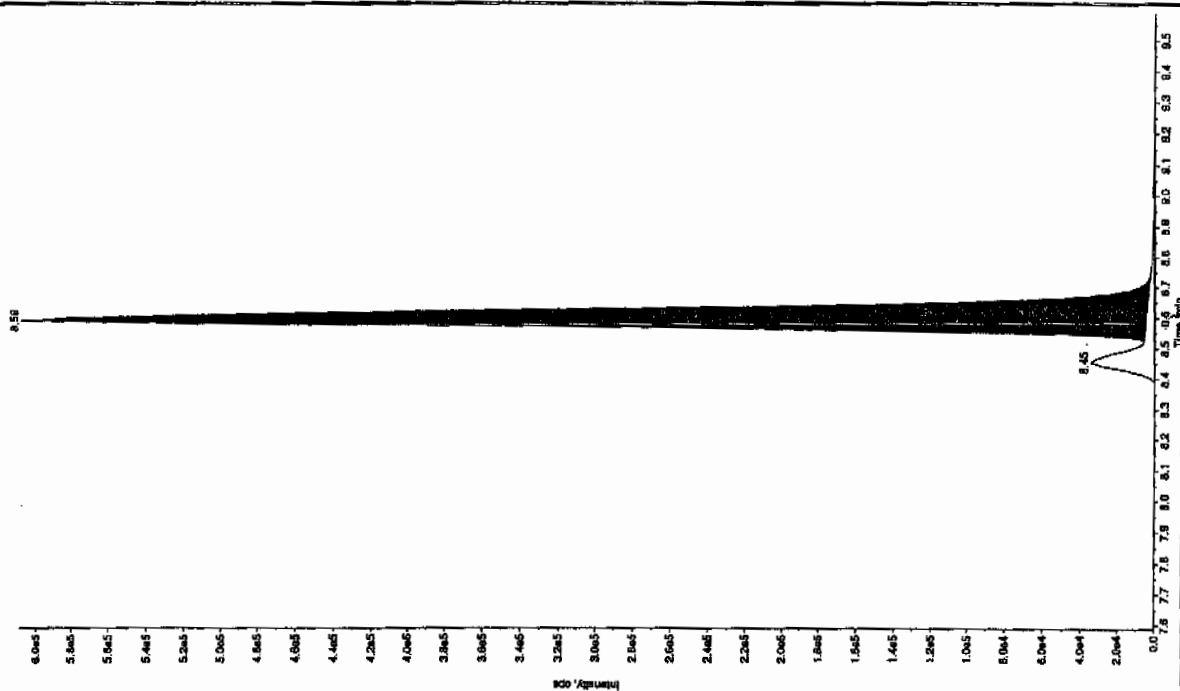


Jan 21/10



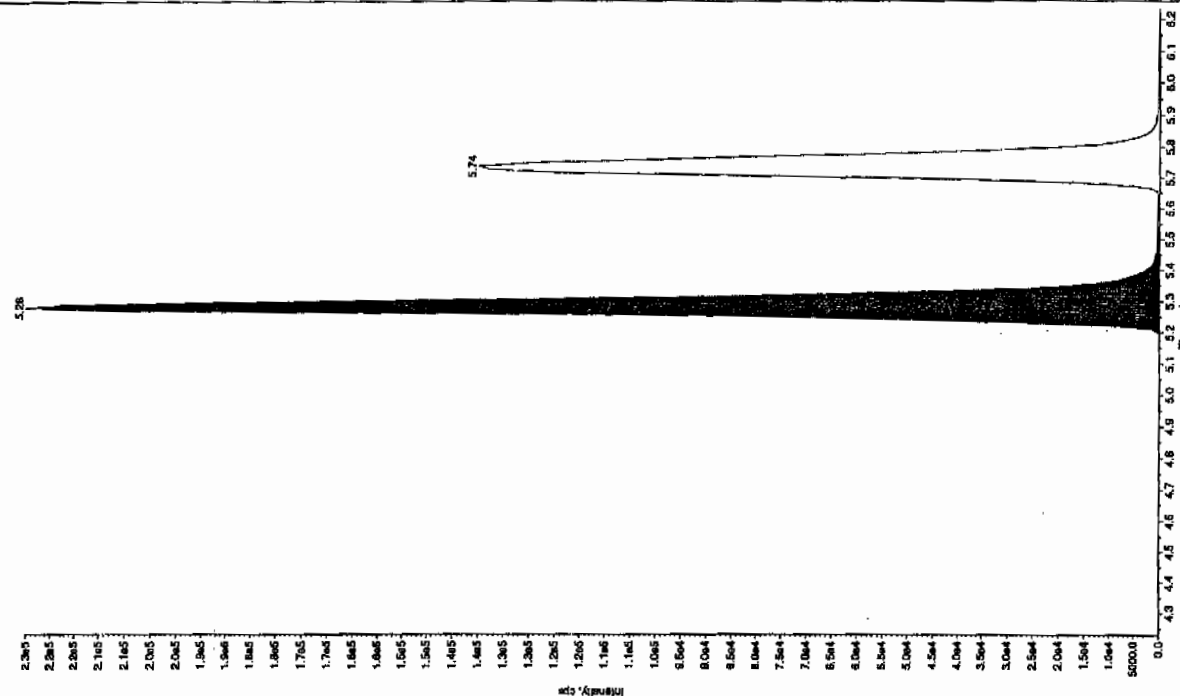
Sample Name: WXX100210-2600V Sample ID: 11LEF File: EX50210024.wif  
 Peak Name: 34-Dinitrophenol Mass(es): 182.1513 amu  
 Comment: LCMS1EXP\_C Annotation:

Sample Index: 1  
 Sample Type: QC  
 Concentration: 250 ng/mL  
 Calculated Conc: 244 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 2:28:40 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.59 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.59 min  
 Area: 2.35e+006 counts  
 Height: 6.05e+005 cps  
 Start Time: 8.53 min  
 End Time: 8.75 min



Sample Name: WXX100210-2600V Sample ID: 11LEF File: EX50210024.wif  
 Peak Name: 26-Dinitro-4-nitrochlorobenzene Mass(es): 166.0460 amu  
 Comment: LCMS1EXP\_C Annotation:

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500 ng/mL  
 Calculated Conc: 490 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 2:28:40 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.23 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.23 min  
 Area: 8.65e+005 counts  
 Height: 2.25e+005 cps  
 Start Time: 5.12 min  
 End Time: 5.54 min



Sample Name: "WXX100210-260CV" Sample ID: "11LER" File: "EX02100024.wif"

Peak Name: "160.046.0 amu" Mass(es): "160.046.0 amu"

Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 328. ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 2:28:40 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 11.1 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 11.1 min  
 Area: 1.02e+007 counts  
 Height: 2.36e+006 cps  
 Start Time: 11.0 min  
 End Time: 11.4 min



Sample Name: "WXX100210-260CV" Sample ID: "11LER" File: "EX02100024.wif"

Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "160.046.0 amu"

Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 491. ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 2:28:40 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.63 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.74 min  
 Area: 6.12e+005 counts  
 Height: 1.35e+005 cps  
 Start Time: 5.63 min  
 End Time: 5.84 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1324

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02100026.wiff

Analysis Date: 10-FEB-10 15:00

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

| Compound                   | True | Found | Recovery | Q |
|----------------------------|------|-------|----------|---|
| 2,4-Diamino-6-nitrotoluene | 100  | 112   | 112      |   |
| 2,6-Diamino-4-nitrotoluene | 100  | 112   | 112      |   |
| 3,4-Dinitrotoluene         | 50   | 54.5  | 109      |   |
| 3,5-Dinitroaniline         | 100  | 101   | 101      |   |
| TATB                       | 100  | 109   | 109      |   |
| tris(o-cresyl) phosphate   | 100  | 108   | 108      |   |

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Bijou Jan 21/11/10

Sample Name: 'WXX100210-27CRF' Sample ID: '111ER' File: 'EXS02100028.wiff'

Peak Name: 'TATB' Mass(es): '257.2264.9 amu'

Comment: 'LOMSEXP\_C' Annotation: ''

Sample Index: 1

Sample Type: QC

Concentration: 100. ng/mL

Calculated Conc: 109. ng/mL

Acq. Date: 2/10/2010

Acq. Time: 3:00:05 PM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 2500.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 7.22 min

Use Relative RT: No

Int. Type: Valley

Retention Time: 7.23 min

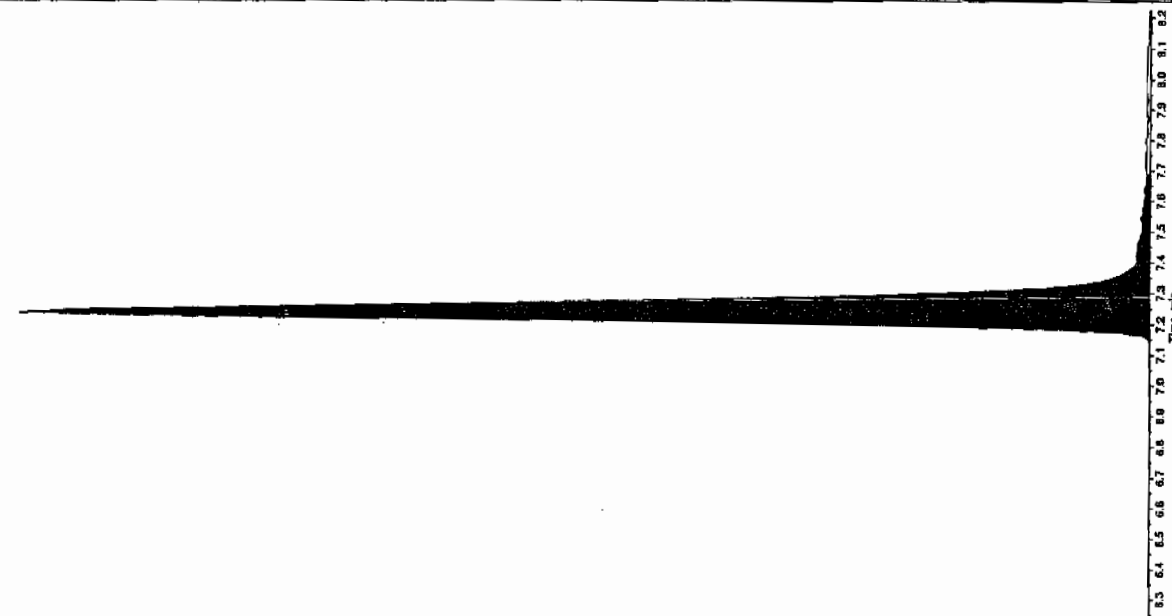
Area: 1.16e+005 counts

Height: 3.01e+004 cps

Start Time: 7.13 min

End Time: 7.69 min

Intensity, cps



Sample Name: 'WXX100210-27CRF' Sample ID: '111ER' File: 'EXS02100028.wiff'

Peak Name: '35-Dinitroaniline' Mass(es): '182.0460 amu'

Comment: 'LOMSEXP\_C' Annotation: ''

Sample Index: 1

Sample Type: QC

Concentration: 100. ng/mL

Calculated Conc: 111. ng/mL

Acq. Date: 2/10/2010

Acq. Time: 3:00:05 PM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 2000.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 15.0 sec

Expected RT: 8.45 min

Use Relative RT: No

Int. Type: Valley

Retention Time: 8.45 min

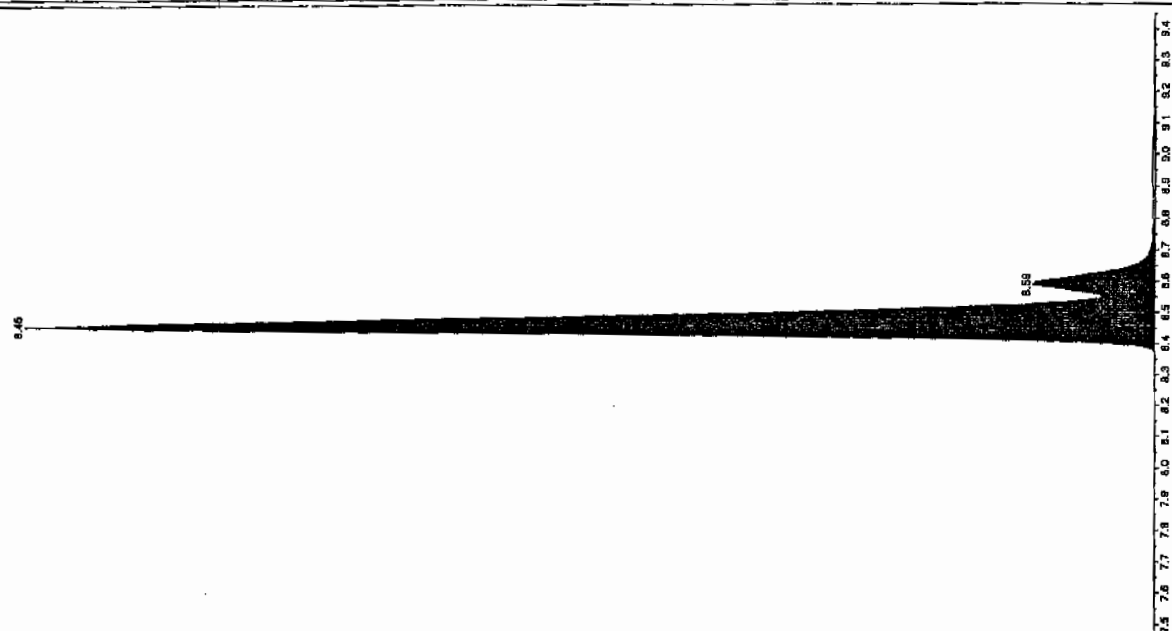
Area: 5.69e+005 counts

Height: 1.30e+005 cps

Start Time: 8.35 min

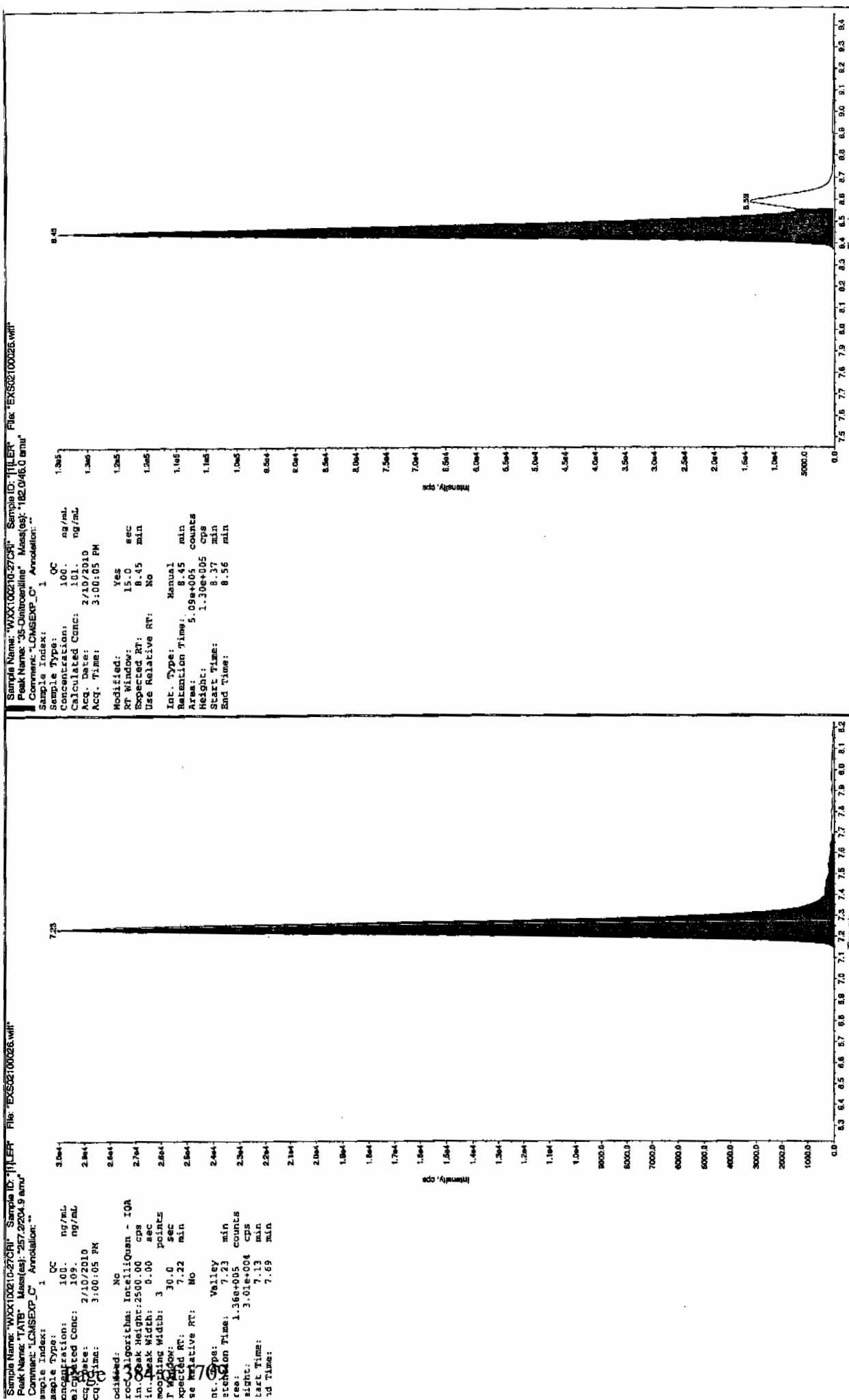
End Time: 8.79 min

Intensity, cps



Jan 21/11/10

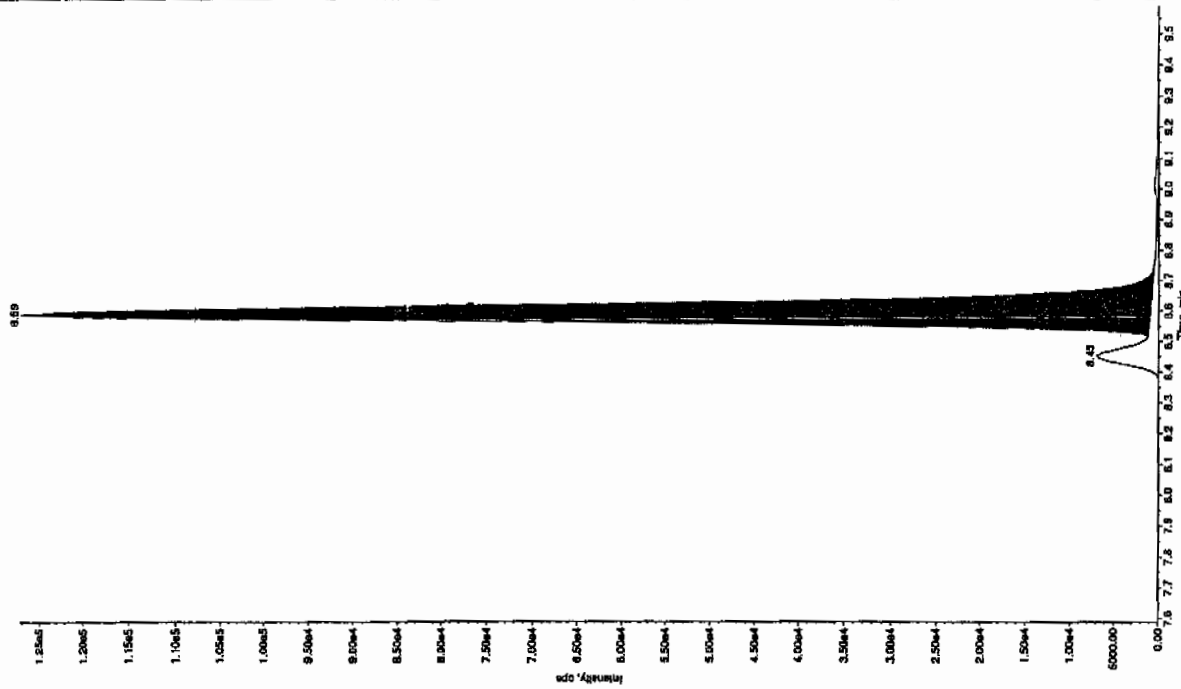
after Jan 21/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

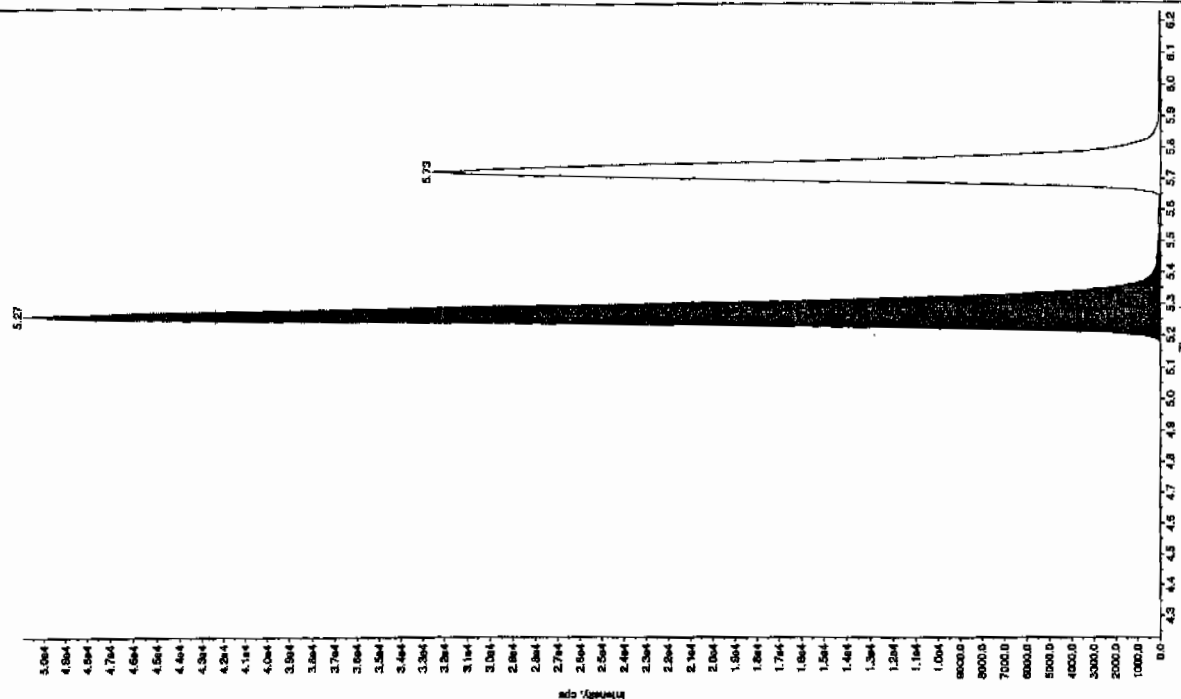
Sample Name: "WXX10210-270R1" Sample ID: "11L1ER" File: "EX502100268.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 50.0 ng/mL  
 Calculated Conc: 54.5 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 3:00:05 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 3.00 sec  
 Smoothing Width: 15.0 points  
 RT Window: 15.0 sec  
 Expected RT: 8.59 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.59 min  
 Area: 5.03e+005 counts  
 Height: 1.36e+005 cps  
 Start Time: 8.52 min  
 End Time: 8.79 min



Sample Name: "WXX10210-270R1" Sample ID: "11L1ER" File: "EX502100268.wif"  
 Peak Name: "26-Dinitro-4-nitrofluorene" Mass(es): "168.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 112. ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 3:00:05 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 3.00 sec  
 Smoothing Width: 30.0 points  
 RT Window: 30.0 sec  
 Expected RT: 5.23 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.27 min  
 Area: 2.11e+005 counts  
 Height: 5.09e+004 cps  
 Start Time: 5.16 min  
 End Time: 5.34 min







7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1324

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02100035.wiff

Analysis Date: 10-FEB-10 17:21

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

| Compound                   | True | Found | Recovery | Q |
|----------------------------|------|-------|----------|---|
| 2,4-Diamino-6-nitrotoluene | 500  | 529   | 106      |   |
| 2,6-Diamino-4-nitrotoluene | 500  | 507   | 101      |   |
| 3,4-Dinitrotoluene         | 250  | 242   | 97       |   |
| 3,5-Dinitroaniline         | 500  | 465   | 93       |   |
| TATB                       | 500  | 492   | 99       |   |
| tris(o-cresyl) phosphate   | 500  | 545   | 109      |   |

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Before Scan 211410

Sample Name: "WXX100210-250CV" Sample ID: "TLER" File: "EXS02100035.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC

Concentration: 500. ng/mL

Calculated Conc: 492. ng/mL

Acq. Date: 2/10/2010

Acq. Time: 5:21:31 PM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2500.00 cps

Min. Peak Width: 8.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 7.22 min

Use Relative RT: No

Int. Type: Valley

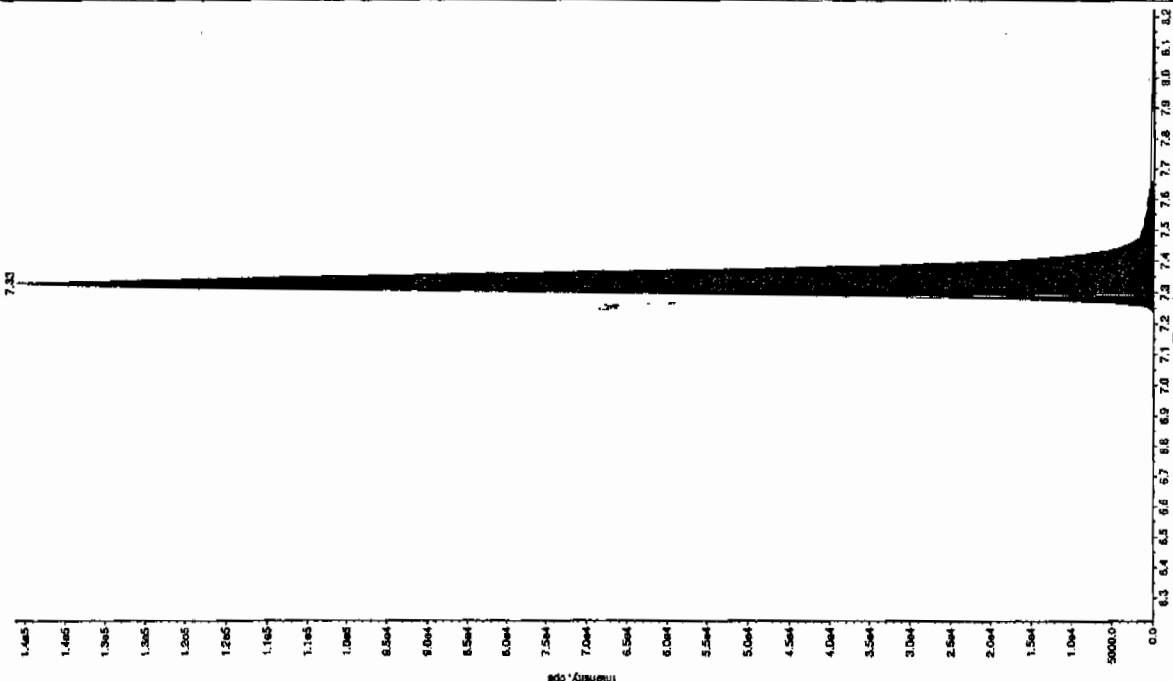
Retention Time: 7.33 min

Area: 6.32e+005 counts

Height: 1.41e+005 cps

Start Time: 7.22 min

End Time: 7.66 min



Sample Name: "WXX100210-250CV" Sample ID: "TLER" File: "EXS02100035.wif"

Peak Name: "35-Dihydrocannab" Mass(es): "192.046.0 amu"

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC

Concentration: 500. ng/mL

Calculated Conc: 524. ng/mL

Acq. Date: 2/10/2010

Acq. Time: 5:21:31 PM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2000.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 15.0 sec

Expected RT: 8.45 min

Use Relative RT: No

Int. Type: Valley

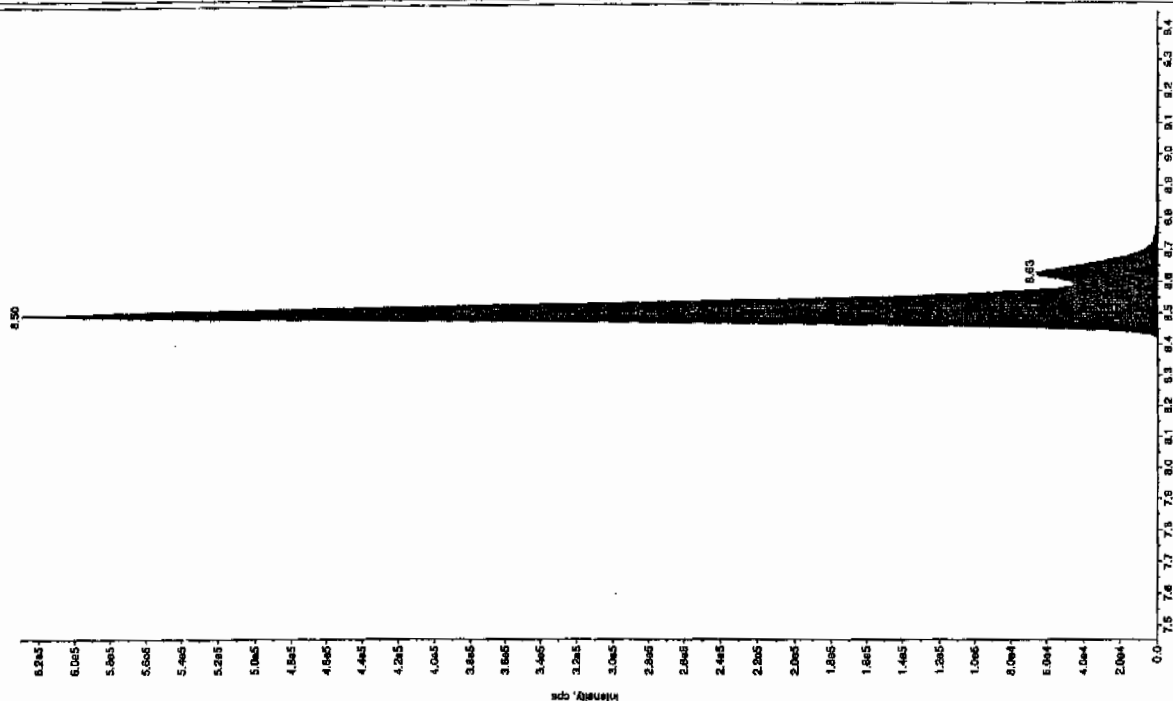
Retention Time: 8.50 min

Area: 2.78e+005 counts

Height: 6.31e+005 cps

Start Time: 8.40 min

End Time: 8.90 min



After Scan 211410

after Jan 21/10

Sample Name: "WXX100210-260CV" Sample ID: "11111" File: "EX502100035.wif"

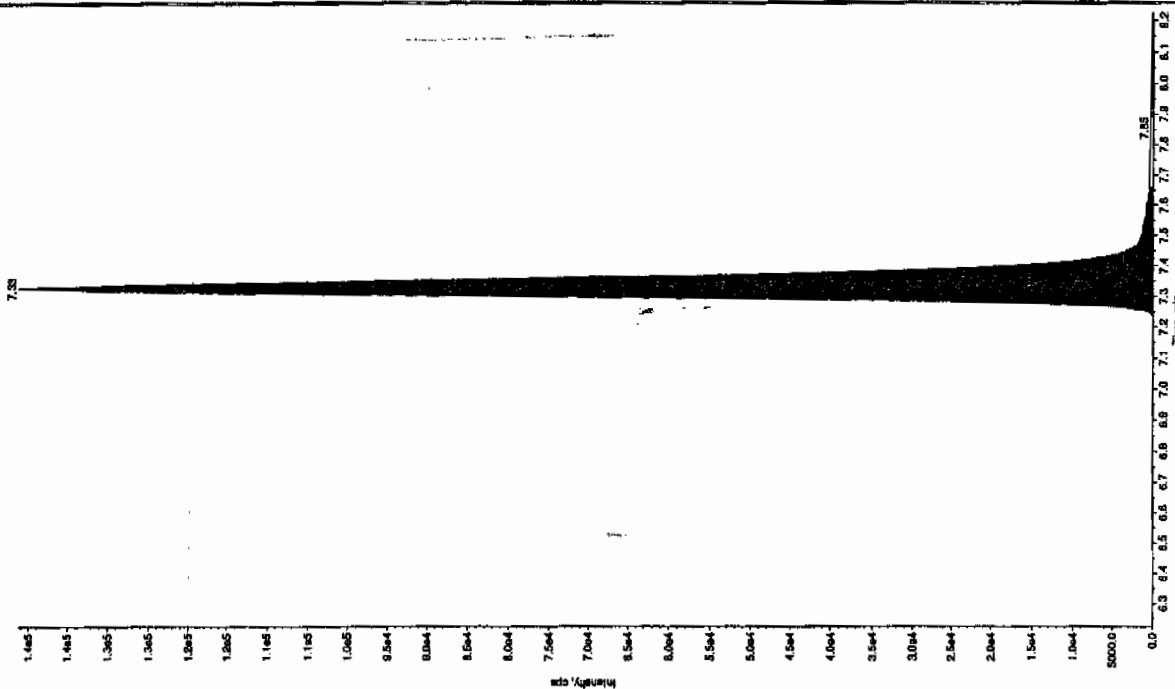
Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 492. ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 5:21:31 PM

Modified: No  
 RT Window: 10A  
 Expected RT: 7.22 min  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 7.22 min  
 Area: 6.32e+005 counts  
 Height: 1.41e+005 cps  
 Start Time: 7.22 min  
 End Time: 7.60 min



Sample Name: "WXX100210-260CV" Sample ID: "11111" File: "EX502100035.wif"

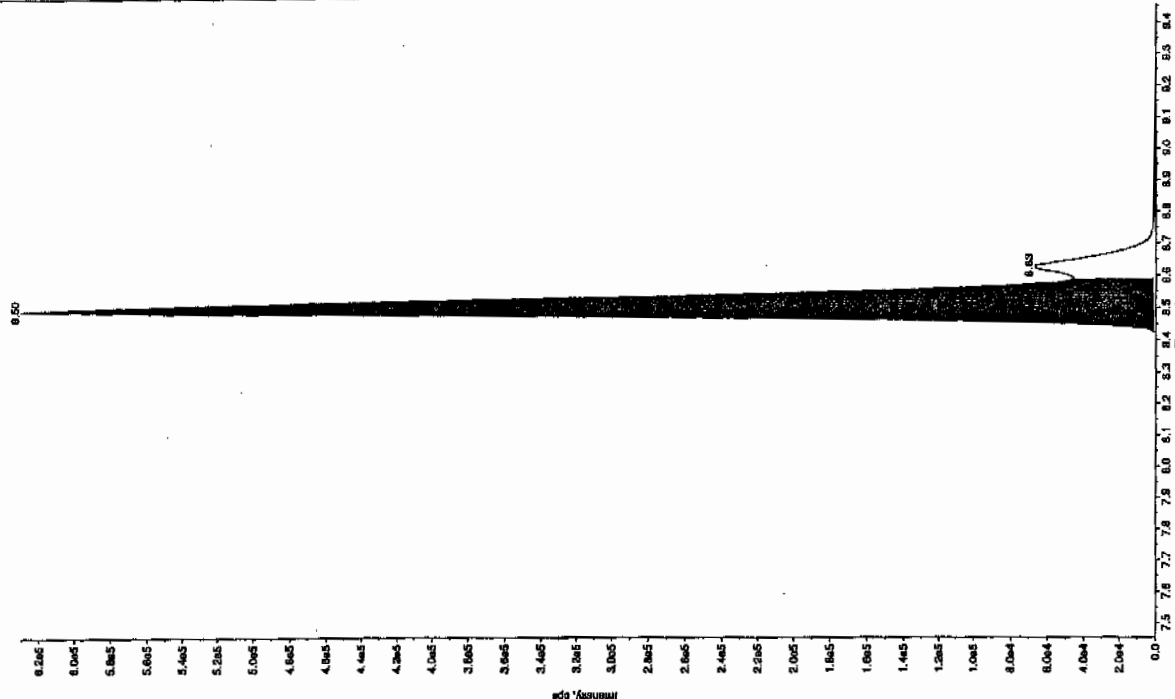
Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 465. ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 5:21:31 PM

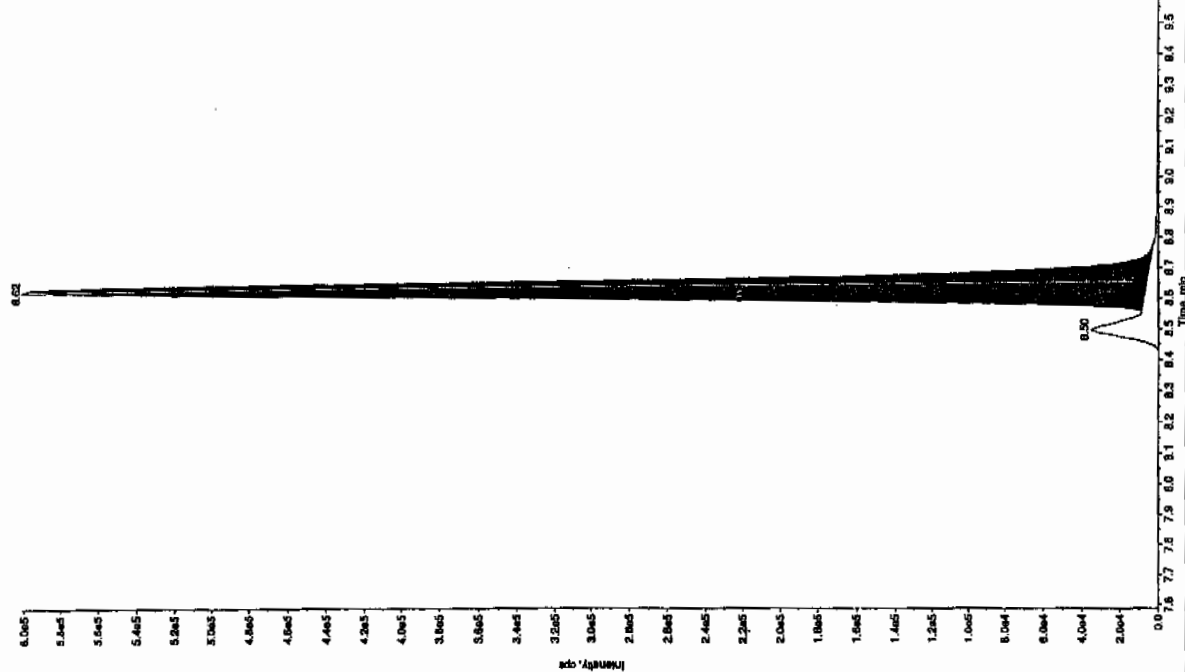
Modified: Yes  
 RT Window: 15.0 sec  
 Expected RT: 8.45 min  
 Use Relative RT: No

Int. Type: Manual  
 Retention Time: 8.50 min  
 Area: 2.47e+006 counts  
 Height: 6.31e+005 cps  
 Start Time: 8.42 min  
 End Time: 8.59 min



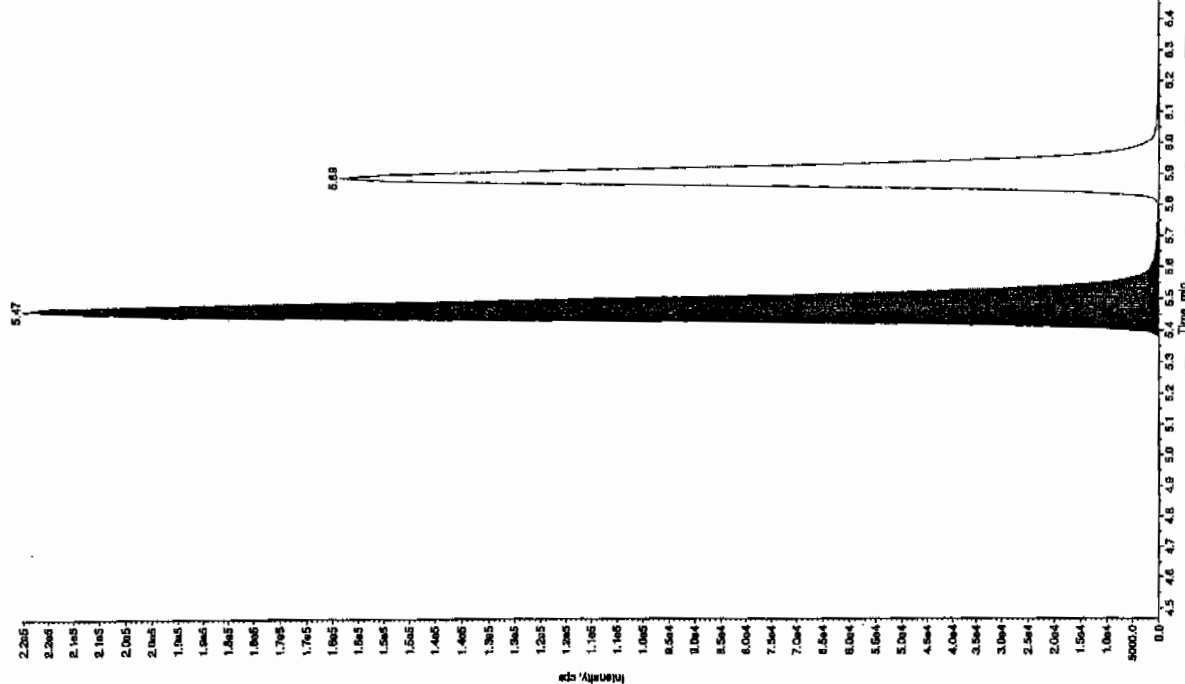
Sample Name: "WXY100210-056" Sample ID: "1111" File: "EX52100035.wif"  
 Peak Name: "34-Dibenzyl-4-hydroxy" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMS-EXP\_C" Annotation: "

Sample Index: 1 QC  
 Sample Type: 500  
 Concentration: 500 ng/mL  
 Calculated Conc: 507 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 5:21:31 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.59 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.62 min  
 Area: 2.34e+006 counts  
 Height: 5.94e+005 cps  
 Start Time: 8.56 min  
 End Time: 8.77 min



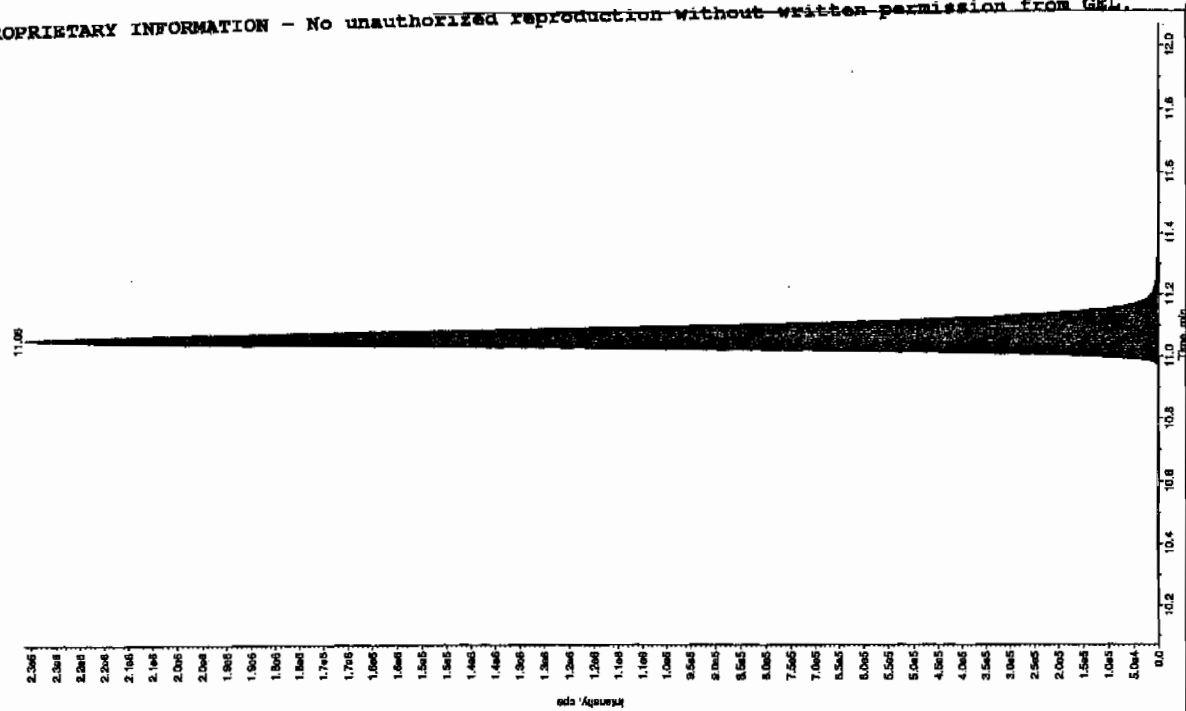
Sample Name: "WXY100210-056" Sample ID: "1111" File: "EX52100035.wif"  
 Peak Name: "26-Dibenzyl-4-hydroxy" Mass(es): "186.0/168.0 amu"  
 Comment: "LCMS-EXP\_C" Annotation: "

Sample Index: 1 QC  
 Sample Type: 500  
 Concentration: 500 ng/mL  
 Calculated Conc: 507 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 5:21:31 PM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.47 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.47 min  
 Area: 9.94e+005 counts  
 Height: 2.20e+005 cps  
 Start Time: 5.31 min  
 End Time: 5.70 min



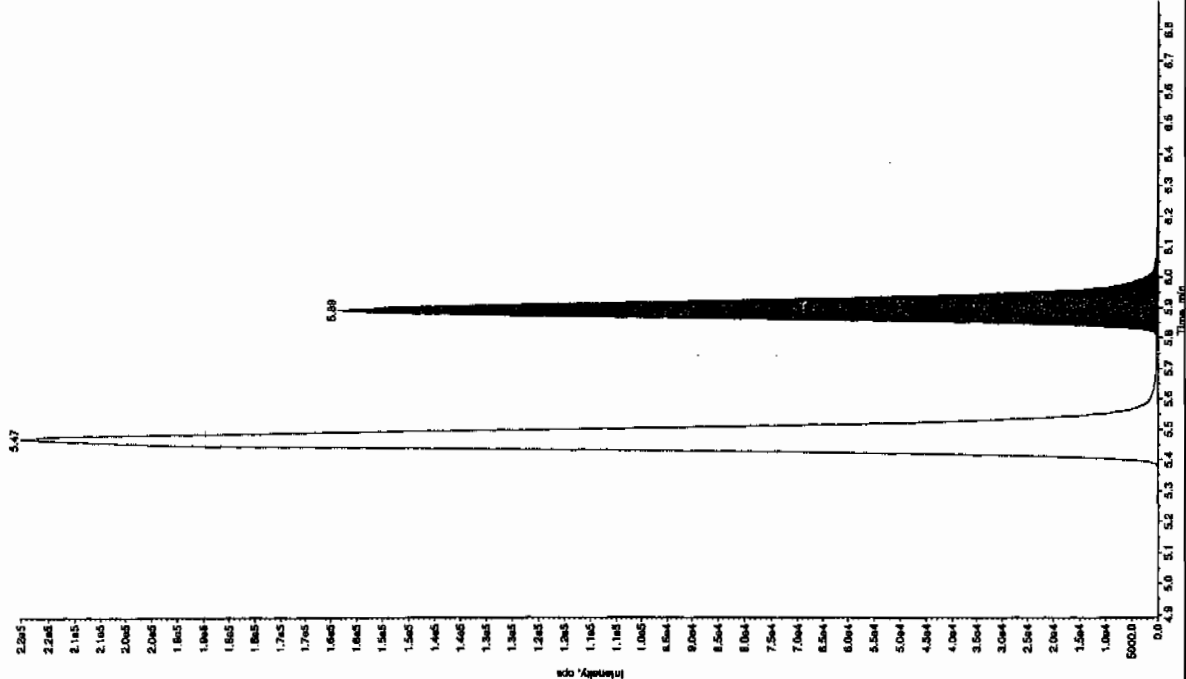
Sample Name: WXX100210-260CV Sample ID: 11LFF File: EXS02100035.wif  
Peak Name: 165.046.0 amu  
Comment: LCMSEXP\_C Annotation: 1

Sample Index: 1  
Sample Type: QC  
Concentration: 500. ng/mL  
Calculated Conc: 545. ng/mL  
Acq. Date: 2/10/2010  
Acq. Time: 5:21:31 PM  
Modified: No  
Proc. Algorithm: IntelliQuan - IQA  
Min. Peak Height: 1.00e4 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 30.0 points  
RT Window: 30.0 sec  
Expected RT: 11.1 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 11.1 min  
Area: 1.05e+007 counts  
Height: 2.31e+006 CPM  
Start Time: 10.9 min  
End Time: 11.4 min



Sample Name: WXX100210-260CV Sample ID: 11LFF File: EXS02100035.wif  
Peak Name: 165.046.0 amu  
Comment: LCMSEXP\_C Annotation: 1

Sample Index: 1  
Sample Type: QC  
Concentration: 500. ng/mL  
Calculated Conc: 529. ng/mL  
Acq. Date: 2/10/2010  
Acq. Time: 5:21:31 PM  
Modified: Yes  
Proc. Algorithm: IntelliQuan - IQA  
Min. Peak Height: 350.0 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 30.0 points  
RT Window: 30.0 sec  
Expected RT: 5.89 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 5.89 min  
Area: 6.42e+005 counts  
Height: 1.59e+005 CPM  
Start Time: 5.78 min  
End Time: 6.24 min



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1324

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02100037.wiff

Analysis Date: 10-FEB-10 17:53

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

| Compound                   | True | Found | Recovery | Q |
|----------------------------|------|-------|----------|---|
| 2,4-Diamino-6-nitrotoluene | 100  | 108   | 108      |   |
| 2,6-Diamino-4-nitrotoluene | 100  | 111   | 111      |   |
| 3,4-Dinitrotoluene         | 50   | 52.2  | 104      |   |
| 3,5-Dinitroaniline         | 100  | 108   | 108      |   |
| TATB                       | 100  | 110   | 110      |   |
| tris(o-cresyl) phosphate   | 100  | 109   | 109      |   |

Recovery Limits:

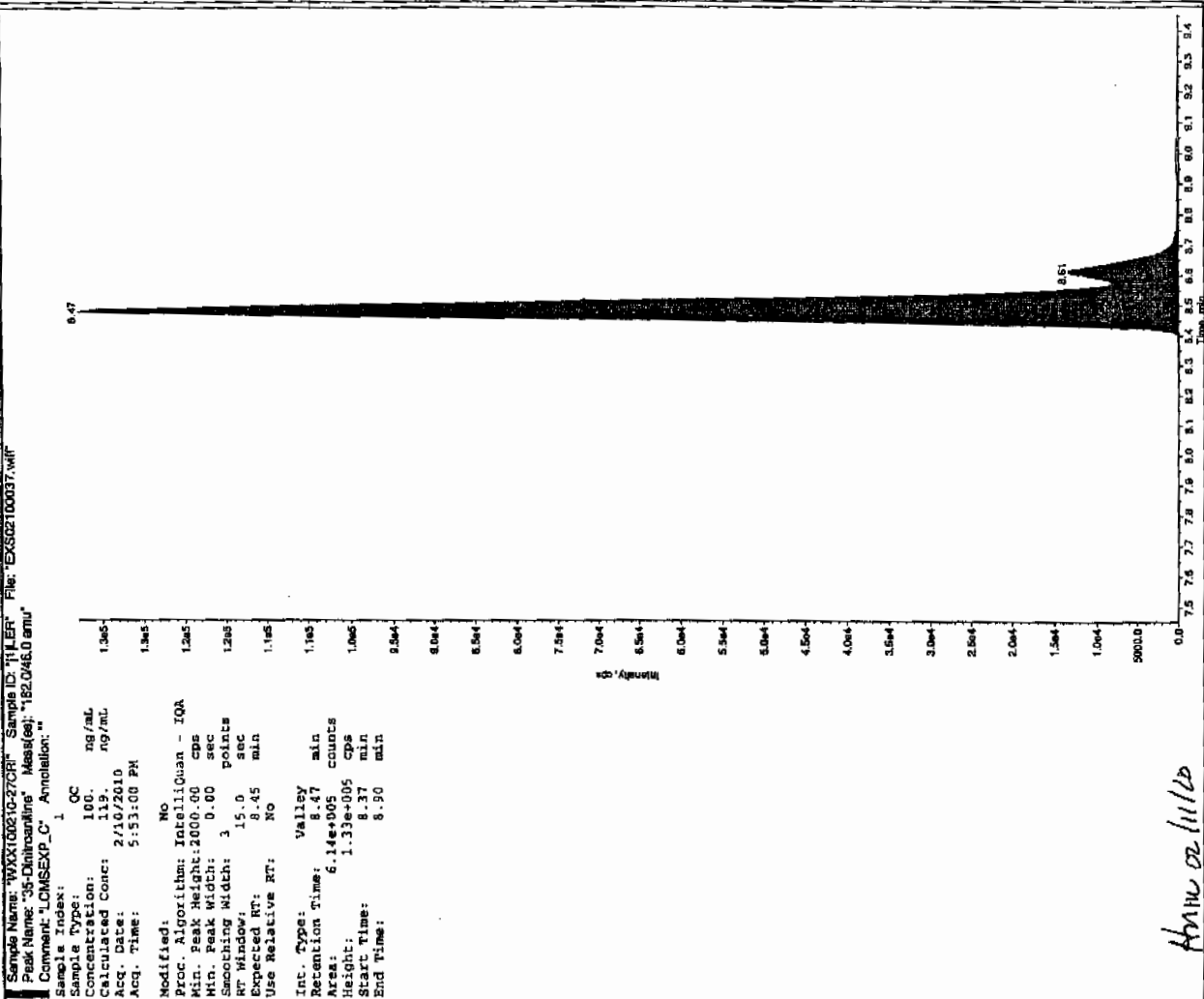
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

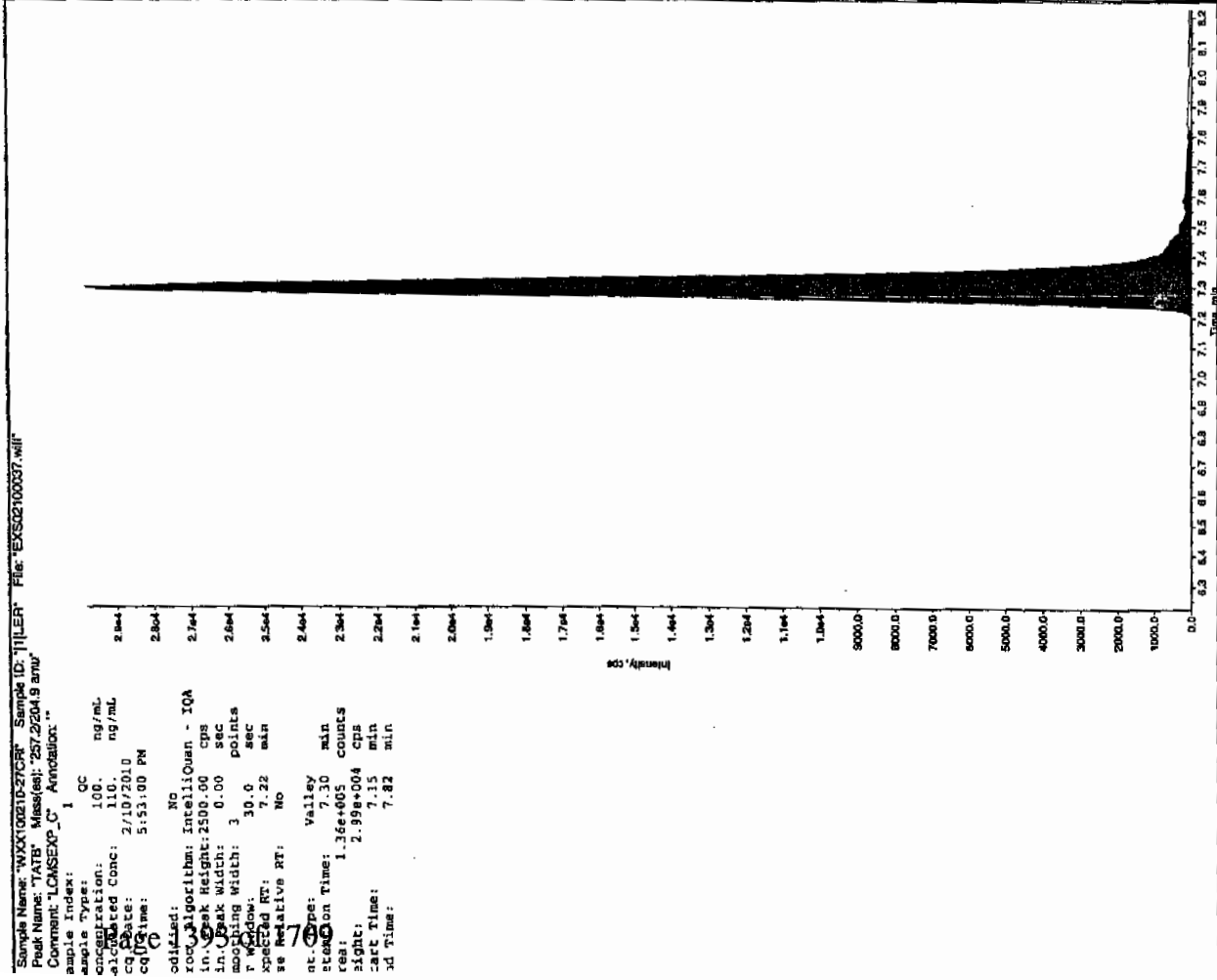
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

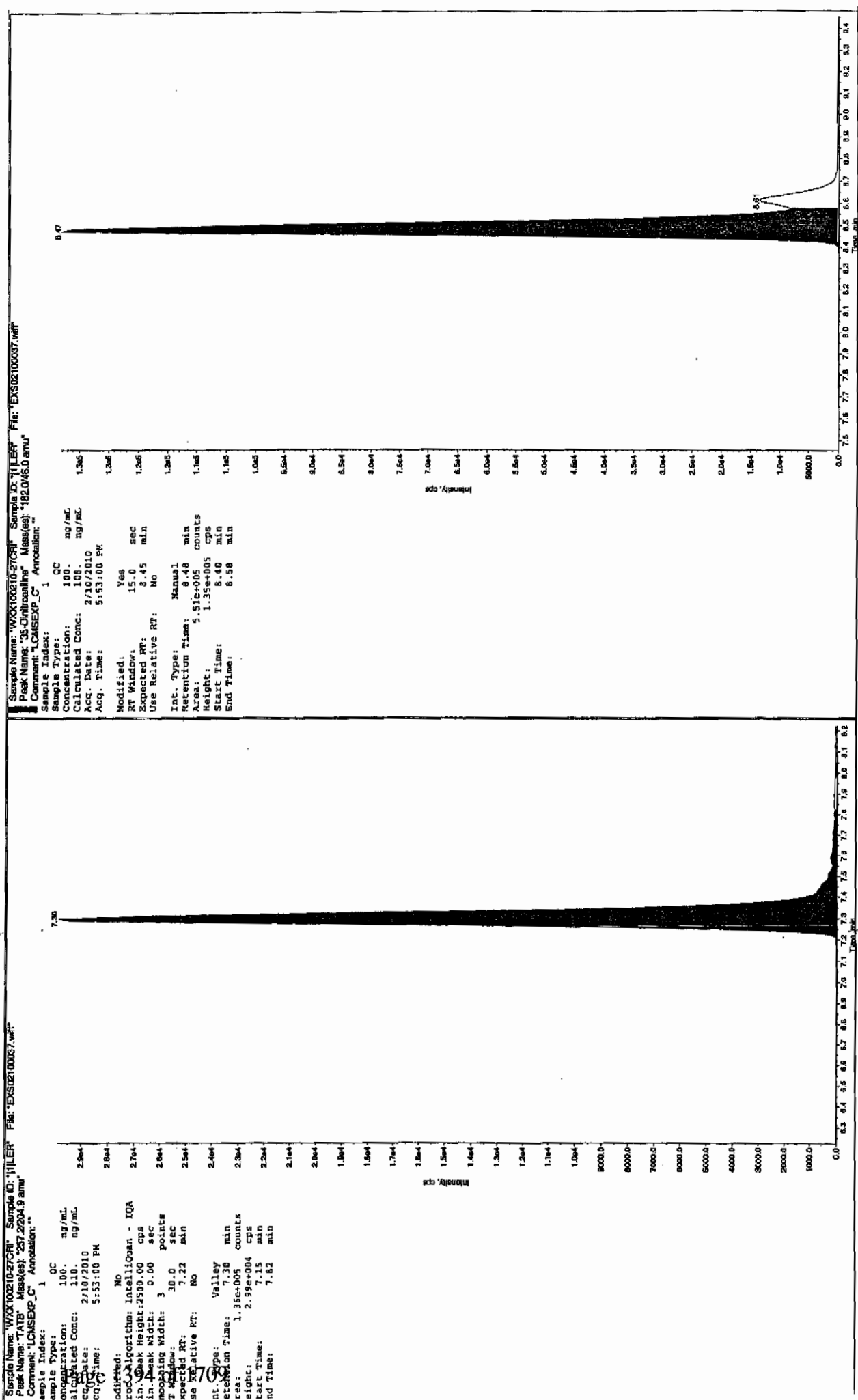
Before Jan 21/11



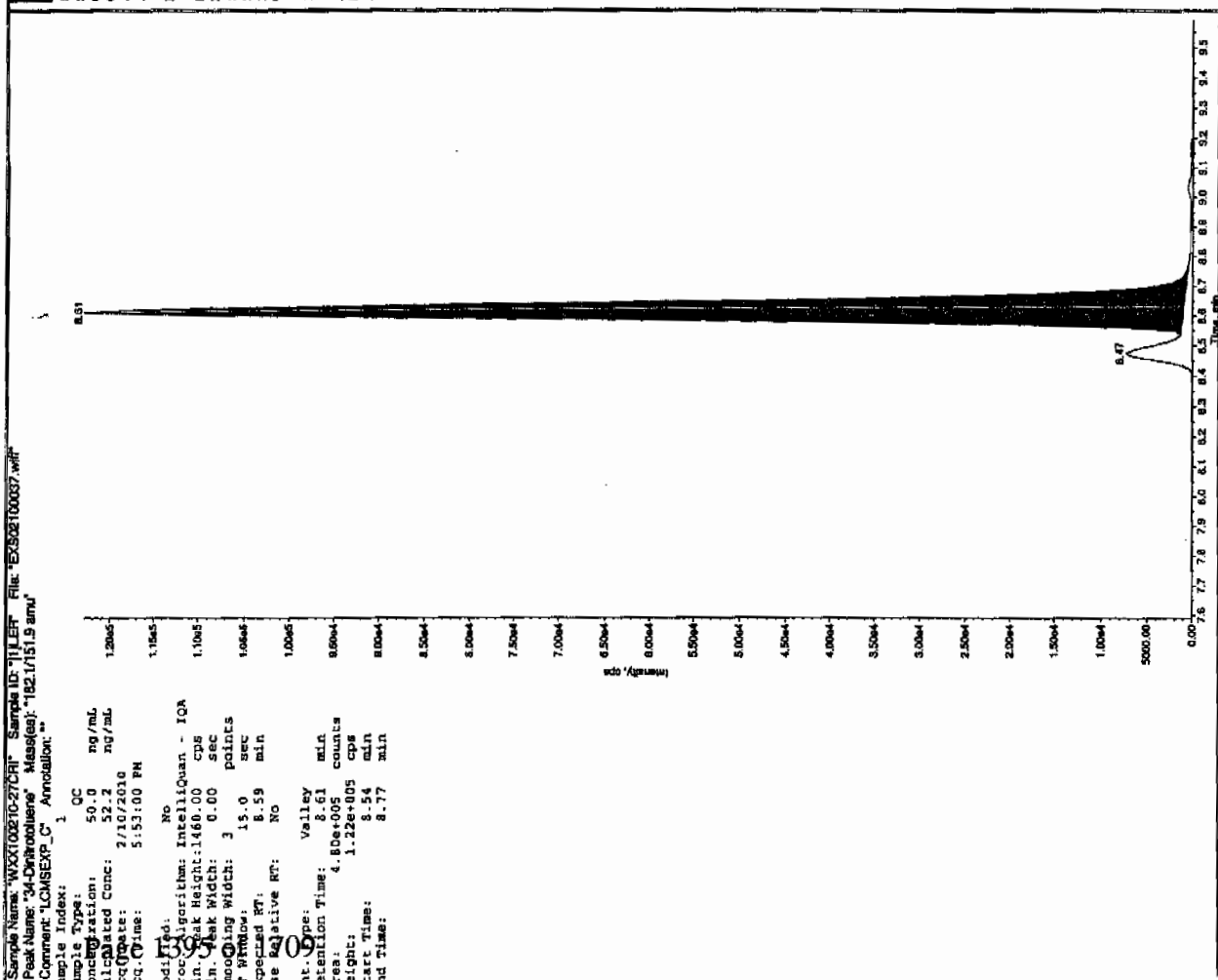
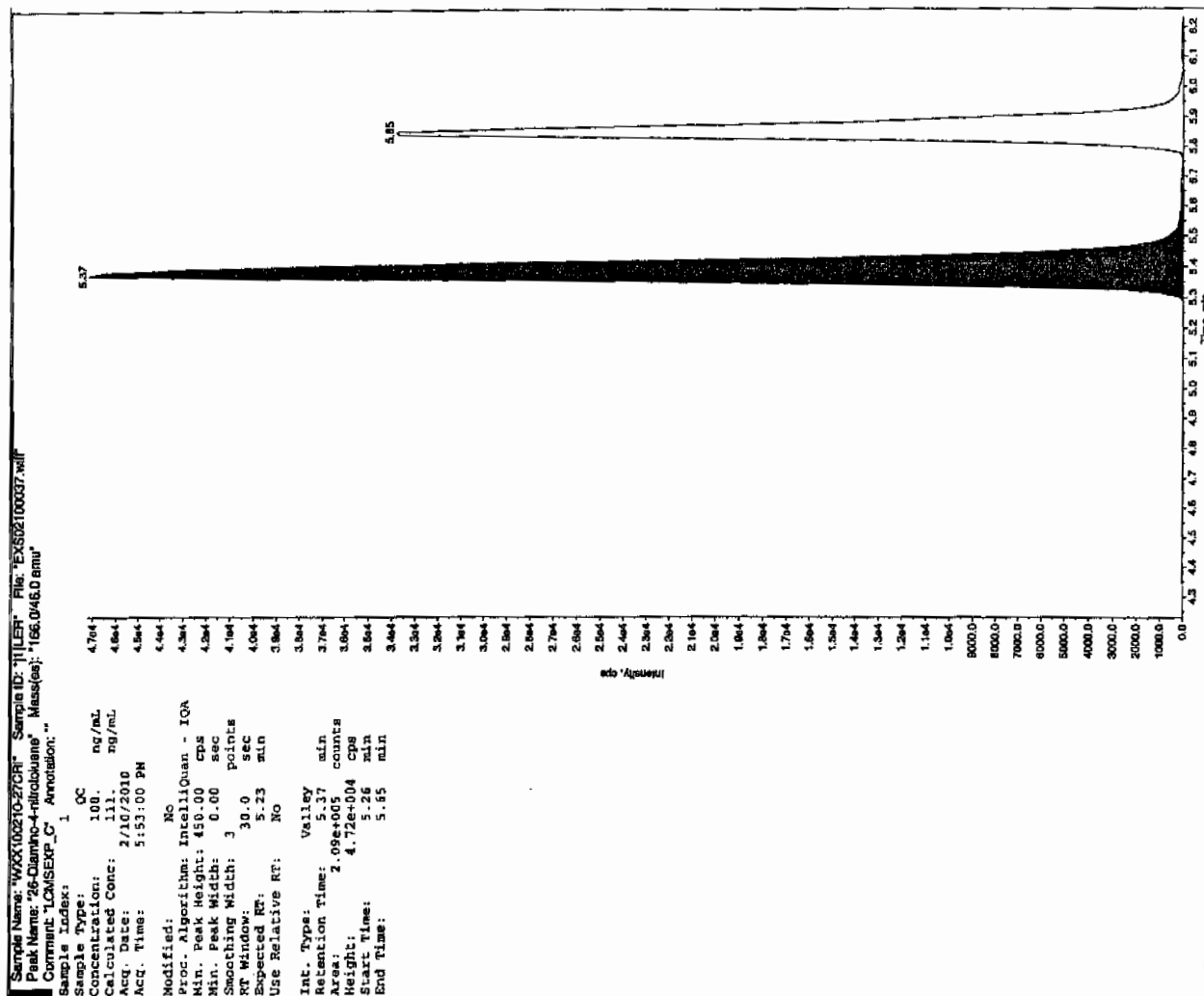
After Jan 21/11



after Jan 21/11







Sample Name: "WXX100210-27CH" Sample ID: "11LRR" File: "EXS02100037.wif"  
 Peak Name: "24-Diamino-5-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 109. ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 5:53:00 PM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 350.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 5.69 min

Use Relative RT: No

Int. Type: Valley

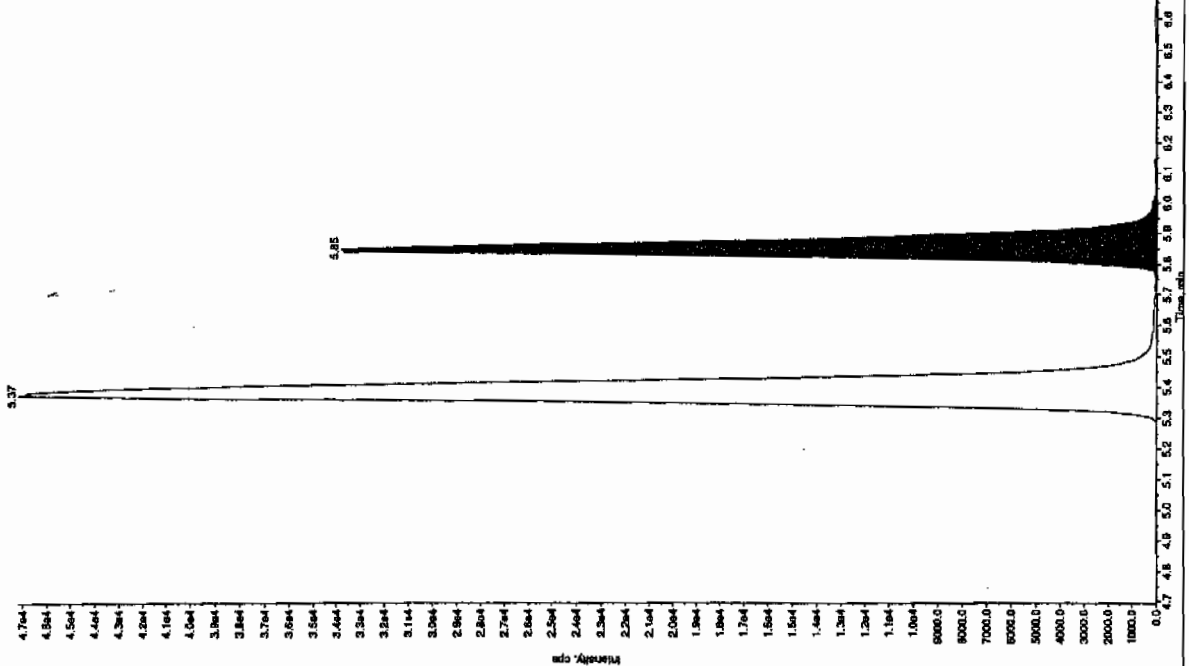
Retention Time: 5.85 min

Area: 1.26e+005 counts

Height: 3.38e+004 cps

Start Time: 5.75 min

End Time: 6.06 min



Sample Name: "WXX100210-27CH" Sample ID: "11LRR" File: "EXS02100037.wif"  
 Peak Name: "bis(o-cresyl) phosphite" Mass(es): "369.179.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 109. ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 5:53:00 PM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 1.00e4 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 11.1 min

Use Relative RT: No

Int. Type: Valley

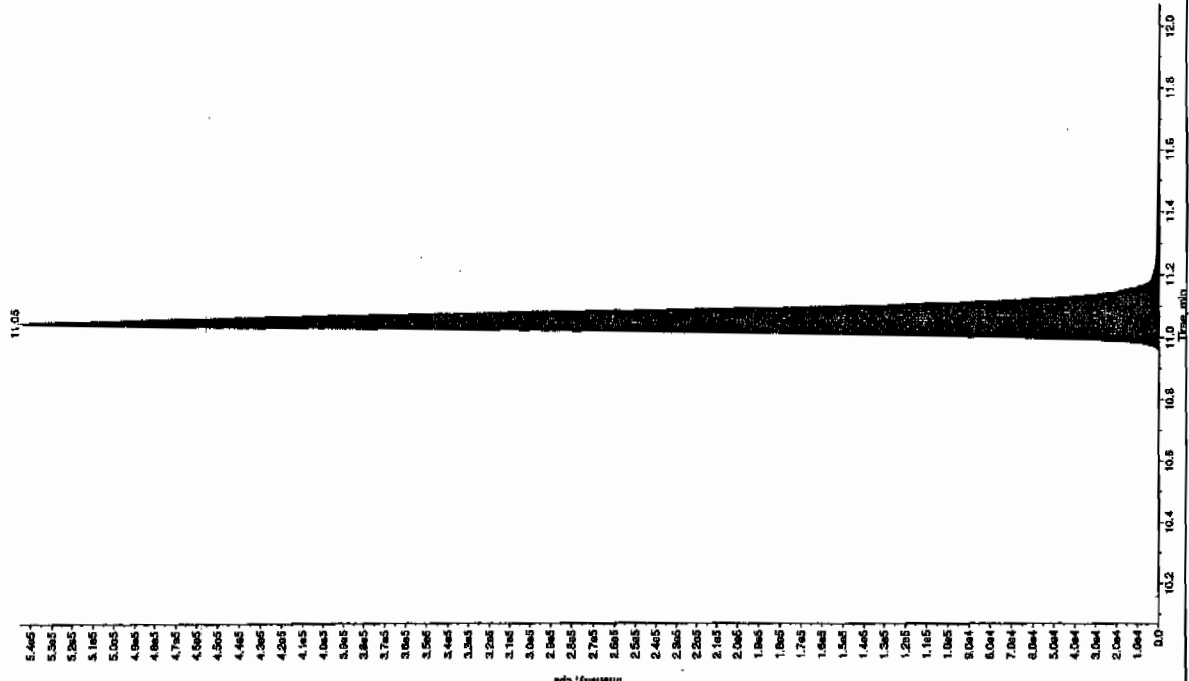
Retention Time: 11.0 min

Area: 2.36e+006 counts

Height: 5.45e+005 cps

Start Time: 10.9 min

End Time: 11.4 min



# QUALITY CONTROL DATA

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 944249

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 1202021914

Sample Amount 2

Moisture:

Amount Units g

Date Received: 21-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208039a

Date Analyzed: 09-FEB-10 09:25

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 500            | U |
| 121-14-2   | 2,4-Dinitrotoluene         | 500            | U |
| 121-82-4   | RDX                        | 500            | U |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 500            | U |
| 2691-41-0  | HMX                        | 500            | U |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 500            | U |
| 479-45-8   | Tetryl                     | 500            | U |
| 606-20-2   | 2,6-Dinitrotoluene         | 500            | U |
| 78-11-5    | PETN                       | 1000           | U |
| 88-72-2    | o-Nitrotoluene             | 500            | U |
| 98-95-3    | Nitrobenzene               | 500            | U |
| 99-08-1    | m-Nitrotoluene             | 500            | U |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 500            | U |
| 99-65-0    | m-Dinitrobenzene           | 500            | U |
| 99-99-0    | p-Nitrotoluene             | 500            | U |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Method: C:\MASSLYNX\New\_Exp.PRO\MethDB\020810expa.mdb, Time: Tue Feb 09 09:17:48 2010  
Calibration: C:\MASSLYNX\New\_Exp.PRO\CurveDB\020810expa.cdb, Time: Tue Feb 09 10:19:06 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208039a

Date: 09-Feb-2010

Time: 09:25:46

ID: 1202021914

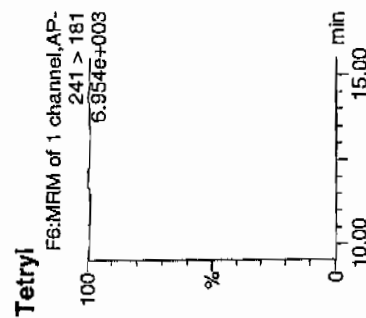
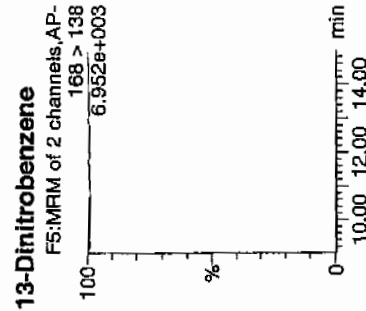
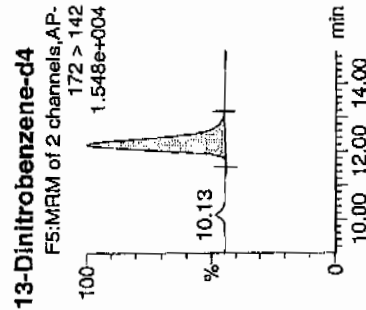
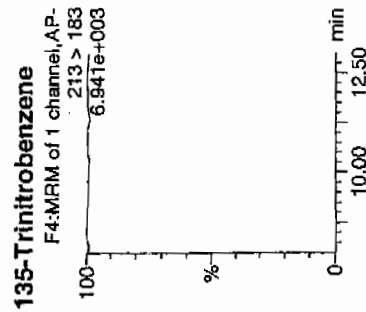
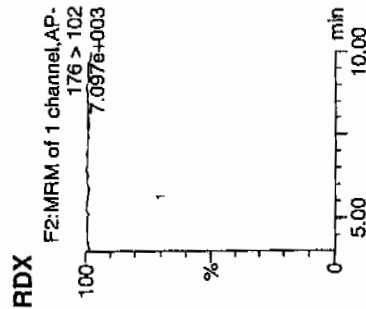
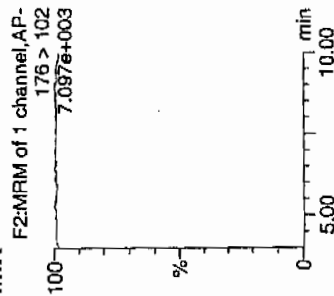
Vial: 2:1,A

1.548e+004  
2/10/10

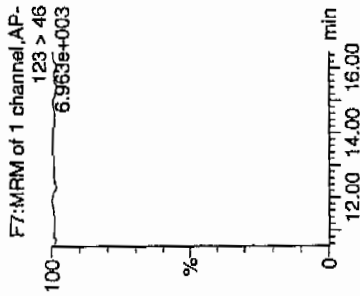
LAJL 944250 | 103 | 21

HMX

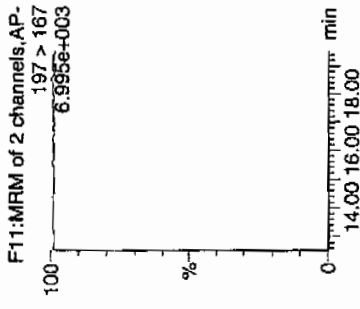
RDX



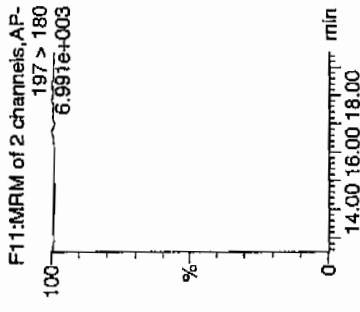
Nitrobenzene



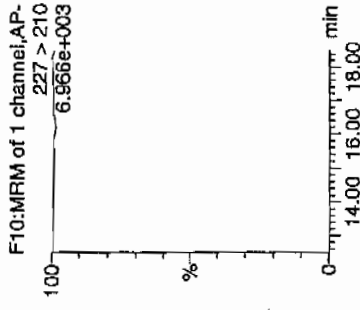
4-Amino-26-dinitrotoluene



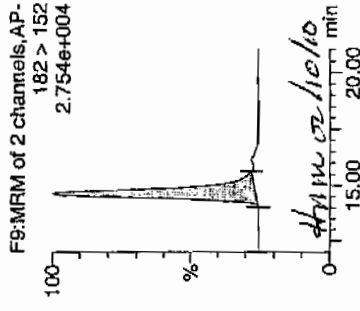
2-Amino-46-dinitrotoluene



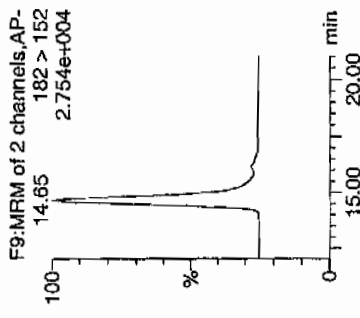
246-Trinitrotoluene



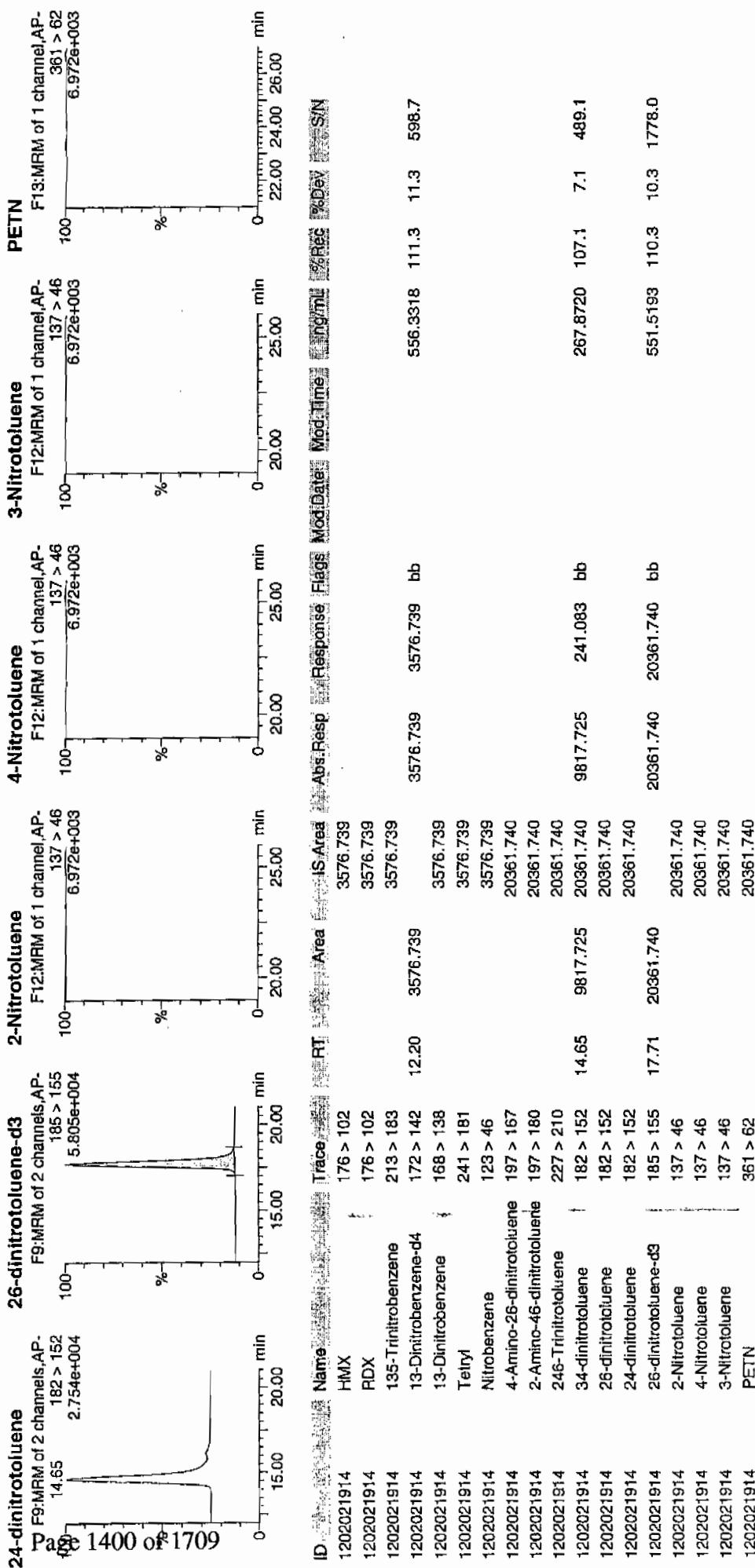
34-dinitrotoluene



26-dinitrotoluene



Dataset: C:\MASSLYNX\New\_Exp\_PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 944249

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 1202021914

Sample Amount 2

Moisture:

Amount Units g

Date Received: 21-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100014.wiff

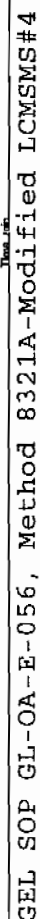
Date Analyzed: 10-FEB-10 11:51

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 1000           | U |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 2000           | U |
| 618-87-1   | 3,5-Dinitroaniline         | 1000           | U |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2000           | U |
| 78-30-8    | tris(o-cresyl) phosphate   | 1000           | U |

\*Concentration =

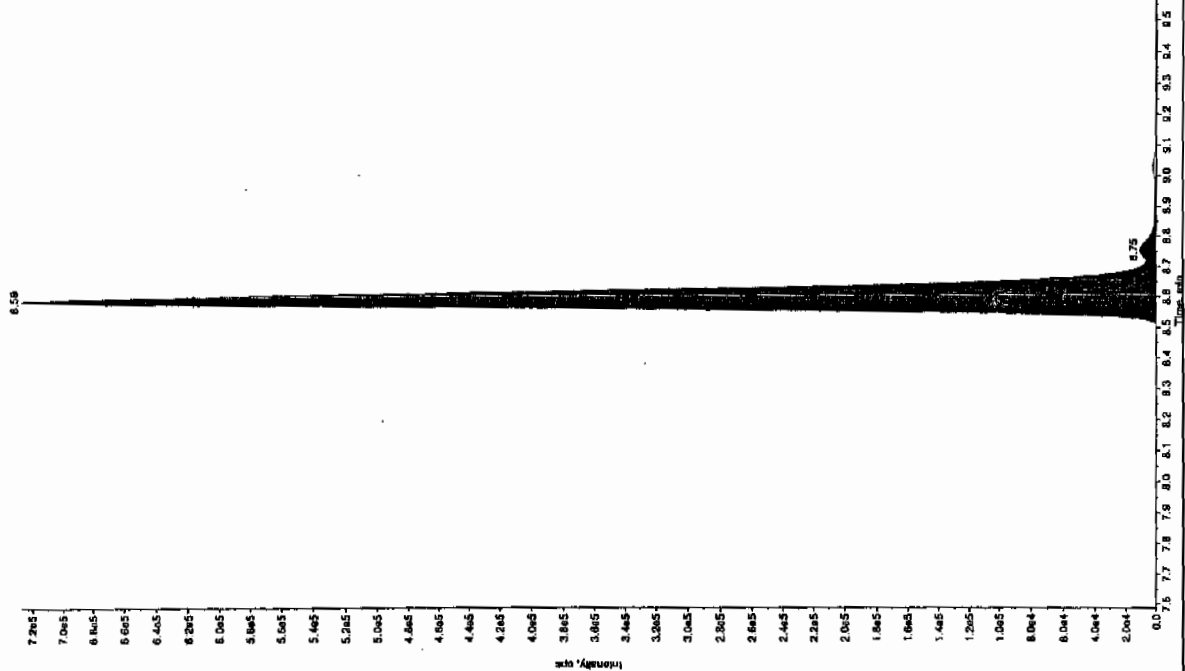
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor





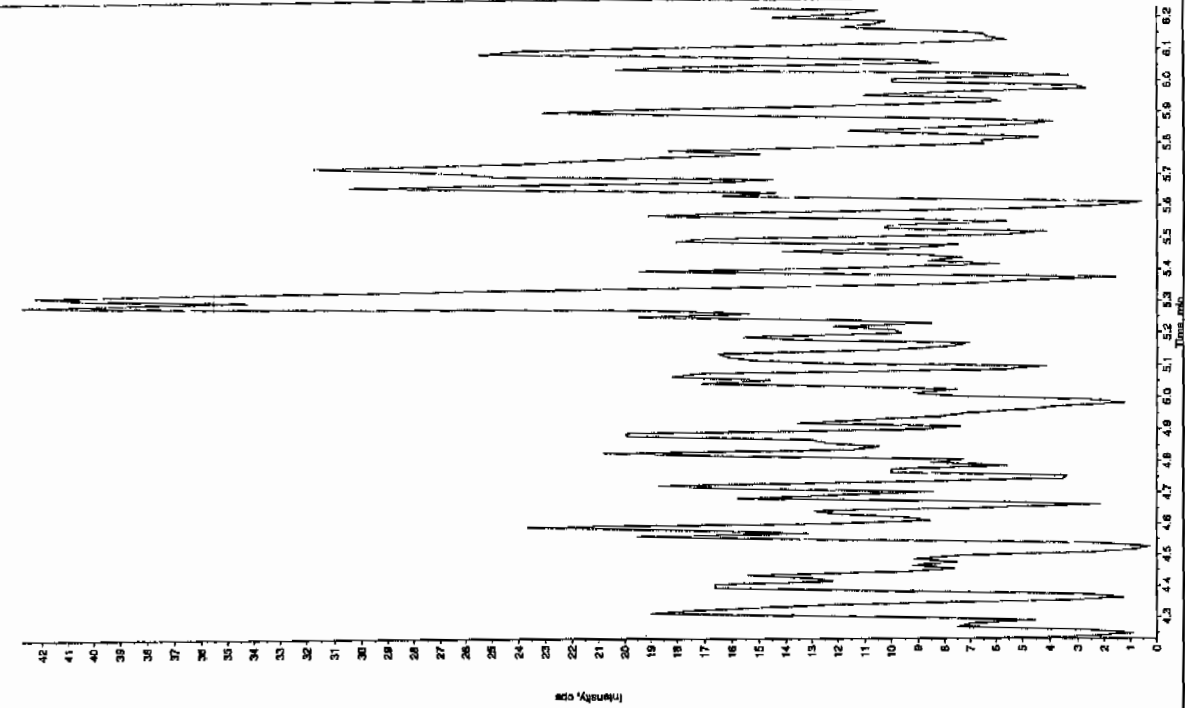
Sample Name: "1202021914" Sample ID: "94425021914" File: "EXS02100014.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1751.9 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 307. ng/mL  
 Acq. Date: 2/16/2010  
 Acq. Time: 11:51:42 AM  
 Modified: No  
 Processing Algorithm: IntelliQuan - IGA  
 Inj. Peak Height: 1460.00 cps  
 Inj. Peak Width: 0.00 sec  
 Mod. Peak Width: 3 points  
 T. HTRlow: 15.0 sec  
 Speeded RT: 8.59 min  
 Relative RT: No  
 Inj. Type: Valley  
 Retention Time: 8.59 min  
 Peak Height: 2.94e+006 counts  
 Peak Width: 7.28e+005 cps  
 Start Time: 8.43 min  
 End Time: 8.95 min



Sample Name: "1202021914" Sample ID: "94425021914" File: "EXS02100014.wif"  
 Peak Name: "26-Dinitro-4-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/16/2010  
 Acq. Time: 11:51:42 AM  
 Modified: No

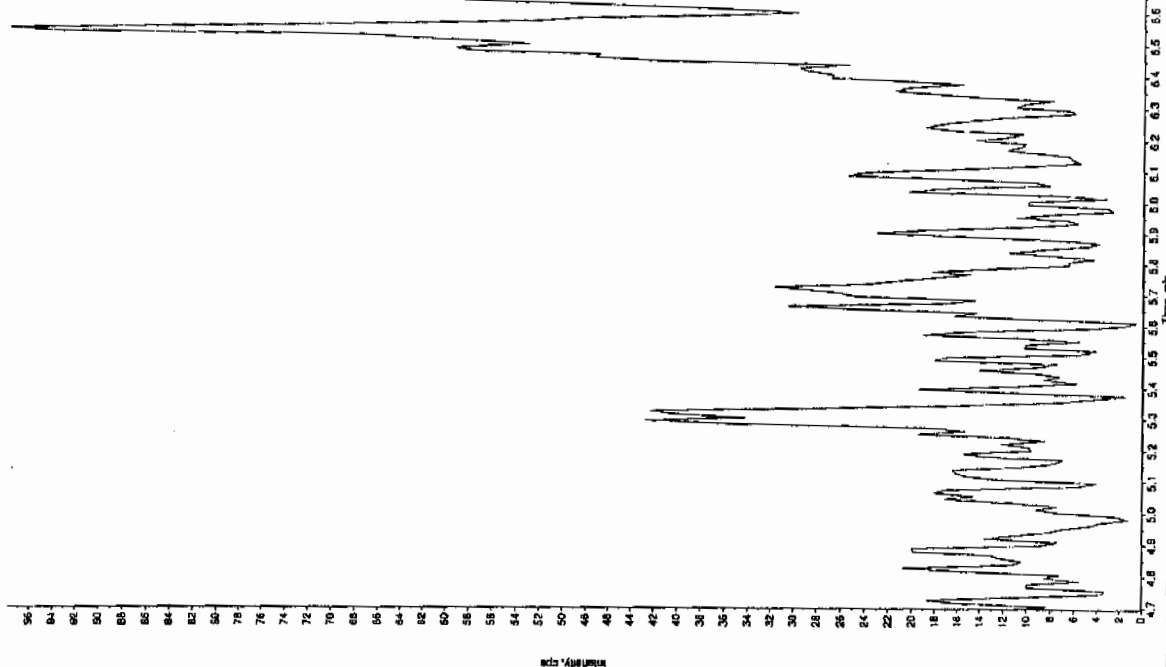


Sample Name: "1202021914" Sample ID: "94425021ER" File: "EXS02100014.wif"  
 Peak Name: "24-Diamino-5-nitrofluorene" Mass(es): "165.046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 11:51:42 AM  
 Modified: No

Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 11.1 min  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 11.1 min  
 Area: 4.75e+004 counts  
 Height: 1.04e+004 cps  
 Start Time: 11.0 min  
 End Time: 11.3 min

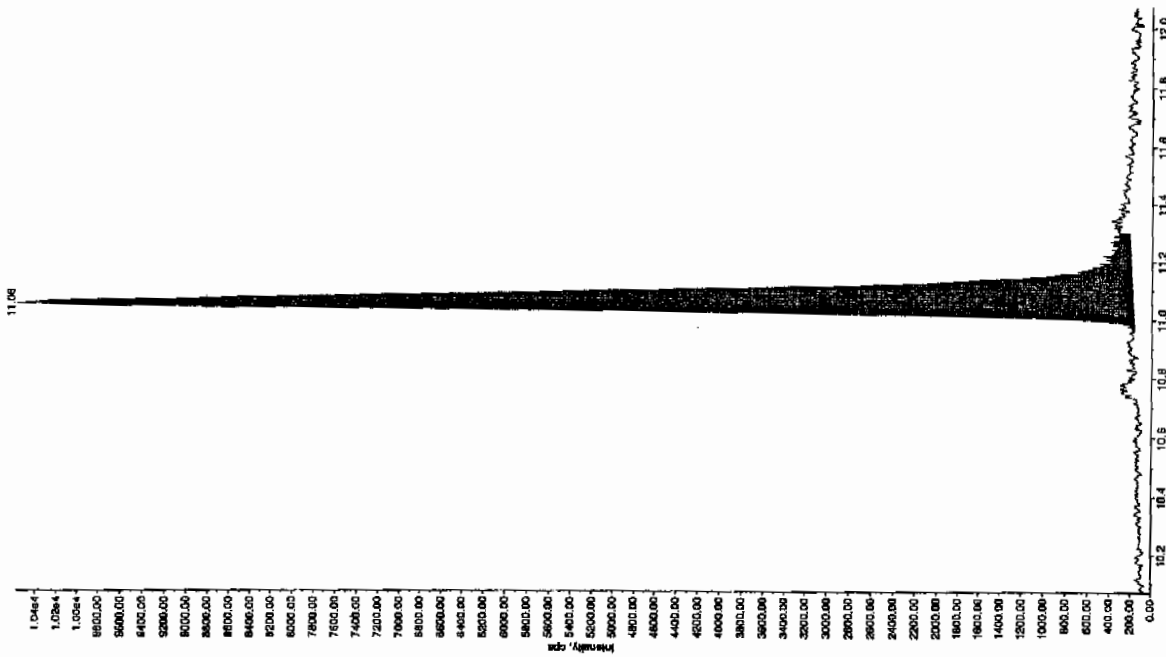


Sample Name: "1202021914" Sample ID: "94425021ER" File: "EXS02100014.wif"  
 Peak Name: "tris(2-cyanoethyl) phosphite" Mass(es): "359.191.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: No Intercept  
 Acq. Date: 2/10/2010  
 Acq. Time: 11:51:42 AM  
 Modified: No

Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 11.1 min  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 11.1 min  
 Area: 4.75e+004 counts  
 Height: 1.04e+004 cps  
 Start Time: 11.0 min  
 End Time: 11.3 min



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 944249

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 1202021915

Sample Amount 2

Moisture:

Amount Units g

Date Received: 21-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208040a

Date Analyzed: 09-FEB-10 09:55

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 5170           |   |
| 121-14-2   | 2,4-Dinitrotoluene         | 6060           |   |
| 121-82-4   | RDX                        | 5170           |   |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 5090           |   |
| 2691-41-0  | HMX                        | 4750           |   |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 4850           |   |
| 479-45-8   | Tetryl                     | 2640           |   |
| 606-20-2   | 2,6-Dinitrotoluene         | 5680           |   |
| 78-11-5    | PETN                       | 4630           |   |
| 88-72-2    | o-Nitrotoluene             | 5090           |   |
| 98-95-3    | Nitrobenzene               | 4810           |   |
| 99-08-1    | m-Nitrotoluene             | 4780           |   |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 4180           |   |
| 99-65-0    | m-Dinitrobenzene           | 5320           |   |
| 99-99-0    | p-Nitrotoluene             | 5490           |   |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208040a

Date: 09-Feb-2010

Time: 09:55:18

ID: 1202021915

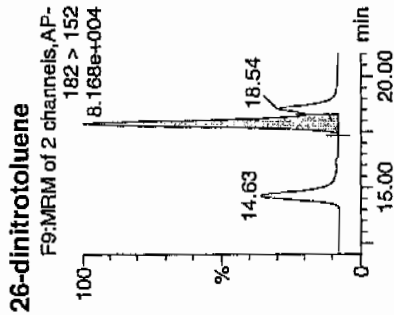
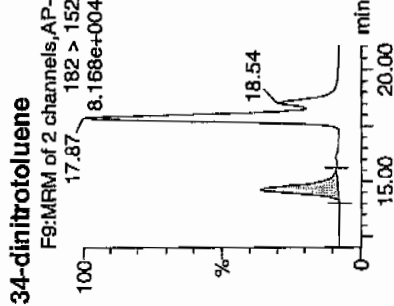
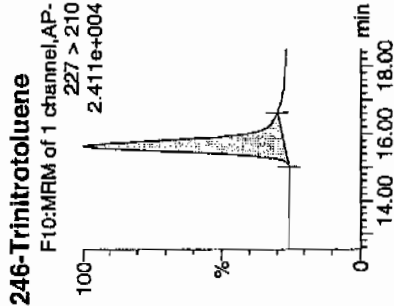
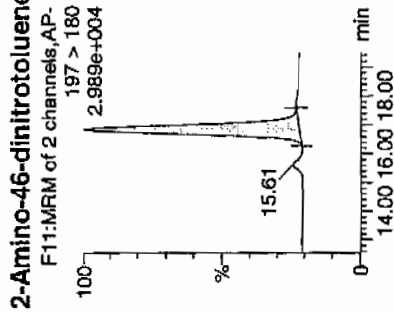
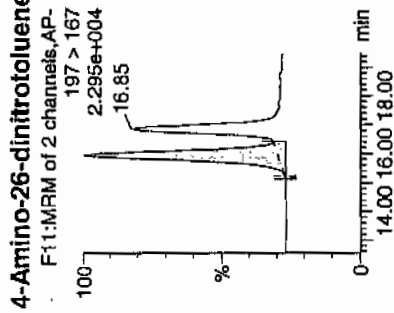
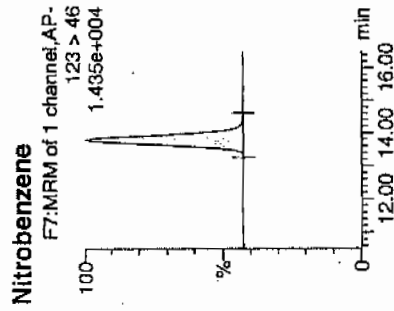
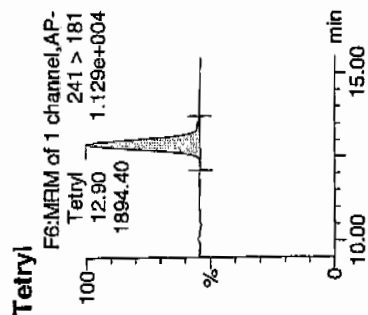
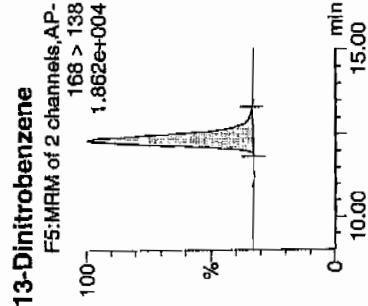
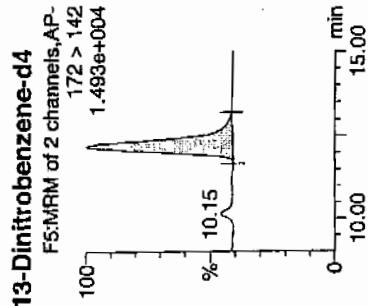
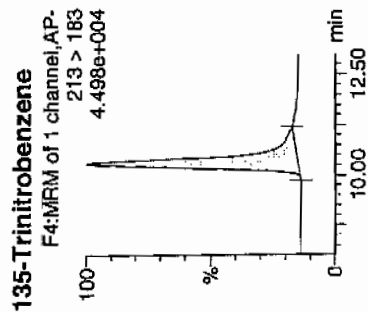
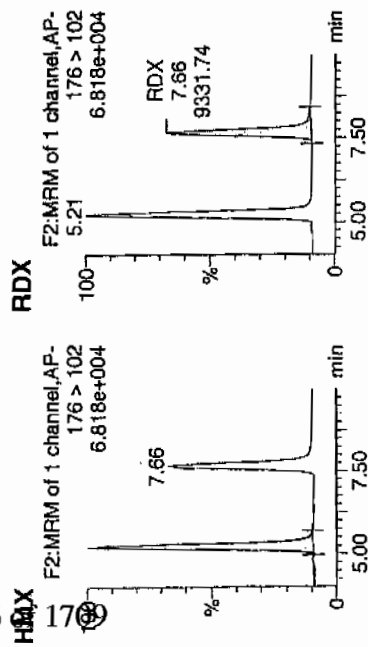
Vol: 2:1,B

not  
2/10/10

LAUW 944250 | 8033 | 108 | 2 |

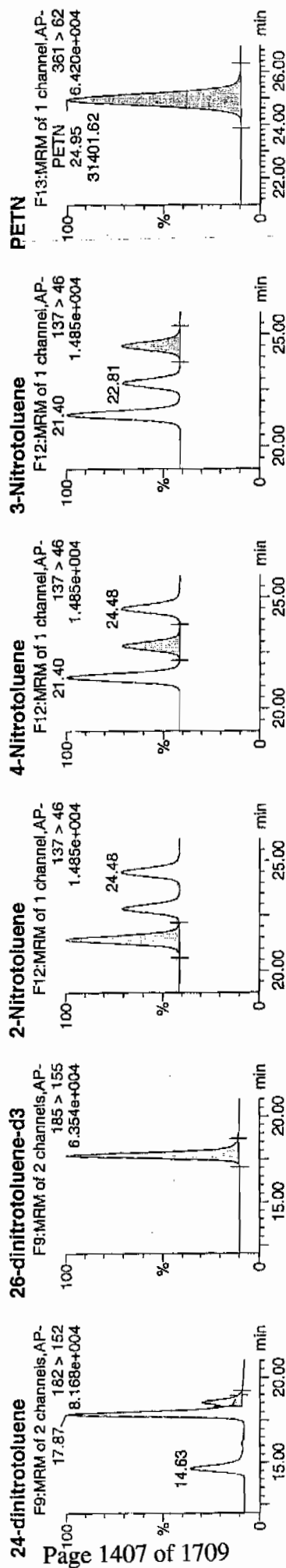
HPLC

RDX



Amu or 110/110

Dataset: C:\MASSLYNX\New\_Exp\_PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



| ID         | Name                      | Trace     | RT    | Area      | S Area    | Abs. Resp | Response  | Flags | Mod. Date | Mod. Time | ng/mL    | %Rec  | %Dev  | S/N    |
|------------|---------------------------|-----------|-------|-----------|-----------|-----------|-----------|-------|-----------|-----------|----------|-------|-------|--------|
| 1202021915 | HMV                       | 176 > 102 | 5.21  | 12256.124 | 3717.326  | 12256.124 | 1648.513  | bb    |           |           | 474.6924 | 94.9  | -5.1  | 1277.8 |
| 1202021915 | RDX                       | 176 > 102 | 7.66  | 9331.738  | 3717.326  | 9331.738  | 1255.168  | bb    |           |           | 516.9251 | 103.4 | 3.4   | 815.3  |
| 1202021915 | 135-Trinitrobenzene       | 213 > 183 | 10.30 | 11433.631 | 3717.326  | 11433.631 | 1537.884  | bb    |           |           | 417.5565 | 83.5  | -16.5 | 1450.1 |
| 1202021915 | 13-Dinitrobenzene-d4      | 172 > 142 | 12.20 | 3717.326  | 3717.326  | 3717.326  | 3717.326  | bb    |           |           | 578.1989 | 115.6 | 15.6  | 362.3  |
| 1202021915 | 13-Dinitrobenzene         | 168 > 138 | 12.34 | 4759.030  | 3717.326  | 4759.030  | 640.115   | bb    |           |           | 532.3661 | 106.5 | 6.5   | 244.4  |
| 1202021915 | Tetryl                    | 241 > 181 | 12.90 | 1894.404  | 3717.326  | 1894.404  | 254.807   | bb    |           |           | 263.5719 | 52.7  | -47.3 | 135.2  |
| 1202021915 | Nitrobenzene              | 123 > 46  | 13.79 | 2891.442  | 3717.326  | 2891.442  | 388.914   | bb    |           |           | 481.4661 | 95.3  | -3.7  | 199.4  |
| 1202021915 | 4-Amino-26-dinitrotoluene | 197 > 167 | 15.94 | 6821.406  | 23347.186 | 6821.406  | 146.086   | MM    | 10-Feb-10 | 09:16:40  | 508.5773 | 101.7 | 1.7   | 177.8  |
| 1202021915 | 2-Amino-46-dinitrotoluene | 197 > 180 | 16.85 | 8967.045  | 23347.186 | 8967.045  | 192.037   | bb    |           |           | 484.9047 | 97.0  | -3.0  | 754.8  |
| 1202021915 | 246-Trinitrotoluene       | 227 > 210 | 15.66 | 7790.635  | 23347.186 | 7790.635  | 166.843   | bb    |           |           | 517.0813 | 103.4 | 3.4   | 432.1  |
| 1202021915 | 34-dinitrotoluene         | 182 > 152 | 14.63 | 10803.355 | 23347.186 | 10803.355 | 231.363   | bb    |           |           | 257.0724 | 102.8 | 2.8   | 461.9  |
| 1202021915 | 26-dinitrotoluene         | 182 > 152 | 17.87 | 28483.828 | 23347.186 | 28483.828 | 610.006   | MM    | 10-Feb-10 | 09:11:03  | 567.9289 | 113.6 | 13.6  | 1506.9 |
| 1202021915 | 24-dinitrotoluene         | 182 > 152 | 18.54 | 6900.501  | 23347.186 | 6900.501  | 147.780   | MM    | 10-Feb-10 | 09:10:34  | 605.5285 | 121.1 | 21.1  | 344.0  |
| 1202021915 | 26-dinitrotoluene-d3      | 185 > 155 | 17.72 | 23347.186 | 23347.186 | 23347.186 | 23347.186 | bb    |           |           | 632.3632 | 126.5 | 26.5  | 2447.7 |
| 1202021915 | 2-Nitrotoluene            | 137 > 46  | 21.40 | 3682.033  | 23347.186 | 3682.033  | 78.854    | bb    |           |           | 508.5766 | 101.7 | 1.7   | 310.7  |
| 1202021915 | 4-Nitrotoluene            | 137 > 46  | 22.81 | 1948.271  | 23347.186 | 1948.271  | 41.724    | bb    |           |           | 548.9795 | 109.8 | 9.8   | 155.3  |
| 1202021915 | 3-Nitrotoluene            | 137 > 46  | 24.48 | 2080.396  | 23347.186 | 2080.396  | 44.553    | bb    |           |           | 478.1889 | 95.6  | -4.4  | 158.9  |
| 1202021915 | PETN                      | 361 > 62  | 24.95 | 31401.617 | 23347.186 | 31401.617 | 672.493   | bb    |           |           | 463.2745 | 92.7  | -7.3  | 2417.2 |

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 944249

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 1202021915

Sample Amount 2

Moisture:

Amount Units g

Date Received: 21-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100015.wiff

Date Analyzed: 10-FEB-10 12:07

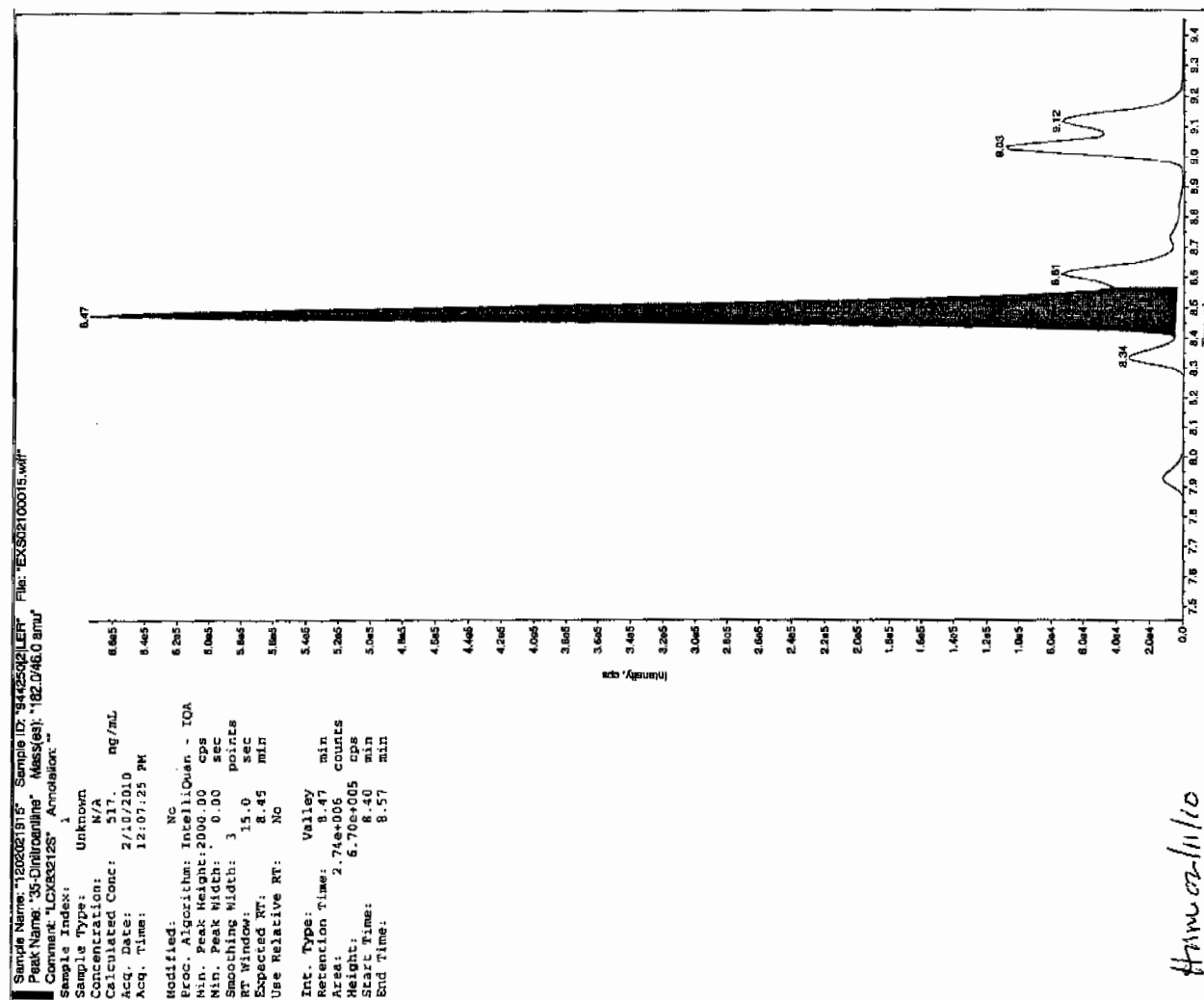
Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 8990           |   |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 5490           |   |
| 618-87-1   | 3,5-Dinitroaniline         | 5170           |   |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 5390           |   |
| 78-30-8    | tris(o-cresyl) phosphate   | 5460           |   |

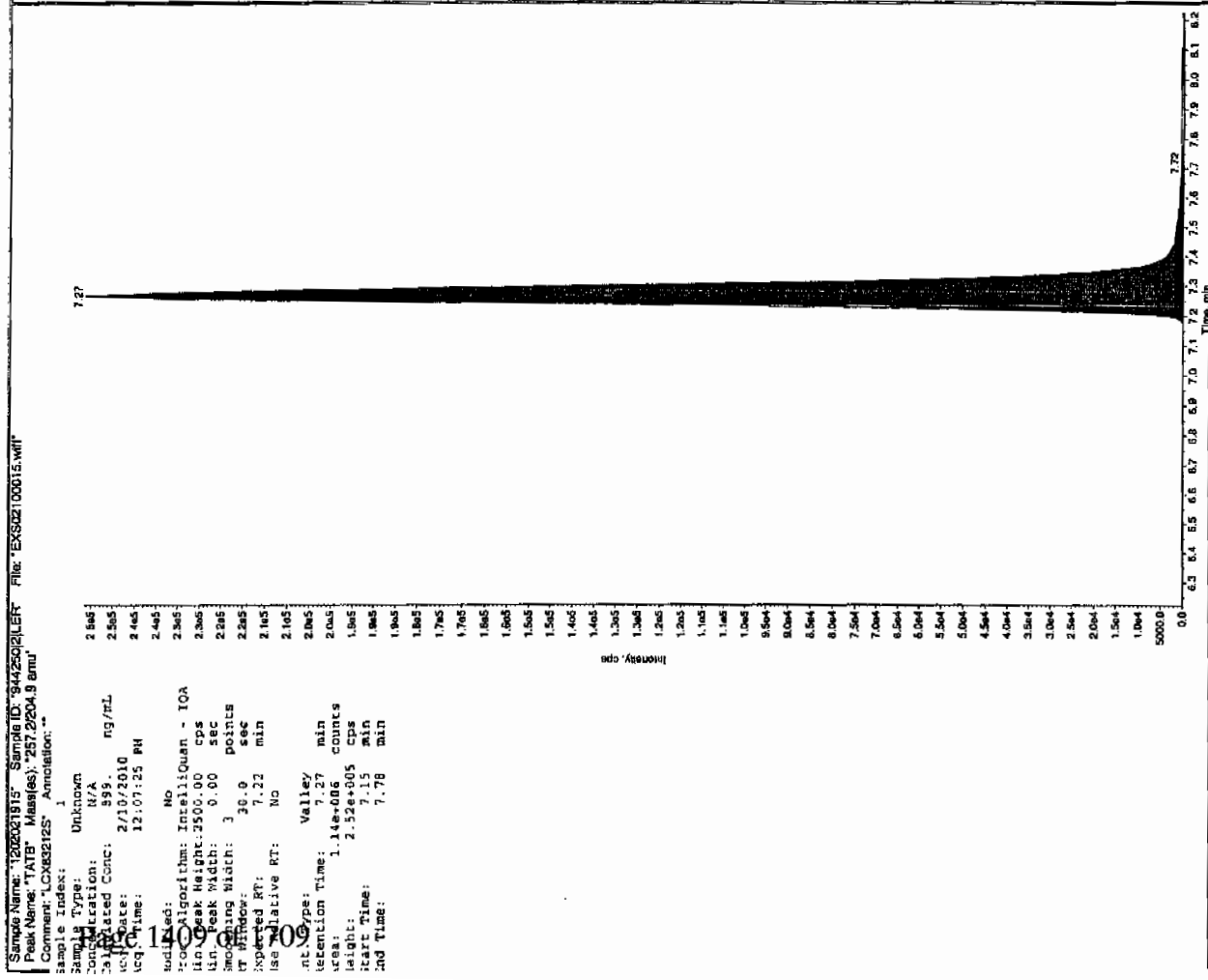
\*Concentration =

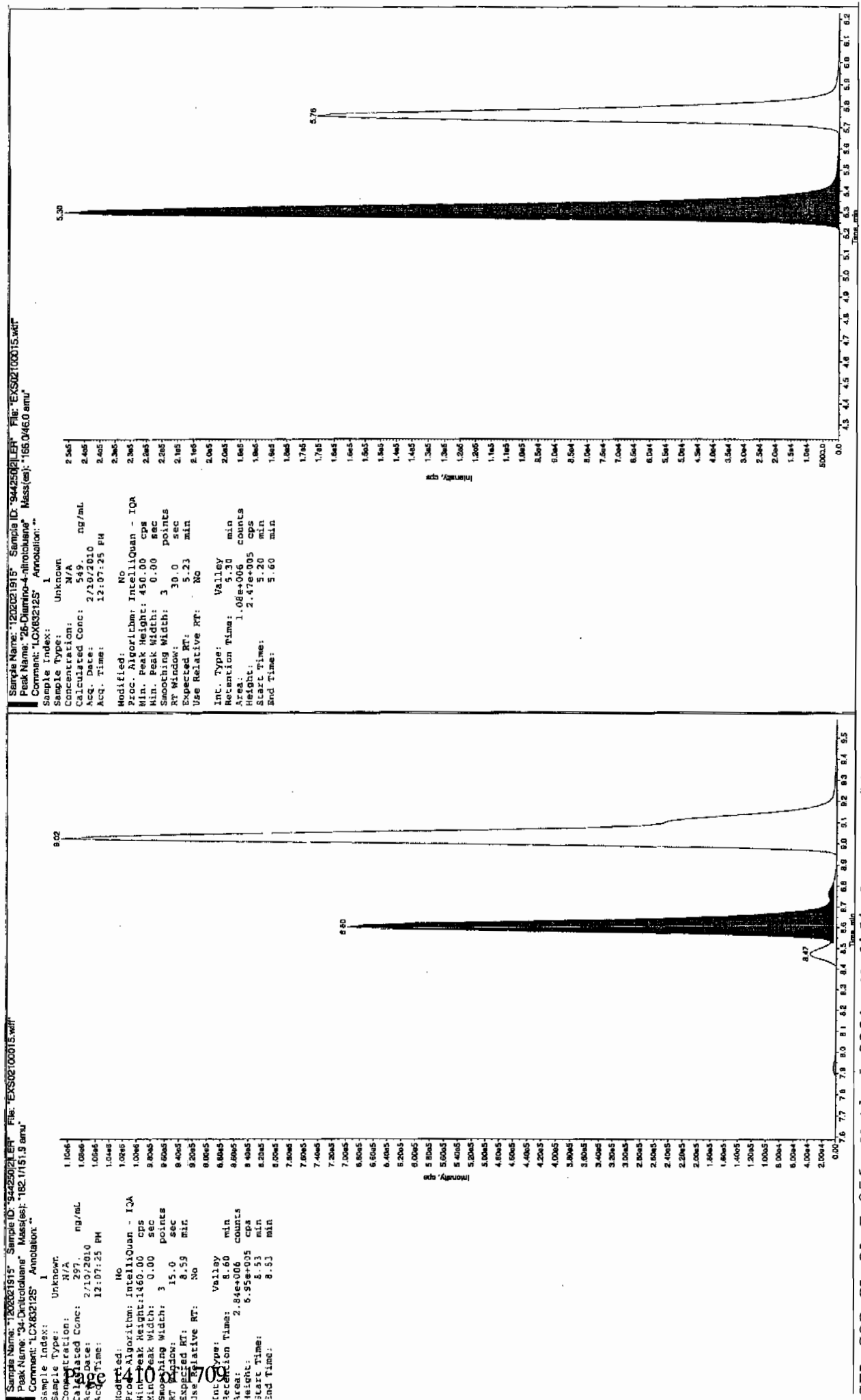
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Jan 21/11/10



Jan 22-11/10

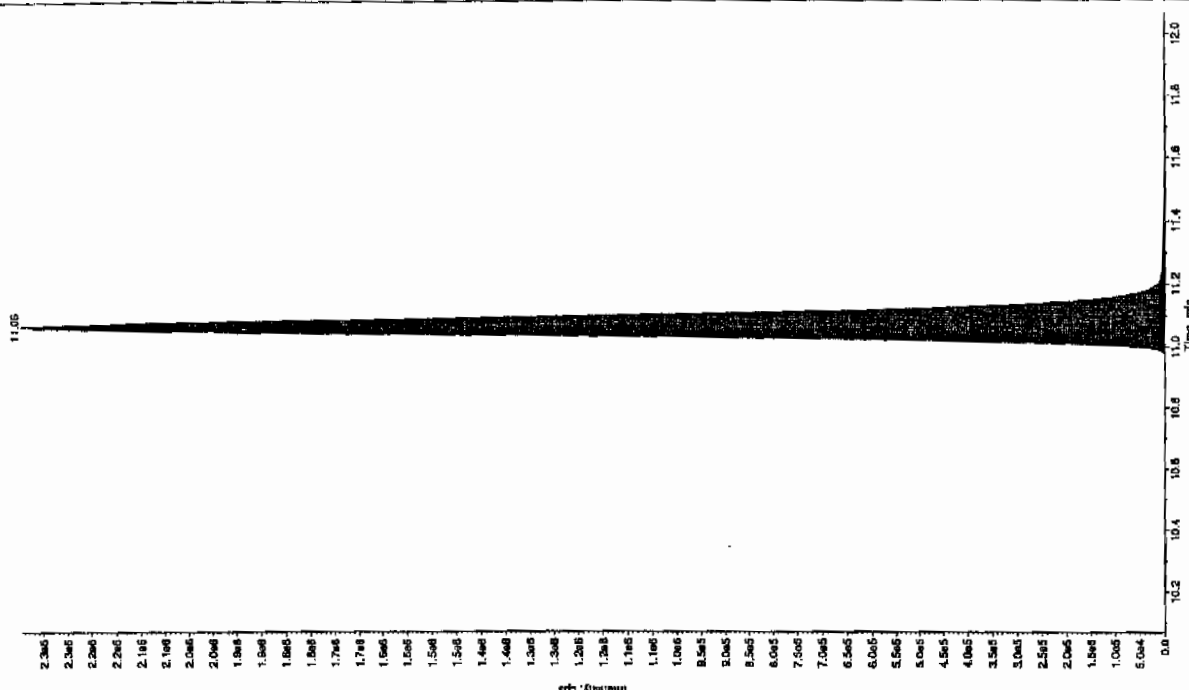






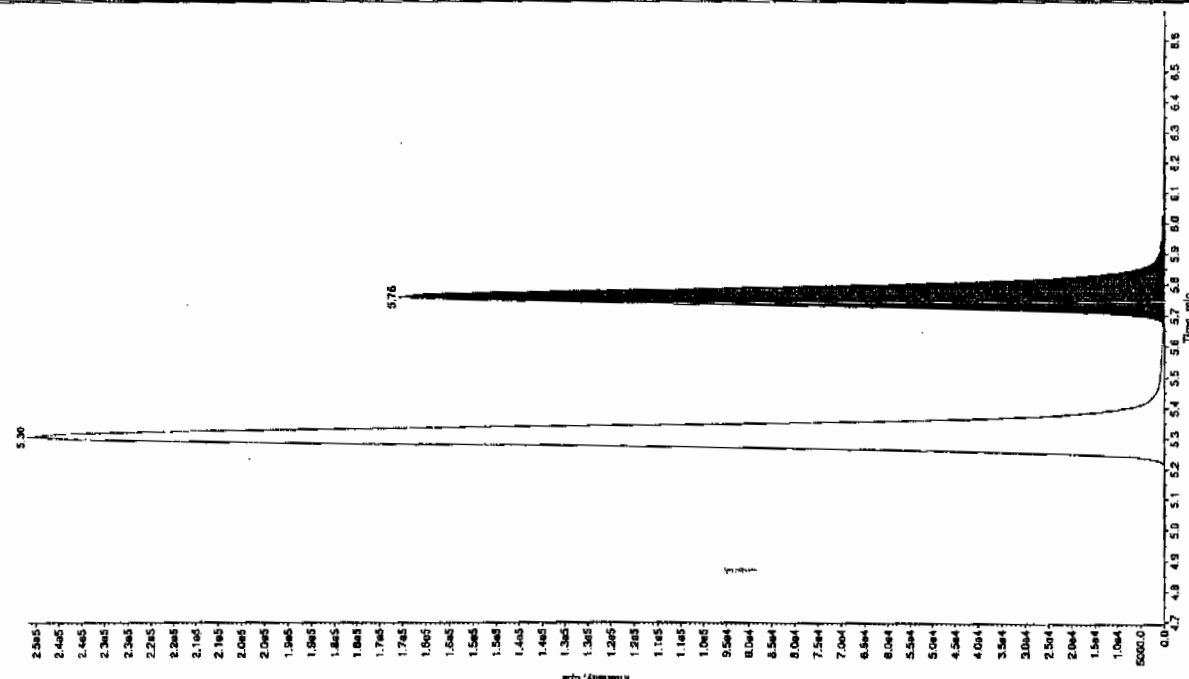
Sample Name: "1202021915" Sample ID: "94425021915" File: "EX02100015.wif"  
 Peak Name: "Bis(o-cresyl) phosphite" Mass(es): "369.191.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 346 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 12:07:25 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 11.1 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 11.1 min  
 Area: 1.05e+007 counts  
 Height: 2.35e+006 cps  
 Start Time: 11.0 min  
 End Time: 11.4 min



Sample Name: "1202021915" Sample ID: "94425021915" File: "EX02100015.wif"  
 Peak Name: "24-Dinitro-6-nitrotoluene" Mass(es): "166.045.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 539 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 12:07:25 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.69 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.76 min  
 Area: 6.75e+005 counts  
 Height: 1.65e+005 cps  
 Start Time: 5.64 min  
 End Time: 6.04 min



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8410(245114002MS)

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 1202021916

Sample Amount 2

Moisture: 24.9

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208042a

Date Analyzed: 09-FEB-10 10:54

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 4950           |   |
| 121-14-2   | 2,4-Dinitrotoluene         | 5730           |   |
| 121-82-4   | RDX                        | 4760           |   |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 5150           |   |
| 2691-41-0  | HMX                        | 4560           |   |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 5590           |   |
| 479-45-8   | Tetryl                     | 2850           |   |
| 606-20-2   | 2,6-Dinitrotoluene         | 5230           |   |
| 78-11-5    | PETN                       | 4640           |   |
| 88-72-2    | o-Nitrotoluene             | 4940           |   |
| 98-95-3    | Nitrobenzene               | 4620           |   |
| 99-08-1    | m-Nitrotoluene             | 4610           |   |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 4600           |   |
| 99-65-0    | m-Dinitrobenzene           | 5350           |   |
| 99-99-0    | p-Nitrotoluene             | 5070           |   |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208042a

Date: 09-Feb-2010

Time: 10:54:24

ID: 1202021916

Val: 2:1,D

128  
XC by 0202080439 (439)

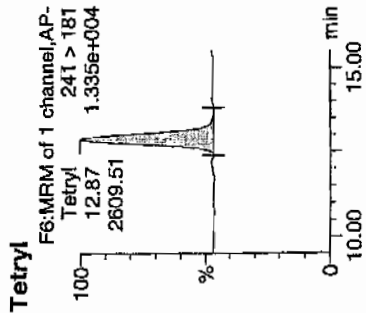
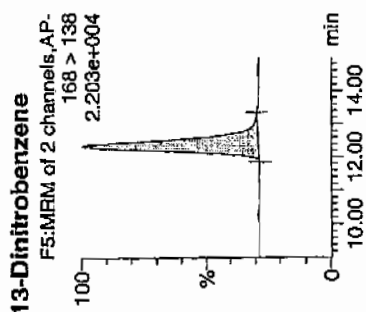
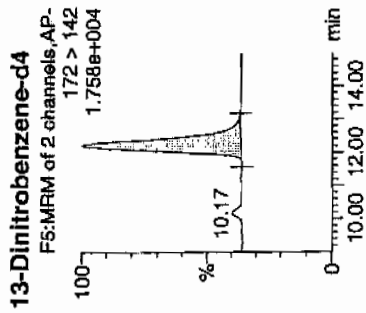
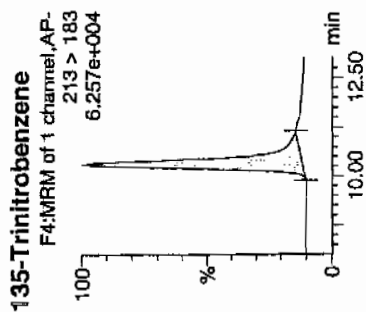
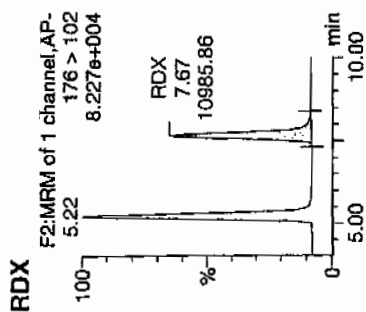
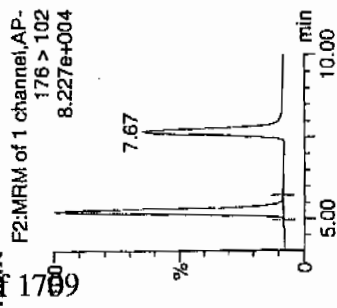
1477

2/10/10

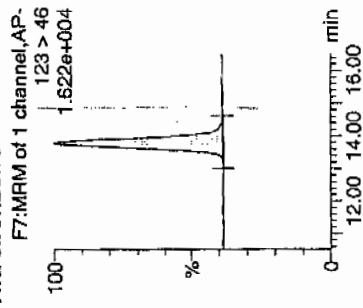
24511400208 / 21

944250 / 80222

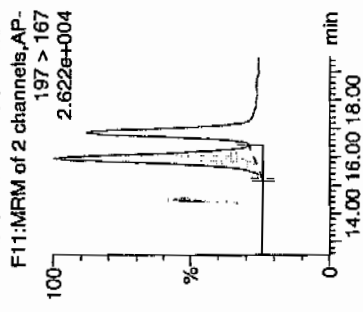
RMX



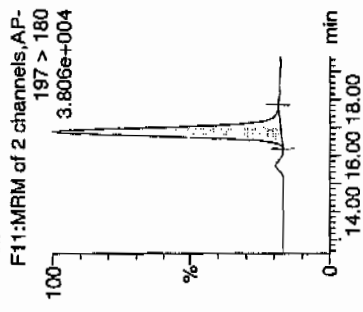
Nitrobenzene



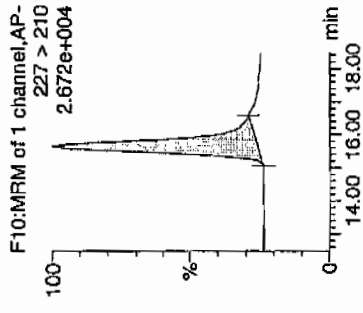
4-Amino-26-dinitrotoluene



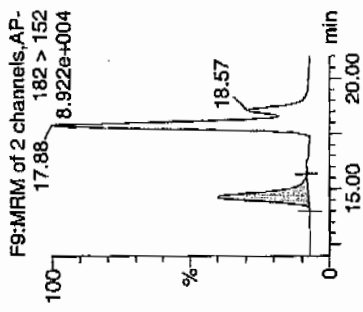
2-Amino-46-dinitrotoluene



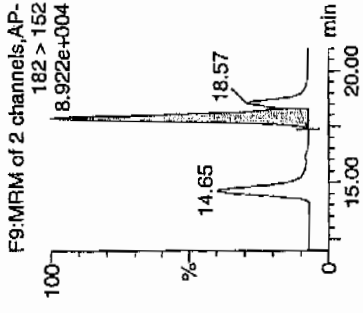
246-Trinitrotoluene



34-dinitrotoluene

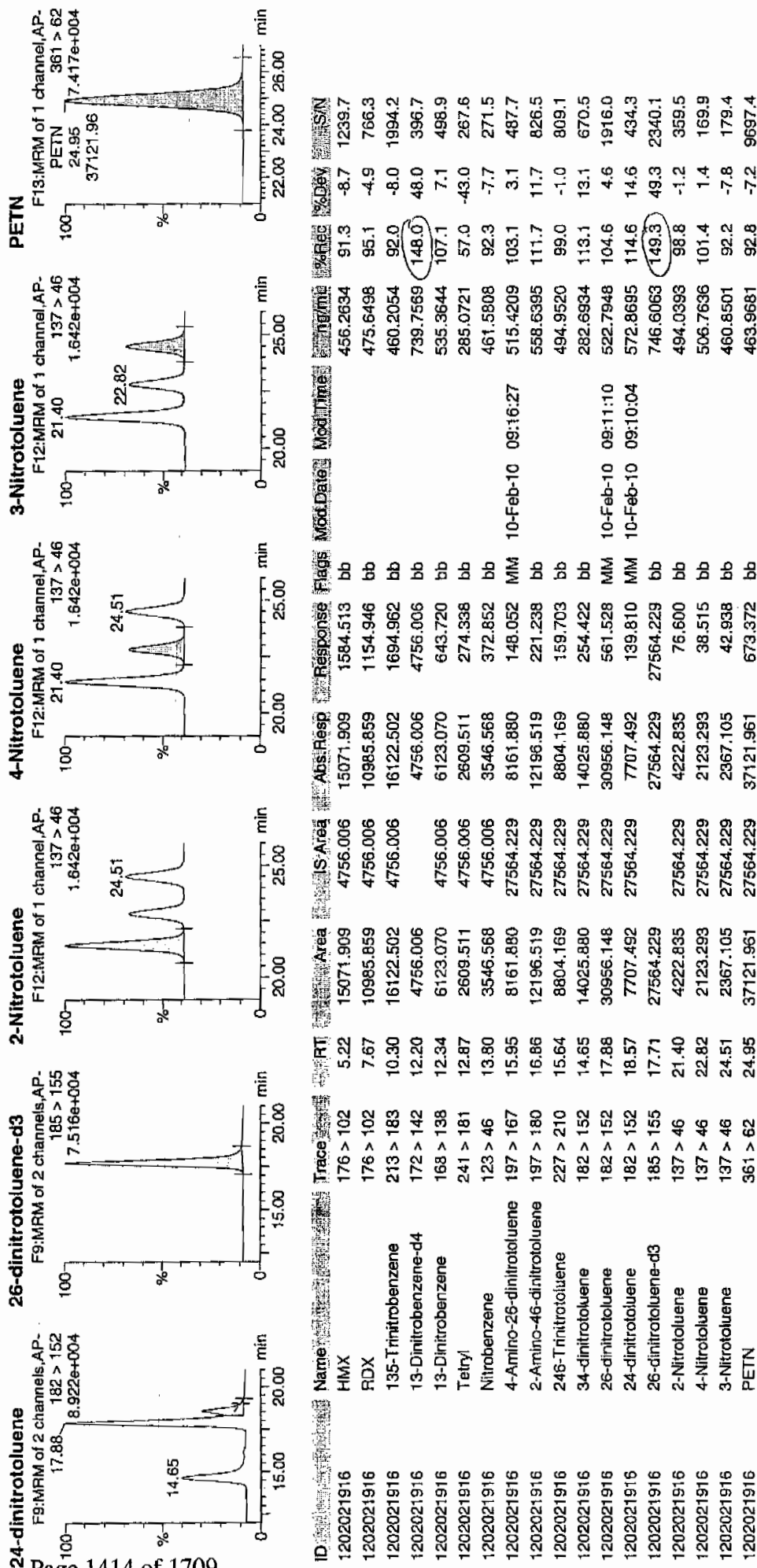


26-dinitrotoluene



Amc 52/10/10

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8410(245114002MS)

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 1202021916

Sample Amount 2

Moisture: 24.9

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100017.wiff

Date Analyzed: 10-FEB-10 12:38

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 5710           |   |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 4490           |   |
| 618-87-1   | 3,5-Dinitroaniline         | 5190           |   |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 2870           |   |
| 78-30-8    | tris(o-cresyl) phosphate   | 5370           |   |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Sample Name: "1202021916" Sample ID: "94425021LER" File: "XS02100017.will"

Folk Name: 35-DIMORPHUM MASS.  
Comment: "LCX83212S" Annotation:

|                  |             |
|------------------|-------------|
| Sample Index:    | 1           |
| Sample Type:     | Unknown:    |
| Concentration:   | N/A         |
| Calculated Conc: | 582. ng/mL  |
| Acq. Date:       | 2/10/2010   |
| Acq. Time:       | 12:38:40 PM |

```

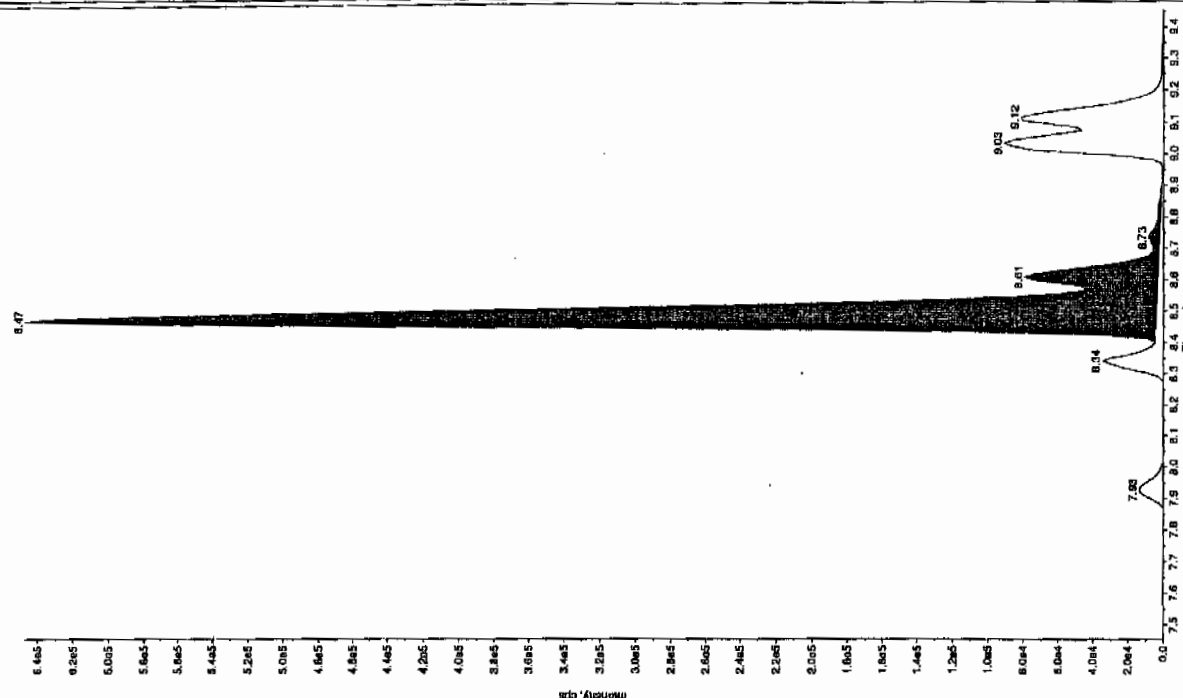
modified: No
Proc. Algorithm: IntelliQuan - IQA
Win. Peak Height: 200.00 cps
n. Peak Width: 0.00 sec
smoothing Width: 3 points
r Window: 15.0 sec
Expected RT: 8.45 min
se Relative RT: No

```

```

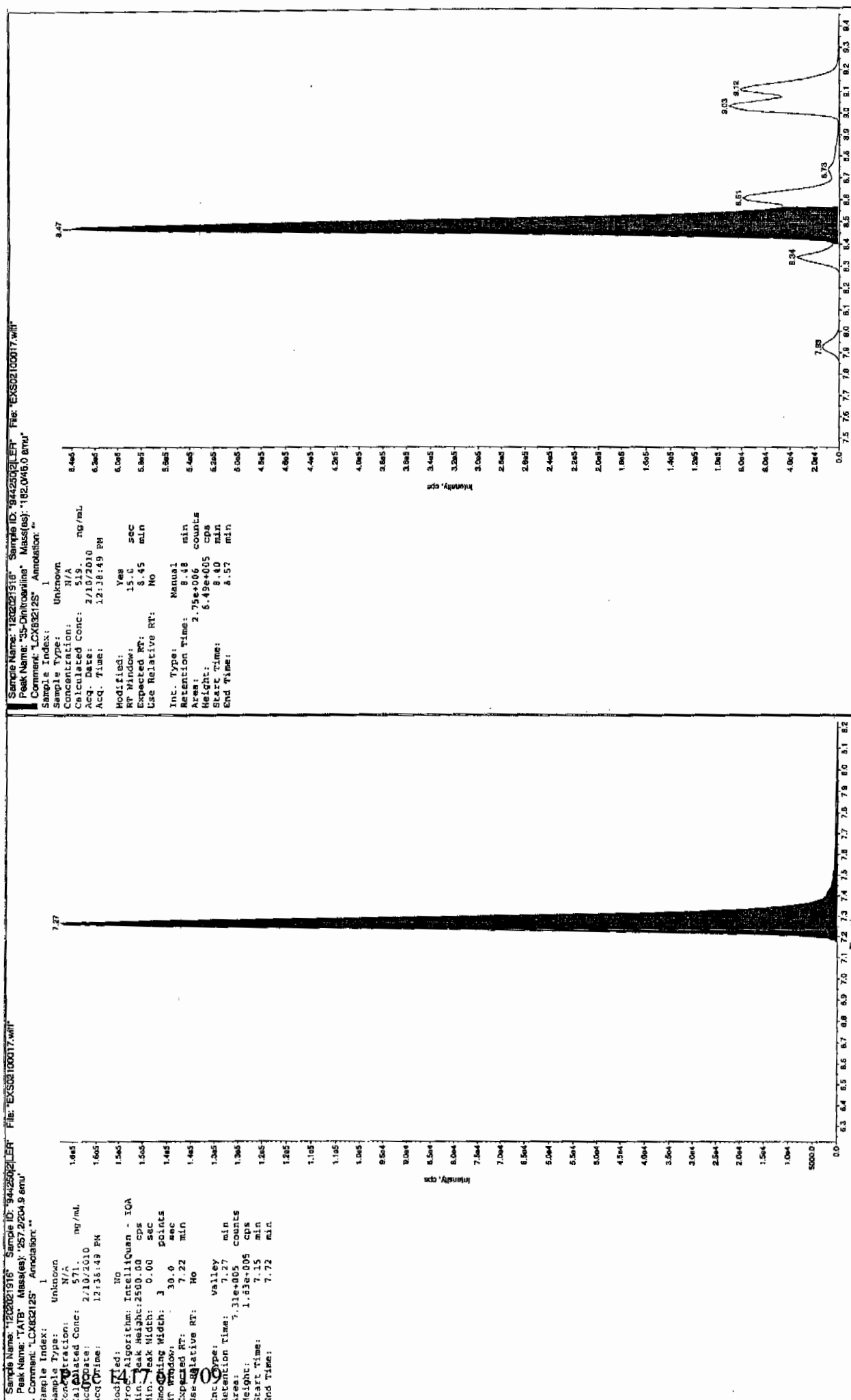
ent. Type: Valley
Retention Time: 8.47 min counts
Area: 3.08e+006 cps
Height: 6.43e+005 cps
Start Time: 8.40 min
End Time: 8.92 min

```



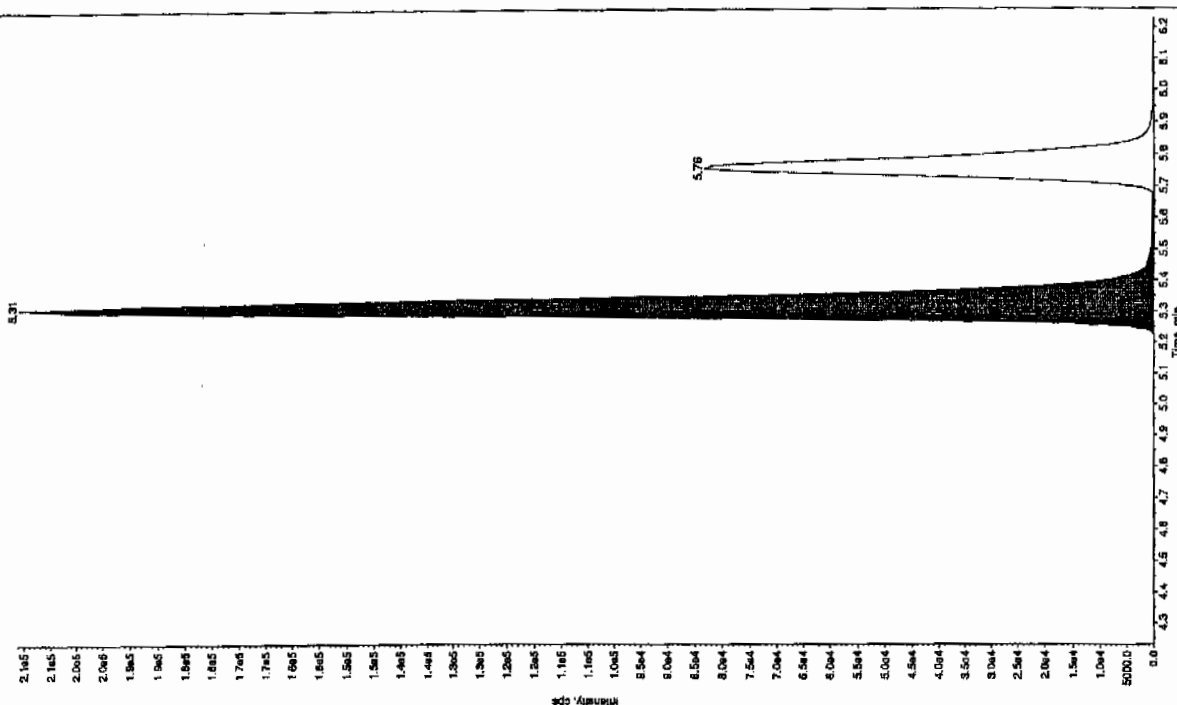
Thurs. 02 July

after Scan 21110



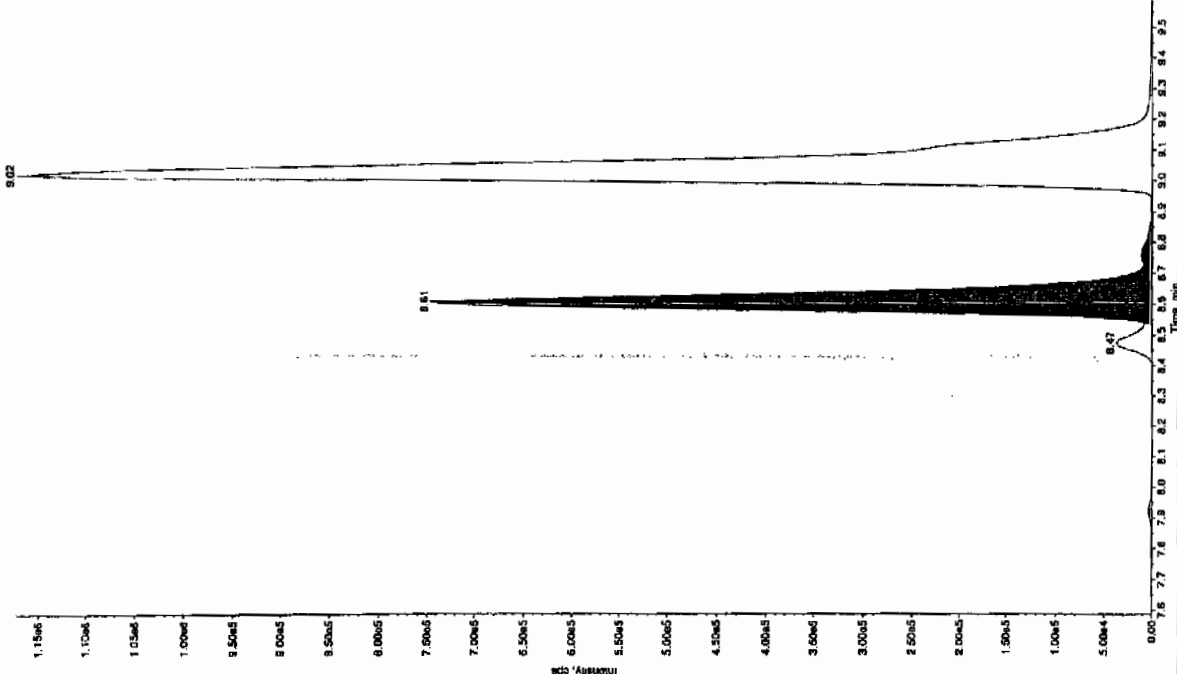
Sample Name: "1202021916" Sample ID: "94425021916" File: "EX02100017.will"  
 Peak Name: "26-Dimetho-4-nitrofluene" Mass(es): "162.046.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 499 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 12:38:49 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.23 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.31 min  
 Area: 8.78e+005 counts  
 Height: 2.11e+005 cps  
 Start Time: 5.21 min  
 End Time: 5.60 min



Sample Name: "1202021916" Sample ID: "94425021916" File: "EX02100017.will"  
 Peak Name: "34-Dimetho-4-nitrofluene" Mass(es): "162.046.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 309 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 12:38:49 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.59 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.61 min  
 Area: 2.95e+006 counts  
 Height: 7.44e+005 cps  
 Start Time: 8.54 min  
 End Time: 8.85 min





Sample Name: "1202021916" Sample ID: "94425021" File: "EXS02100017.wif"

Peak Name: "bis(O-cresyl) phosphate" Mass(es): "389.191.0 amu"

Comment: "LCX832125" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: N/A

Calculated Conc: 537. ng/mL

Acq. Date: 2/10/2010

Acq. Time: 12:18:49 PM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 1.00e4 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 11.1 min

Use Relative RT: No

Int. Type: Valley

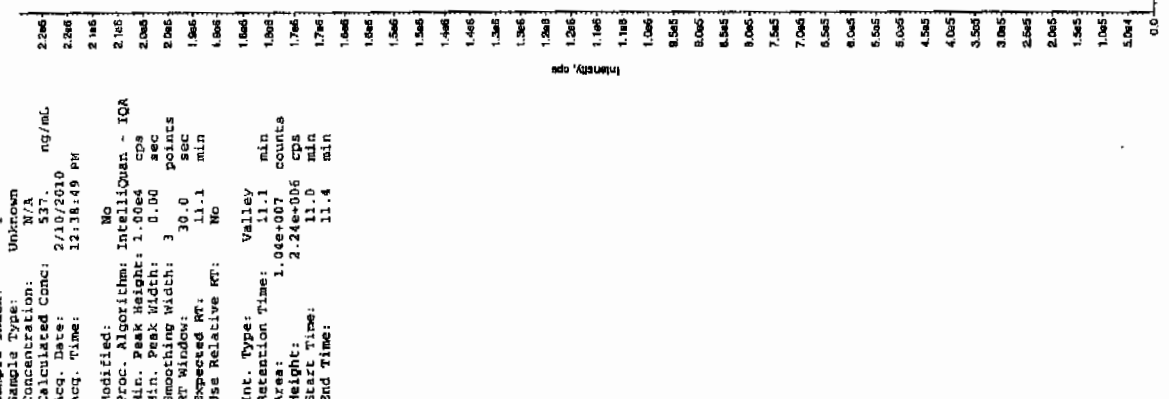
Retention Time: 11.1 min

Area: 1.00e+007 counts

Height: 2.24e+006 cps

Start Time: 11.0 min

End Time: 11.4 min



Sample Name: "24-Dienne-5-nitrodiene" Sample ID: "94425021" File: "EXS02100017.wif"

Peak Name: "24-Dienne-5-nitrodiene" Mass(es): "166.046.0 amu"

Comment: "LCX832125" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: N/A

Calculated Conc: 287. ng/mL

Acq. Date: 2/10/2010

Acq. Time: 12:33:49 PM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 350.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 30.0 points

RT Window: 5.69 min

Expected RT: No

Use Relative RT: No

Int. Type: Valley

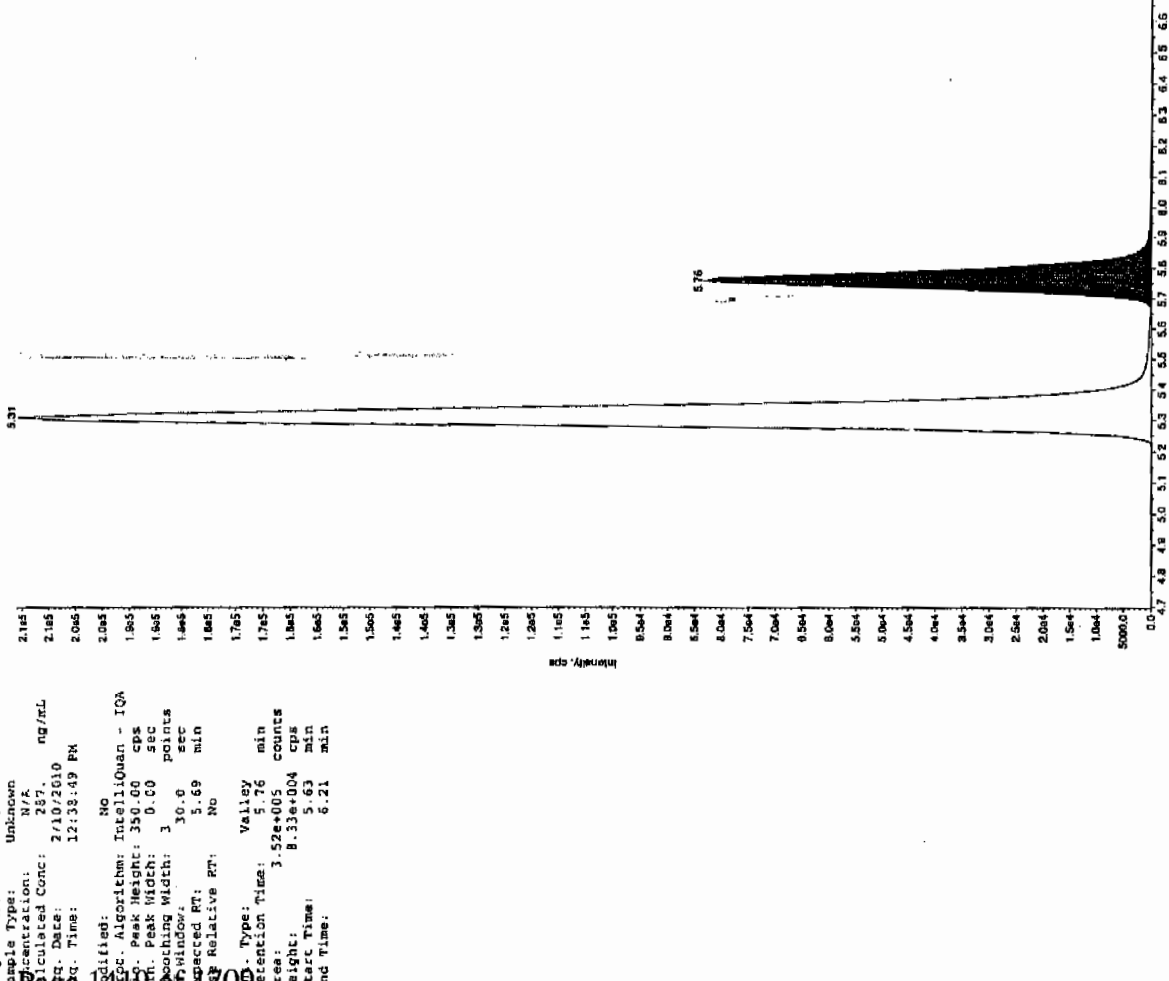
Retention Time: 5.26 min

Area: 3.52e+005 counts

Height: 8.33e+004 cps

Start Time: 5.03 min

End Time: 5.21 min



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8410(245114002MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 1202021917

Sample Amount 2

Moisture: 24.9

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208043a

Date Analyzed: 09-FEB-10 11:23

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 118-96-7   | 2,4,6-Trinitrotoluene      | 4600           |   |
| 121-14-2   | 2,4-Dinitrotoluene         | 5620           |   |
| 121-82-4   | RDX                        | 4710           |   |
| 19406-51-0 | 4-Amino-2,6-dinitrotoluene | 5060           |   |
| 2691-41-0  | HMX                        | 4340           |   |
| 35572-78-2 | 2-Amino-4,6-dinitrotoluene | 5250           |   |
| 479-45-8   | Tetryl                     | 2160           |   |
| 606-20-2   | 2,6-Dinitrotoluene         | 5220           |   |
| 78-11-5    | PETN                       | 4560           |   |
| 88-72-2    | o-Nitrotoluene             | 4640           |   |
| 98-95-3    | Nitrobenzene               | 4370           |   |
| 99-08-1    | m-Nitrotoluene             | 4500           |   |
| 99-35-4    | 1,3,5-Trinitrobenzene      | 4350           |   |
| 99-65-0    | m-Dinitrobenzene           | 5230           |   |
| 99-99-0    | p-Nitrotoluene             | 4860           |   |

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Dataset: C:\MASSLYNX\New\_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0208043a

Date: 09-Feb-2010

Time: 11:23:51

ID: 1202021917

Val: 2:1,E

1077

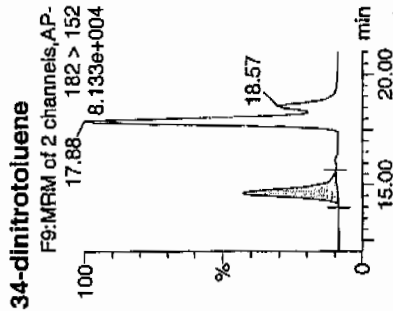
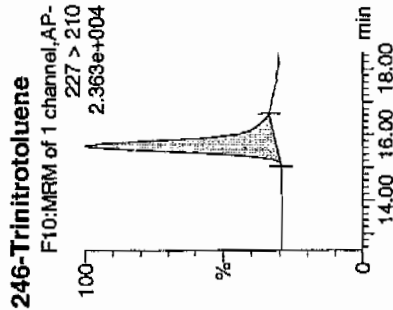
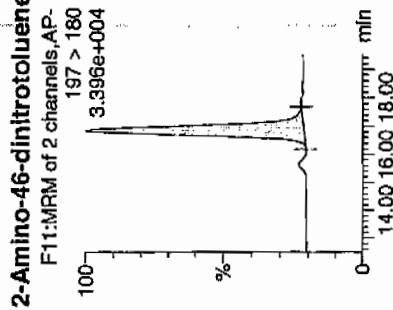
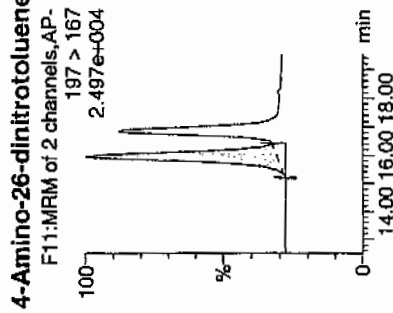
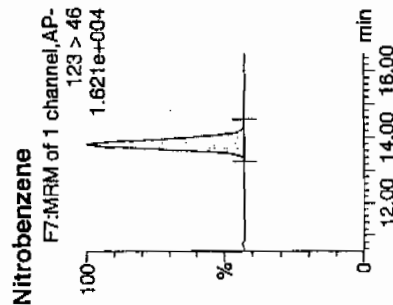
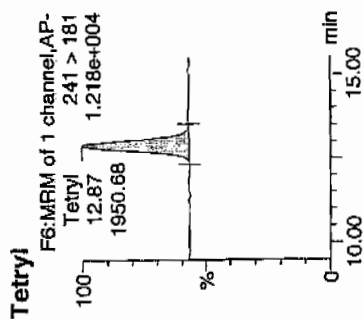
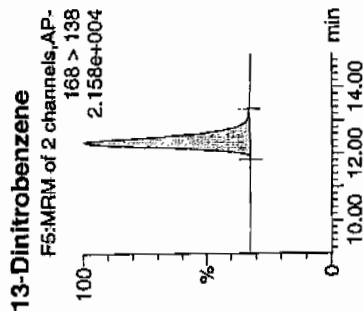
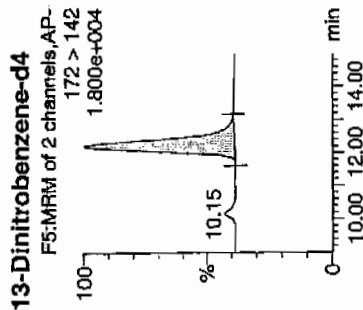
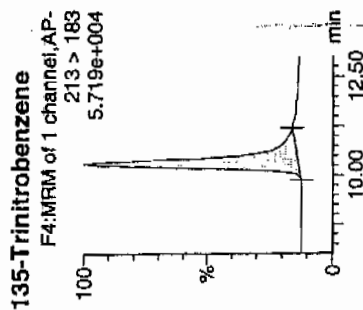
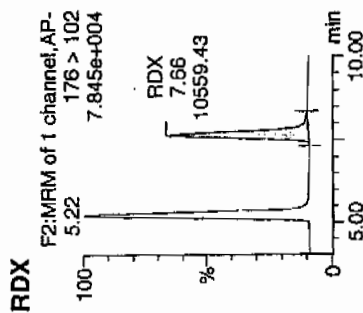
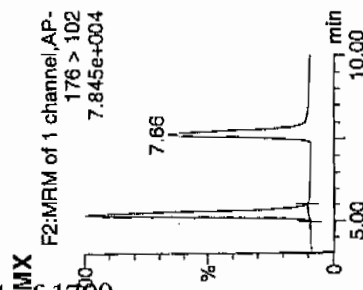
2/10/10

24511402-MSD / 2-1

AB8

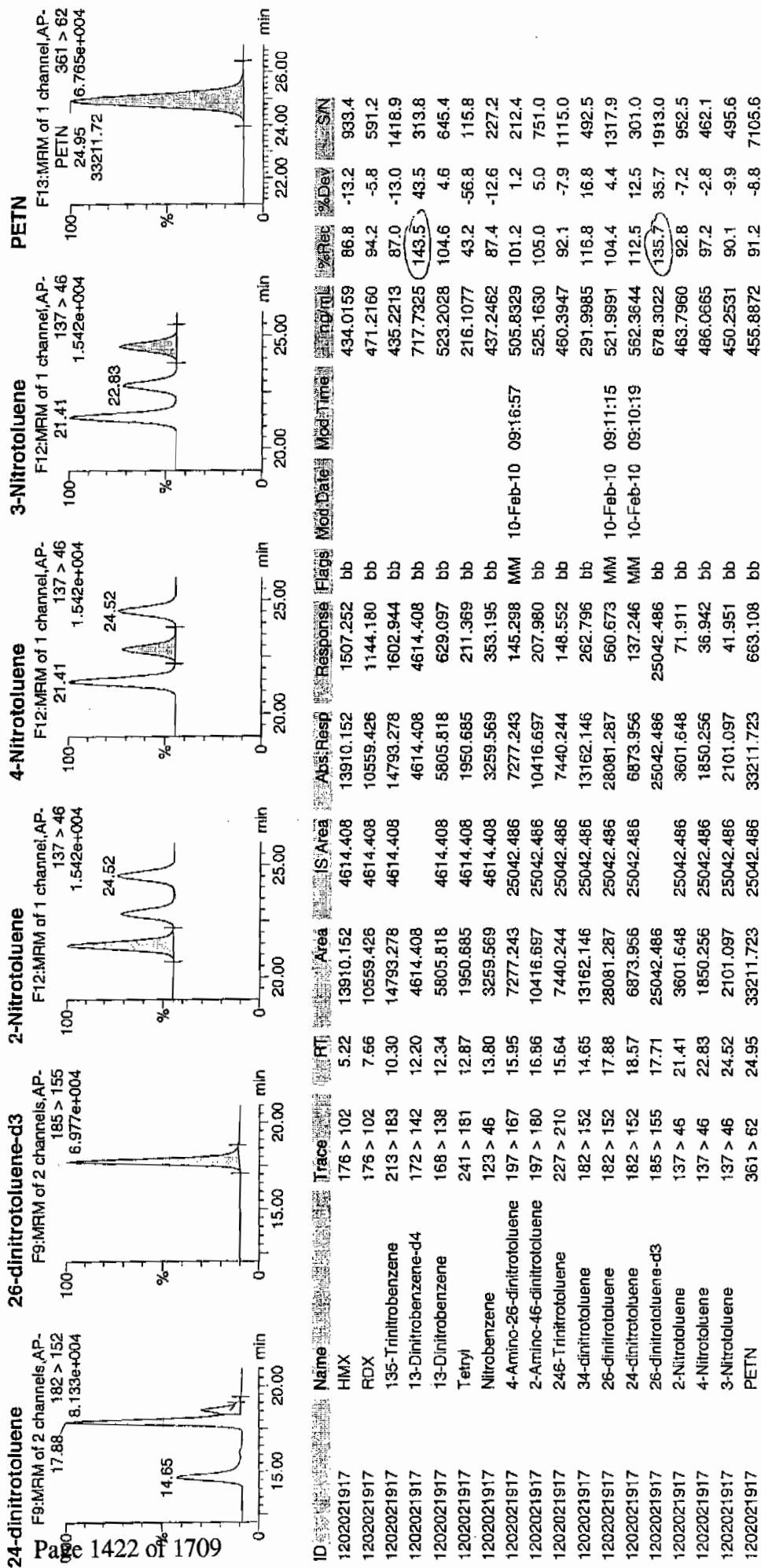
QC by EXP0208042a (ms)

BMX  
F1709



Time 02/10/10

Dataset: C:\MASSLYNX\New\_Exp\_PROV020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8410(245114002MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1324

Matrix: SOIL

GEL Sample ID: 1202021917

Sample Amount 2

Moisture: 24.9

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944249

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02100018.wiff

Date Analyzed: 10-FEB-10 12:54

Units: ug/kg

| Cas No.    | Compound                   | Concentration* | Q |
|------------|----------------------------|----------------|---|
| 3058-38-6  | TATB                       | 5980           |   |
| 59229-75-3 | 2,6-Diamino-4-nitrotoluene | 4660           |   |
| 618-87-1   | 3,5-Dinitroaniline         | 5130           |   |
| 6629-29-4  | 2,4-Diamino-6-nitrotoluene | 3150           |   |
| 78-30-8    | tris(o-cresyl) phosphate   | 5380           |   |

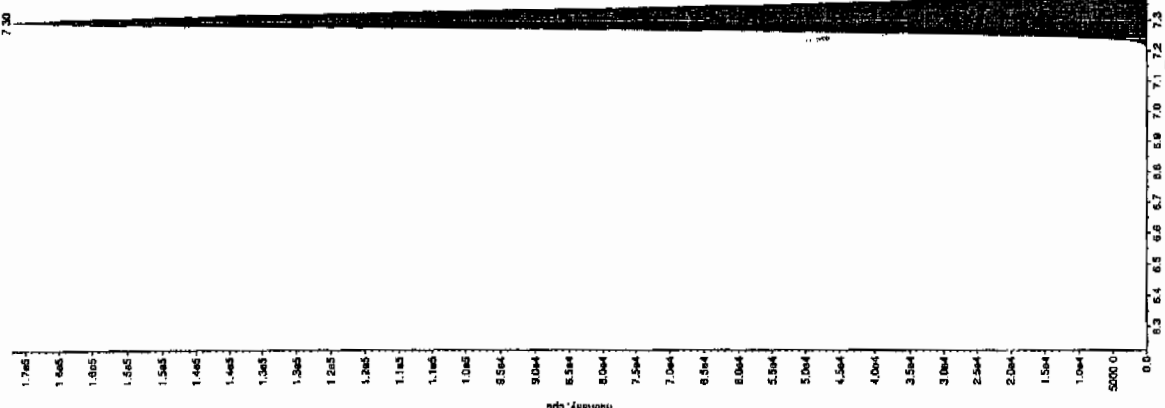
\*Concentration =

|                  |   |   |   |                 |
|------------------|---|---|---|-----------------|
| Instrument Value | X | $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ | X | Dilution Factor |
|------------------|---|---|---|-----------------|

Bifene Jan 21/11/10

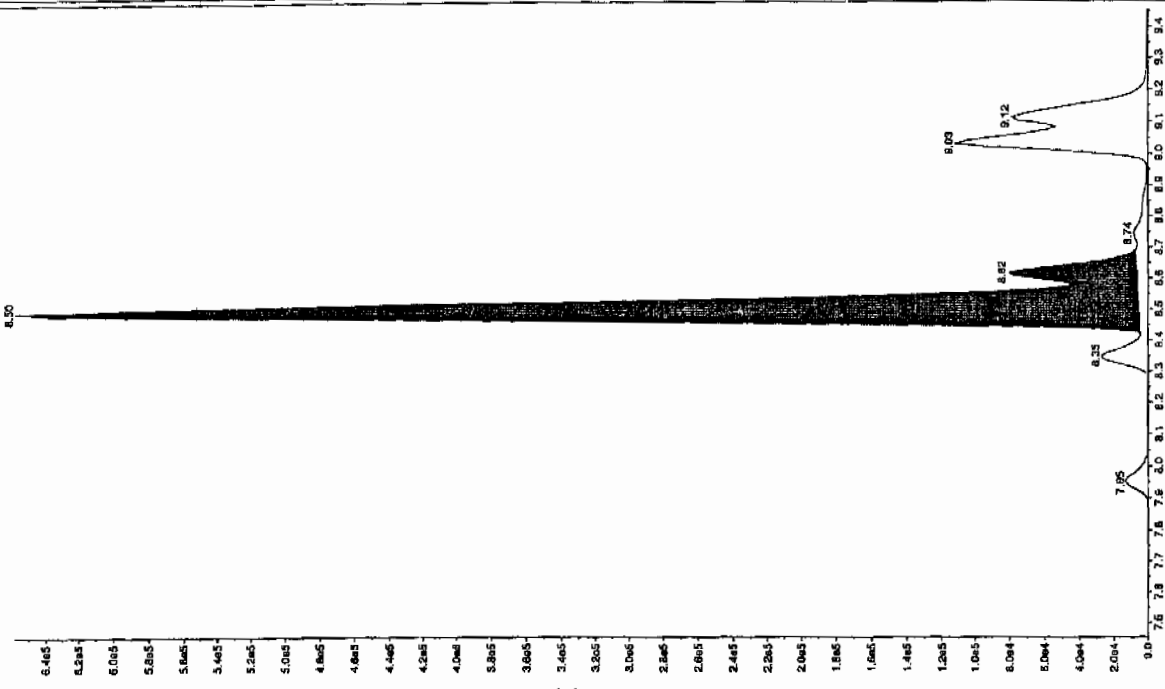
Sample Name: "1202021917" Sample ID: "944250JELER" File: "EX502100018.wif"  
 Peak Name: "TATB" Mass(es): "257.2/204.9 amu"  
 Comment: "LCX632125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 595. ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 12:54:29 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 2500.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 39.0 sec  
 Expected RT: 7.22 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 7.30 min  
 Area: 7.66e+005 counts  
 Height: 1.67e+005 cps  
 Start Time: 7.18 min  
 End Time: 7.35 min



Sample Name: "1202021917" Sample ID: "944250JELER" File: "EX502100018.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCX632125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 559. ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 12:54:29 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 2000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.45 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.50 min  
 Area: 3.96e+006 counts  
 Height: 6.53e+005 cps  
 Start Time: 8.41 min  
 End Time: 8.69 min

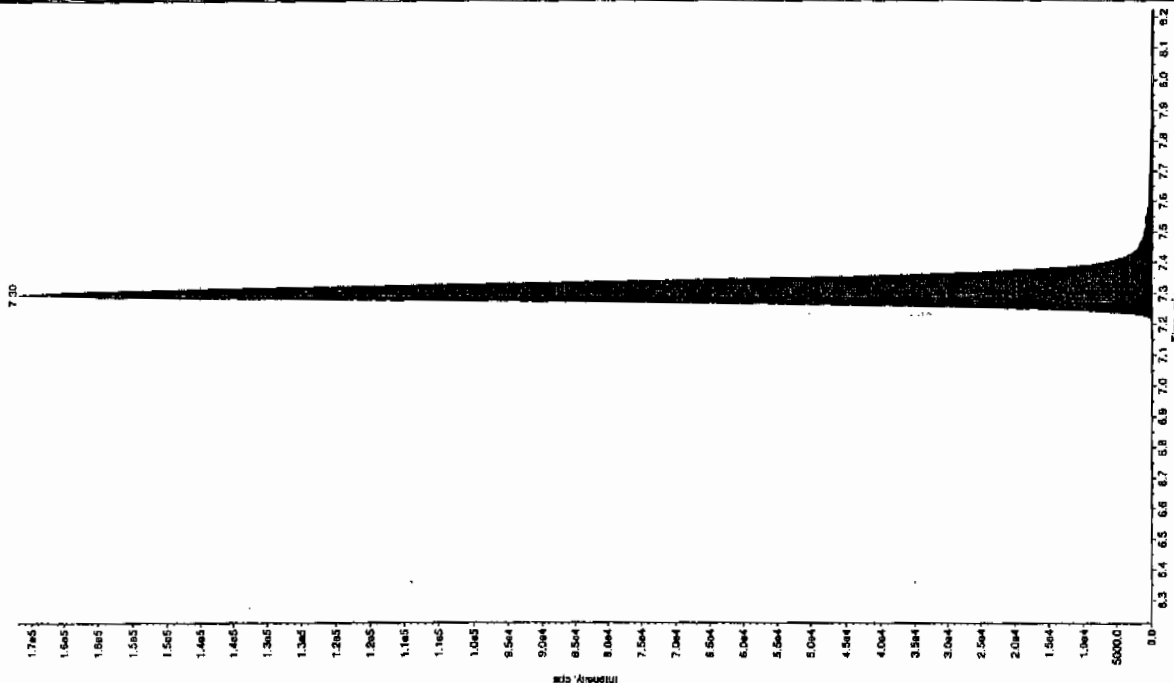


Hyw 22/11/10

after Jan 2010

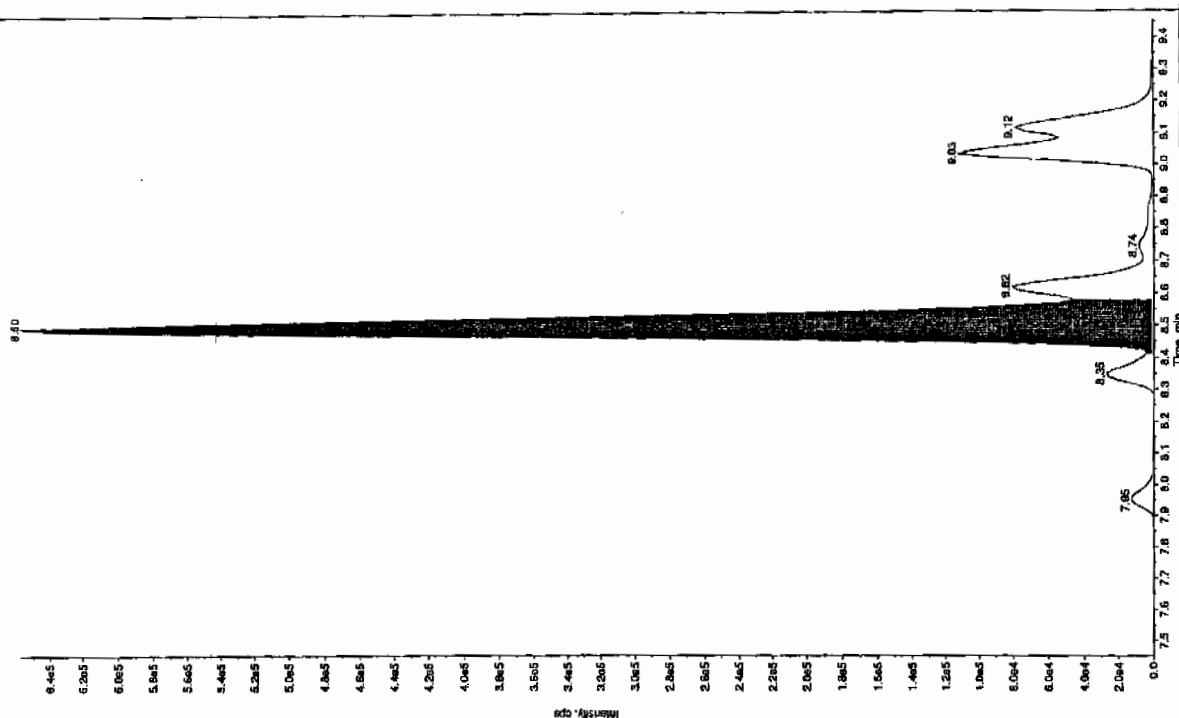
Sample Name: "120221917" Sample ID: "94425021ER" File: "EXS02100018.wif"  
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"  
Comment: "LCX832125" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 2/10/2010 ng/mL  
Acq. Date: 2/10/2010  
Acq. Time: 12:54:23 PM  
Modified: No  
Int. Type: Manual  
Retention Time: 7.30 min  
Peak Height: 2500.00 cps  
Peak Width: 0.00 sec  
Smoothing Width: 30.0 points  
Peak Area: 30.0  
Peak RT: 7.22 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 7.30 min  
Peak Height: 7.66e+003 counts  
Peak Area: 1.67e+005 cps  
Start Time: 7.18 min  
End Time: 7.36 min



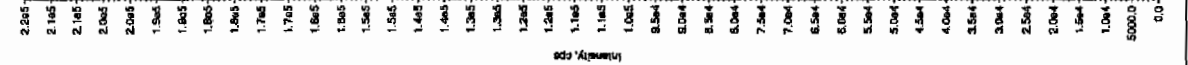
Sample Name: "120221917" Sample ID: "94425021ER" File: "EXS02100018.wif"  
Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
Comment: "LCX832125" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 2/10/2010 ng/mL  
Acq. Date: 2/10/2010  
Acq. Time: 12:54:23 PM  
Modified: Yes  
Int. Type: Manual  
Retention Time: 8.41 min  
Peak Height: 6.62e+005 counts  
Peak Area: 8.41 min  
Start Time: 8.41 min  
End Time: 8.58 min



Sample Name: "1202021917" Sample ID: "94425021917" File: "EX502100018.wif"  
 Peak Name: "3a-Dinitrobenzene" Mass(es): "182.1151.9 amu"  
 Comment: "LCX83212S" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 466. ng/mL  
 Calculated Conc: 2/10/2010  
 Acq. Date: 12:54:29 PM  
 Acq. Time: 12:54:29 PM  
 Modified: NO  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.03 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.23 min  
 Use Relative RT: NO  
 Int. Type: Valley  
 Retention Time: 5.39 min  
 Area: 9.13e+005 counts  
 Height: 2.15e+005 cps  
 Start Time: 5.24 min  
 End Time: 5.67 min



Sample Name: "1202021917" Sample ID: "94425021917" File: "EX502100018.wif"  
 Peak Name: "3a-Dinitrobenzene" Mass(es): "182.1151.9 amu"  
 Comment: "LCX83212S" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 300. ng/mL  
 Calculated Conc: 2/10/2010  
 Acq. Date: 12:54:29 PM  
 Acq. Time: 12:54:29 PM  
 Modified: NO  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.03 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.59 min  
 Use Relative RT: NO  
 Int. Type: Valley  
 Retention Time: 8.61 min  
 Area: 2.87e+006 counts  
 Height: 7.19e+005 cps  
 Start Time: 8.54 min  
 End Time: 8.84 min





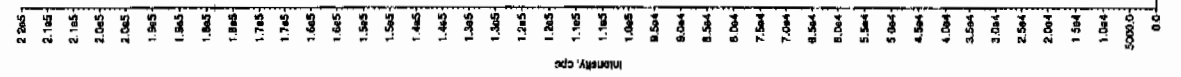
Sample Name: 1202021917 Sample ID: 94425021.177 File: EX502100018.wif  
 Peak Name: 24-Diamino-Enitrolidene Mass(es): 168.046.0 b/mu  
 Comment: LCX832125 Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 518 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 12:54:29 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 11.1 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 11.1 min  
 Peak Height: 1.04e+007 counts  
 Peak Width: 2.39e+006 cps  
 Start Time: 10.9 min  
 End Time: 11.3 min



Sample Name: 1202021917 Sample ID: 94425021.177 File: EX502100018.wif  
 Peak Name: 24-Diamino-Enitrolidene Mass(es): 168.046.0 b/mu  
 Comment: LCX832125 Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 315 ng/mL  
 Acq. Date: 2/10/2010  
 Acq. Time: 12:54:29 PM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.84 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.84 min  
 Peak Height: 1.88e+005 counts  
 Peak Width: 8.94e+004 cps  
 Start Time: 5.75 min  
 End Time: 5.91 min



# MISCELLANEOUS DATA

ANALYTICAL LOGBOOK

# Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)

Batch ID: 944249  
 Analyst: Sirena White  
 Method: SW846 8330 PREP

Lab SOP: GL-OA-E-033 REV# 17  
 Instrument: Semi-Volatiles Manual

Verified by:

| Sample ID                  | Run Date             | Aliquot (g) | Prepped Aliquot (mL) | Prepped Factor (mL/g) | Type | Sample Id  | Description                           | Serial Number  | Spike Amt | Units | Comments:          |
|----------------------------|----------------------|-------------|----------------------|-----------------------|------|------------|---------------------------------------|----------------|-----------|-------|--------------------|
| 1202021914 MB              | 26-JAN-2010 13:36:00 | 2           | 10                   | 5                     | LCS  | 1202021915 | 8321 Explosives LCS                   | IXX100125-03   | .1        | mL    | Final Solvent: ACN |
| 1202021915 LCS             | 26-JAN-2010 13:36:00 | 2           | 10                   | 5                     | LCS  | 1202021915 | 8321 LANL Explosives Mix 10mg/L       | UXX100108-01.2 | 1         | mL    |                    |
| 245114002                  | 26-JAN-2010 13:36:00 | 2           | 10                   | 5                     | MS   | 1202021916 | 8321 Explosives LCS                   | IXX100125-03   | .1        | mL    |                    |
| 1202021916 MS (245114002)  | 26-JAN-2010 13:36:00 | 2           | 10                   | 5                     | MS   | 1202021916 | 8321 LANL Explosives Mix 10mg/L       | UXX100108-01.2 | 1         | mL    |                    |
| 1202021917 MSD (245114002) | 26-JAN-2010 13:36:00 | 2           | 10                   | 5                     | MSD  | 1202021917 | 8321 Explosives LCS                   | IXX100125-03   | .1        | mL    |                    |
| 245114003                  | 26-JAN-2010 13:36:00 | 2           | 10                   | 5                     | MSD  | 1202021917 | 8321 LANL Explosives Mix 10mg/L       | UXX100108-01.2 | 1         | mL    |                    |
| 245114004                  | 26-JAN-2010 13:36:00 | 2           | 10                   | 5                     | SURR | All        | 3,4-Dinitrotoluene (8330 Sur.) 100ppm | DXP100121-02   | .05       | mL    |                    |
| 245114005                  | 26-JAN-2010 13:36:00 | 2           | 10                   | 5                     |      |            |                                       |                |           |       |                    |
| 245114006                  | 26-JAN-2010 13:36:00 | 2           | 10                   | 5                     |      |            |                                       |                |           |       |                    |
| 245114007                  | 26-JAN-2010 13:36:00 | 2           | 10                   | 5                     |      |            |                                       |                |           |       |                    |
| 245114008                  | 26-JAN-2010 13:36:00 | 2           | 10                   | 5                     |      |            |                                       |                |           |       |                    |
| 245114009                  | 26-JAN-2010 13:36:00 | 2           | 10                   | 5                     |      |            |                                       |                |           |       |                    |
| 245114010                  | 26-JAN-2010 13:36:00 | 2           | 10                   | 5                     |      |            |                                       |                |           |       |                    |
| 245114011                  | 26-JAN-2010 13:36:00 | 2           | 10                   | 5                     |      |            |                                       |                |           |       |                    |
| 245114012                  | 26-JAN-2010 13:36:00 | 2           | 10                   | 5                     |      |            |                                       |                |           |       |                    |
| 245114013                  | 26-JAN-2010 13:36:00 | 2           | 10                   | 5                     |      |            |                                       |                |           |       |                    |
| 245114014                  | 26-JAN-2010 13:36:00 | 2           | 10                   | 5                     |      |            |                                       |                |           |       |                    |
| 245114015                  | 26-JAN-2010 13:36:00 | 2           | 10                   | 5                     |      |            |                                       |                |           |       |                    |

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS #1

Date: 02/08/10

Method: SW846 8321A-Modified

Extr. Injection Volume: 50uL

Int. Std.: UXX100128-01.1

Sequence Number: 020810expA

Mobile Phase Lot#: 1265885, 1250738

Initial Calibration Date: 02/08/10

Standard-Samp Reagent Lot#: 1260901, 1246195

Reviewed BY: *hmm*

Date: 02/10/10

SOP: GL-OA-E-056 Rev.12

Alt Check Std. ID: WXX100208-07

| DataFile    | Sample     | Analyst | Injection Date | Batch  | SDG     | Dilution | Client | Comments | QC_Flag |
|-------------|------------|---------|----------------|--------|---------|----------|--------|----------|---------|
| EXP0208001a | XIBLK01    | MAP     | 2/8/10 14:44   |        |         | 1        |        | USE      | B       |
| EXP0208002a | XIBLK01    | MAP     | 2/8/10 15:13   |        |         | 1        |        | USE      | B       |
| EXP0208003a | WXXICAL-01 | MAP     | 2/8/10 15:43   |        |         | 1        |        | USE      | I       |
| EXP0208004a | WXXICAL-02 | MAP     | 2/8/10 16:12   |        |         | 1        |        | USE      | I       |
| EXP0208005a | WXXICAL-03 | MAP     | 2/8/10 16:42   |        |         | 1        |        | USE      | I       |
| EXP0208006a | WXXICAL-04 | MAP     | 2/8/10 17:11   |        |         | 1        |        | USE      | I       |
| EXP0208007a | WXXICAL-05 | MAP     | 2/8/10 17:41   |        |         | 1        |        | USE      | I       |
| EXP0208008a | WXXICAL-06 | MAP     | 2/8/10 18:11   |        |         | 1        |        | USE      | I       |
| EXP0208009a | XIBLK02    | MAP     | 2/8/10 18:40   |        |         | 1        |        | USE      | B       |
| EXP0208010a | WXXICV     | MAP     | 2/8/10 19:10   |        |         | 1        |        | USE      | C       |
| EXP0208011a | XIBLK03    | MAP     | 2/8/10 19:39   |        |         | 1        |        | USE      | B       |
| EXP0208012a | WXXCRI     | MAP     | 2/8/10 20:09   |        |         | 1        |        | USE      | C       |
| EXP0208013a | 1202021906 | MAP     | 2/8/10 20:38   | 944246 | 10-1304 | 2        | LANL   | DUSE-RA  | S       |
| EXP0208014a | 1202021907 | MAP     | 2/8/10 21:08   | 944246 | 10-1304 | 2        | LANL   | DUSE-RA  | S       |
| EXP0208015a | 245106001  | MAP     | 2/8/10 21:37   | 944246 | 10-1304 | 2        | LANL   | USE      | S       |
| EXP0208016a | 1202021908 | MAP     | 2/8/10 22:07   | 944246 | 10-1304 | 2        | LANL   | USE      | S       |
| EXP0208017a | 1202021909 | MAP     | 2/8/10 22:36   | 944246 | 10-1304 | 2        | LANL   | USE      | S       |
| EXP0208018a | 245106002  | MAP     | 2/8/10 23:05   | 944246 | 10-1304 | 2        | LANL   | USE      | S       |
| EXP0208019a | 245106003  | MAP     | 2/8/10 23:35   | 944246 | 10-1304 | 2        | LANL   | USE      | S       |
| EXP0208020a | 245106004  | MAP     | 2/9/10 0:04    | 944246 | 10-1304 | 2        | LANL   | USE      | S       |
| EXP0208021a | 245106005  | MAP     | 2/9/10 0:34    | 944246 | 10-1304 | 2        | LANL   | USE      | S       |
| EXP0208022a | 245106006  | MAP     | 2/9/10 1:03    | 944246 | 10-1304 | 2        | LANL   | USE      | S       |
| EXP0208023a | WXXCCV     | MAP     | 2/9/10 1:33    |        |         | 1        |        | USE      | C       |
| EXP0208024a | XIBLK04    | MAP     | 2/9/10 2:02    |        |         | 1        |        | USE      | B       |
| EXP0208025a | WXXCRI     | MAP     | 2/9/10 2:32    |        |         | 1        |        | USE      | C       |
| EXP0208026a | 245106007  | MAP     | 2/9/10 3:01    | 944246 | 10-1304 | 2        | LANL   | USE      | S       |
| EXP0208027a | 245106008  | MAP     | 2/9/10 3:31    | 944246 | 10-1304 | 2        | LANL   | USE      | S       |
| EXP0208028a | 245106009  | MAP     | 2/9/10 4:00    | 944246 | 10-1304 | 2        | LANL   | USE      | S       |
| EXP0208029a | 245106010  | MAP     | 2/9/10 4:30    | 944246 | 10-1304 | 2        | LANL   | USE      | S       |

|             |            |     |              |        |         |   |      |     |   |
|-------------|------------|-----|--------------|--------|---------|---|------|-----|---|
| EXP0208030a | 245106011  | MAP | 2/9/10 4:59  | 944246 | 10-1304 | 2 | LANL | USE | S |
| EXP0208031a | 245106012  | MAP | 2/9/10 5:29  | 944246 | 10-1304 | 2 | LANL | USE | S |
| EXP0208032a | 245106013  | MAP | 2/9/10 5:58  | 944246 | 10-1304 | 2 | LANL | USE | S |
| EXP0208033a | 245106014  | MAP | 2/9/10 6:28  | 944246 | 10-1304 | 2 | LANL | USE | S |
| EXP0208034a | 245106015  | MAP | 2/9/10 6:58  | 944246 | 10-1304 | 2 | LANL | USE | S |
| EXP0208035a | 245106016  | MAP | 2/9/10 7:27  | 944246 | 10-1304 | 2 | LANL | USE | S |
| EXP0208036a | WXXCCV     | MAP | 2/9/10 7:57  |        |         | 1 |      | USE | C |
| EXP0208037a | XIBLK05    | MAP | 2/9/10 8:26  |        |         | 1 |      | USE | B |
| EXP0208038a | WXXCRI     | MAP | 2/9/10 8:56  |        |         | 1 |      | USE | C |
| EXP0208039a | 1202021914 | MAP | 2/9/10 9:25  |        |         | 2 | LANL | USE | S |
| EXP0208040a | 1202021915 | MAP | 2/9/10 9:55  | 944250 | 10-1324 | 2 | LANL | USE | S |
| EXP0208041a | 245114002  | MAP | 2/9/10 10:24 | 944250 | 10-1324 | 2 | LANL | USE | S |
| EXP0208042a | 1202021916 | MAP | 2/9/10 10:54 | 944250 | 10-1324 | 2 | LANL | USE | S |
| EXP0208043a | 1202021917 | MAP | 2/9/10 11:23 | 944250 | 10-1324 | 2 | LANL | USE | S |
| EXP0208044a | 245114003  | MAP | 2/9/10 11:53 | 944250 | 10-1324 | 2 | LANL | USE | S |
| EXP0208045a | 245114004  | MAP | 2/9/10 12:22 | 944250 | 10-1324 | 2 | LANL | USE | S |
| EXP0208046a | 245114005  | MAP | 2/9/10 12:52 | 944250 | 10-1324 | 2 | LANL | USE | S |
| EXP0208047a | 245114006  | MAP | 2/9/10 13:21 | 944250 | 10-1324 | 2 | LANL | USE | S |
| EXP0208048a | 245114007  | MAP | 2/9/10 13:51 | 944250 | 10-1324 | 2 | LANL | USE | S |
| EXP0208049a | WXXCCV     | MAP | 2/9/10 14:20 |        |         | 1 |      | USE | C |
| EXP0208050a | XIBLK06    | MAP | 2/9/10 14:50 |        |         | 1 |      | USE | B |
| EXP0208051a | WXXCRI     | MAP | 2/9/10 15:19 |        |         | 1 |      | USE | C |
| EXP0208052a | 245114008  | MAP | 2/9/10 15:49 | 944250 | 10-1324 | 2 | LANL | USE | S |
| EXP0208053a | 245114009  | MAP | 2/9/10 16:18 | 944250 | 10-1324 | 2 | LANL | USE | S |
| EXP0208054a | 245114010  | MAP | 2/9/10 16:48 | 944250 | 10-1324 | 2 | LANL | USE | S |
| EXP0208055a | 245114011  | MAP | 2/9/10 17:17 | 944250 | 10-1324 | 2 | LANL | USE | S |
| EXP0208056a | 245114012  | MAP | 2/9/10 17:47 | 944250 | 10-1324 | 2 | LANL | USE | S |
| EXP0208057a | 245114013  | MAP | 2/9/10 18:16 | 944250 | 10-1324 | 2 | LANL | USE | S |
| EXP0208058a | 245114014  | MAP | 2/9/10 18:46 | 944250 | 10-1324 | 2 | LANL | USE | S |
| EXP0208059a | 245114015  | MAP | 2/9/10 19:15 | 944250 | 10-1324 | 2 | LANL | USE | S |
| EXP0208060a | 1202021906 | MAP | 2/9/10 19:45 | 944246 | 10-1304 | 2 | LANL | USE | S |
| EXP0208061a | 1202021907 | MAP | 2/9/10 20:14 | 944246 | 10-1304 | 2 | LANL | USE | S |
| EXP0208062a | WXXCCV     | MAP | 2/9/10 20:44 |        |         | 1 |      | USE | C |
| EXP0208063a | XIBLK07    | MAP | 2/9/10 21:13 |        |         | 1 |      | USE | B |
| EXP0208064a | WXXCRI     | MAP | 2/9/10 21:43 |        |         | 1 |      | USE | C |
| EXP0208065a | 1202023096 | MAP | 2/9/10 22:12 | 944718 | Various | 2 | LANL | USE | S |
| EXP0208066a | 1202023097 | MAP | 2/9/10 22:42 | 944718 | Various | 2 | LANL | USE | S |

|             |            |     |              |        |         |   |      |         |   |
|-------------|------------|-----|--------------|--------|---------|---|------|---------|---|
| EXP0208067a | 245116001  | MAP | 2/9/10 23:12 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXP0208068a | 1202023098 | MAP | 2/9/10 23:41 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXP0208069a | 1202023099 | MAP | 2/10/10 0:10 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXP0208070a | 245116002  | MAP | 2/10/10 0:40 | 944718 | 10-1327 | 2 | LANL | DUSE-RA | S |
| EXP0208071a | 245116003  | MAP | 2/10/10 1:09 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXP0208072a | 245116004  | MAP | 2/10/10 1:39 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXP0208073a | 245116005  | MAP | 2/10/10 2:08 | 944718 | 10-1327 | 2 | LANL | DUSE-RA | S |
| EXP0208074a | 245116006  | MAP | 2/10/10 2:38 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXP0208075a | WXXCCV     | MAP | 2/10/10 3:07 |        |         | 1 |      | USE     | C |
| EXP0208076a | XIBLK08    | MAP | 2/10/10 3:37 |        |         | 1 |      | USE     | B |
| EXP0208077a | WXXCRI     | MAP | 2/10/10 4:06 |        |         | 1 |      | USE     | C |

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS4

Date: 02/10/10  
 Extr. Injection Volume: 10uL  
 Sequence Number: 021010exs  
 Initial Calibration Date: 021010

Method: 8321A-Modified  
 Int. Std.: N/A  
 Mobile Phase Lot#: 1250738, 1246467  
 Standard-Samp Reagent Lot#: 1246195, 1253092

Reviewed By: *John W.*  
 Date: 02/11/10  
 SOP: GL-OA-E-056 Rev.12  
 Alt Check Std. ID: WXX100210-26

| DataFile         | Sample     | Analyst | Injection Date  | Batch  | SDG     | Dilution | Client | Comments | QC Flag |
|------------------|------------|---------|-----------------|--------|---------|----------|--------|----------|---------|
| EXS02100001.wiff | XIBLK01    | LER     | 2/10/2010 8:27  |        |         | 1        |        | USE      | B       |
| EXS02100002.wiff | XIBLK01    | LER     | 2/10/2010 8:43  |        |         | 1        |        | USE      | B       |
| EXS02100003.wiff | WXXICAL-19 | LER     | 2/10/2010 8:58  |        |         | 1        |        | USE      | I       |
| EXS02100004.wiff | WXXICAL-20 | LER     | 2/10/2010 9:14  |        |         | 1        |        | USE      | I       |
| EXS02100005.wiff | WXXICAL-21 | LER     | 2/10/2010 9:30  |        |         | 1        |        | USE      | I       |
| EXS02100006.wiff | WXXICAL-22 | LER     | 2/10/2010 9:46  |        |         | 1        |        | USE      | I       |
| EXS02100007.wiff | WXXICAL-23 | LER     | 2/10/2010 10:01 |        |         | 1        |        | USE      | I       |
| EXS02100008.wiff | WXXICAL-24 | LER     | 2/10/2010 10:17 |        |         | 1        |        | USE      | I       |
| EXS02100009.wiff | WXXICAL-25 | LER     | 2/10/2010 10:33 |        |         | 1        |        | USE      | I       |
| EXS02100010.wiff | XIBLK02    | LER     | 2/10/2010 10:48 |        |         | 1        |        | USE      | I       |
| EXS02100011.wiff | WXXICV     | LER     | 2/10/2010 11:04 |        |         | 1        |        | USE      | B       |
| EXS02100012.wiff | XIBLK03    | LER     | 2/10/2010 11:20 |        |         | 1        |        | USE      | C       |
| EXS02100013.wiff | WXXCRI     | LER     | 2/10/2010 11:36 |        |         | 1        |        | USE      | B       |
| EXS02100014.wiff | 1202021914 | LER     | 2/10/2010 11:51 | 944250 | 10-1324 | 2        | LANL   | USE      | C       |
| EXS02100015.wiff | 1202021915 | LER     | 2/10/2010 12:07 | 944250 | 10-1324 | 2        | LANL   | USE      | S       |
| EXS02100016.wiff | 245114002  | LER     | 2/10/2010 12:23 | 944250 | 10-1324 | 2        | LANL   | USE      | S       |
| EXS02100017.wiff | 1202021916 | LER     | 2/10/2010 12:38 | 944250 | 10-1324 | 2        | LANL   | USE      | S       |
| EXS02100018.wiff | 1202021917 | LER     | 2/10/2010 12:54 | 944250 | 10-1324 | 2        | LANL   | USE      | S       |
| EXS02100019.wiff | 245114003  | LER     | 2/10/2010 13:10 | 944250 | 10-1324 | 2        | LANL   | USE      | S       |
| EXS02100020.wiff | 245114004  | LER     | 2/10/2010 13:25 | 944250 | 10-1324 | 2        | LANL   | USE      | S       |
| EXS02100021.wiff | 245114005  | LER     | 2/10/2010 13:41 | 944250 | 10-1324 | 2        | LANL   | USE      | S       |
| EXS02100022.wiff | 245114006  | LER     | 2/10/2010 13:57 | 944250 | 10-1324 | 2        | LANL   | USE      | S       |
| EXS02100023.wiff | 245114007  | LER     | 2/10/2010 14:12 | 944250 | 10-1324 | 2        | LANL   | USE      | S       |
| EXS02100024.wiff | WXXCCV     | LER     | 2/10/2010 14:28 |        |         | 1        |        | USE      | C       |
| EXS02100025.wiff | XIBLK04    | LER     | 2/10/2010 14:44 |        |         | 1        |        | USE      | B       |
| EXS02100026.wiff | WXXCRI     | LER     | 2/10/2010 15:00 |        |         | 1        |        | USE      | C       |
| EXS02100027.wiff | 245114008  | LER     | 2/10/2010 15:15 | 944250 | 10-1324 | 2        | LANL   | USE      | S       |
| EXS02100028.wiff | 245114009  | LER     | 2/10/2010 15:31 | 944250 | 10-1324 | 2        | LANL   | USE      | S       |
| EXS02100029.wiff | 245114010  | LER     | 2/10/2010 15:47 | 944250 | 10-1324 | 2        | LANL   | USE      | S       |

|                  |            |     |                 |        |         |   |      |         |   |
|------------------|------------|-----|-----------------|--------|---------|---|------|---------|---|
| EXS02100030.wiff | 245114011  | LER | 2/10/2010 16:02 | 944250 | 10-1324 | 2 | LANL | USE     | S |
| EXS02100031.wiff | 245114012  | LER | 2/10/2010 16:18 | 944250 | 10-1324 | 2 | LANL | USE     | S |
| EXS02100032.wiff | 245114013  | LER | 2/10/2010 16:34 | 944250 | 10-1324 | 2 | LANL | USE     | S |
| EXS02100033.wiff | 245114014  | LER | 2/10/2010 16:50 | 944250 | 10-1324 | 2 | LANL | USE     | S |
| EXS02100034.wiff | 245114015  | LER | 2/10/2010 17:05 | 944250 | 10-1324 | 2 | LANL | USE     | S |
| EXS02100035.wiff | WXXCCV     | LER | 2/10/2010 17:21 |        |         | 1 |      | USE     | C |
| EXS02100036.wiff | XIBLK05    | LER | 2/10/2010 17:37 |        |         | 1 |      | USE     | B |
| EXS02100037.wiff | WXXCRI     | LER | 2/10/2010 17:53 |        |         | 1 |      | USE     | C |
| EXS02100038.wiff | 1202023096 | LER | 2/10/2010 18:08 | 944718 | VARIOUS | 2 | LANL | USE     | S |
| EXS02100039.wiff | 1202023097 | LER | 2/10/2010 18:24 | 944718 | VARIOUS | 2 | LANL | USE     | S |
| EXS02100040.wiff | 245116001  | LER | 2/10/2010 18:40 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXS02100041.wiff | 1202023098 | LER | 2/10/2010 18:55 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXS02100042.wiff | 1202023099 | LER | 2/10/2010 19:11 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXS02100043.wiff | 245116002  | LER | 2/10/2010 19:27 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXS02100044.wiff | 245116003  | LER | 2/10/2010 19:42 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXS02100045.wiff | 245116004  | LER | 2/10/2010 19:58 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXS02100046.wiff | 245116005  | LER | 2/10/2010 20:14 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXS02100047.wiff | 245116006  | LER | 2/10/2010 20:30 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXS02100048.wiff | WXXCCV     | LER | 2/10/2010 20:45 |        |         | 1 |      | USE     | C |
| EXS02100049.wiff | XIBLK06    | LER | 2/10/2010 21:01 |        |         | 1 |      | USE     | B |
| EXS02100050.wiff | WXXCRI     | LER | 2/10/2010 21:17 |        |         | 1 |      | USE     | C |
| EXS02100051.wiff | 245116007  | LER | 2/10/2010 21:32 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXS02100052.wiff | 245116008  | LER | 2/10/2010 21:48 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXS02100053.wiff | 245116009  | LER | 2/10/2010 22:04 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXS02100054.wiff | 245116010  | LER | 2/10/2010 22:20 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXS02100055.wiff | 245116011  | LER | 2/10/2010 22:35 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXS02100056.wiff | 245116012  | LER | 2/10/2010 22:51 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXS02100057.wiff | 245116013  | LER | 2/10/2010 23:07 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXS02100058.wiff | 245116014  | LER | 2/10/2010 23:22 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXS02100059.wiff | 245116015  | LER | 2/10/2010 23:38 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXS02100060.wiff | 245116016  | LER | 2/10/2010 23:54 | 944718 | 10-1327 | 2 | LANL | USE     | S |
| EXS02100061.wiff | WXXCCV     | LER | 2/11/2010 0:10  |        |         | 1 |      | USE     | C |
| EXS02100062.wiff | XIBLK07    | LER | 2/11/2010 0:25  |        |         | 1 |      | USE     | B |
| EXS02100063.wiff | WXXCRI     | LER | 2/11/2010 0:41  |        |         | 1 |      | USE     | C |
| EXS02100064.wiff | 245226001  | LER | 2/11/2010 0:57  | 944718 | 10-1342 | 2 | LANL | DUSE-RA | S |
| EXS02100065.wiff | 245226003  | LER | 2/11/2010 1:12  | 944718 | 10-1342 | 2 | LANL | DUSE-RA | S |
| EXS02100066.wiff | WXXCCV     | LER | 2/11/2010 1:28  |        |         | 1 |      | DUSE-RA | C |



|                 |            |     |                |        |         |  |   |      |         |   |
|-----------------|------------|-----|----------------|--------|---------|--|---|------|---------|---|
| XS02100067.wiff | XIBLK08    | LER | 2/11/2010 1:44 |        |         |  | 1 |      | DUSE-RA | B |
| XS02100068.wiff | WXXCRI     | LER | 2/11/2010 1:59 |        |         |  | 1 |      | DUSE-RA | C |
| XS02100069.wiff | 1202027262 | LER | 2/11/2010 2:15 | 946483 | 10-1408 |  | 2 | LANL | DUSE-RA | S |
| XS02100070.wiff | 1202027263 | LER | 2/11/2010 2:31 | 946483 | 10-1408 |  | 2 | LANL | DUSE-RA | S |
| XS02100071.wiff | 245597002  | LER | 2/11/2010 2:47 | 946483 | 10-1408 |  | 2 | LANL | DUSE-RA | S |
| XS02100072.wiff | 1202027264 | LER | 2/11/2010 3:02 | 946483 | 10-1408 |  | 2 | LANL | DUSE-RA | S |
| XS02100073.wiff | 1202027265 | LER | 2/11/2010 3:18 | 946483 | 10-1408 |  | 2 | LANL | DUSE-RA | S |
| XS02100074.wiff | 245597003  | LER | 2/11/2010 3:34 | 946483 | 10-1408 |  | 2 | LANL | DUSE-RA | S |
| XS02100075.wiff | 245597004  | LER | 2/11/2010 3:49 | 946483 | 10-1408 |  | 2 | LANL | DUSE-RA | S |
| XS02100076.wiff | 245597005  | LER | 2/11/2010 4:05 | 946483 | 10-1408 |  | 2 | LANL | DUSE-RA | S |
| XS02100077.wiff | 245597006  | LER | 2/11/2010 4:21 | 946483 | 10-1408 |  | 2 | LANL | DUSE-RA | S |
| XS02100078.wiff | WXXCCV     | LER | 2/11/2010 4:37 |        |         |  | 1 |      | DUSE-RA | C |
| XS02100079.wiff | XIBLK09    | LER | 2/11/2010 4:52 |        |         |  | 1 |      | DUSE-RA | B |
| XS02100080.wiff | WXXCRI     | LER | 2/11/2010 5:08 |        |         |  | 1 |      | DUSE-RA | C |
| XS02100081.wiff | 245597007  | LER | 2/11/2010 5:24 | 946483 | 10-1408 |  | 2 | LANL | DUSE-RA | S |
| XS02100082.wiff | 245597008  | LER | 2/11/2010 5:39 | 946483 | 10-1408 |  | 2 | LANL | DUSE-RA | S |
| XS02100083.wiff | 245597009  | LER | 2/11/2010 5:55 | 946483 | 10-1408 |  | 2 | LANL | DUSE-RA | S |
| XS02100084.wiff | 245597010  | LER | 2/11/2010 6:11 | 946483 | 10-1408 |  | 2 | LANL | DUSE-RA | S |
| XS02100085.wiff | 245597011  | LER | 2/11/2010 6:26 | 946483 | 10-1408 |  | 2 | LANL | DUSE-RA | S |
| XS02100086.wiff | WXXCCV     | LER | 2/11/2010 6:42 |        |         |  | 1 |      | DUSE-RA | C |
| XS02100087.wiff | XIBLK10    | LER | 2/11/2010 6:58 |        |         |  | 1 |      | DUSE-RA | B |
| XS02100088.wiff | WXXCRI     | LER | 2/11/2010 7:13 |        |         |  | 1 |      | DUSE-RA | C |

GEL Laboratories LLC  
Form GEL-DER

DER Report No.: 789725  
Revision No.: 1

### DATA EXCEPTION REPORT

|  |  |   |                             |
|--|--|---|-----------------------------|
| <b>Mo. Day Yr.</b><br>11-FEB-10  | <b>Division:</b><br>Federal                      | <b>Quality Criteria:</b><br>Specifications                              | <b>Type:</b><br>Process     |
| <b>Instrument Type:</b><br>LC-MS/MS  | <b>Test / Method:</b><br>SW846 8321A Modified    | <b>Matrix Type:</b><br>Solid  | <b>Client Code:</b><br>LANL |
| <b>Batch ID:</b><br>944250   | <b>Sample Numbers:</b><br>1202021916, 1202021917 |   |                             |
| <b>Potentially affected work order(s)(SDG):</b> 245114(10-1324)<br><b>Application Issues:</b><br>Other                             |  |   |                             |
| <b>Specification and Requirements</b>  |  | <b>DER Disposition:</b>   |                             |
| <b>Exception Description:</b>  |  |   |                             |
| 1. QC sample 1202021916(MS) had biased high internal standard recoveries. QC sample 1202021917(MSD) confirmed the high recoveries. |  | 1. Both QC samples had passing spike recoveries. The data are reported. |                             |

**Originator's Name:**  
Lynne Russell      11-FEB-10

**Data Validator/Group Leader:**  
Herbert Maler      11-FEB-10

GC  
SEMIVOLATILE  
PCB  
ANALYSIS

**PCB Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1324**

**Method/Analysis Information**

**Procedure:** Analysis of Polychlorinated Biphenyls by ECD  
**Analytical Method:** SW846 8082  
**Prep Method:** SW846 3550B  
**Analytical Batch Number:** 944883  
**Prep Batch Number:** 944882

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in SW846 8082:

| <b>Sample ID</b> | <b>Client ID</b>                                     |
|------------------|--|
| 245114002        | RE15-10-8410   |
| 245114003        | RE15-10-8411   |
| 245114004        | RE15-10-8412   |
| 245114005        | RE15-10-8441   |
| 245114006        | RE15-10-8413   |
| 1202023521       | Method Blank (MB)                                    |
| 1202023522       | Laboratory Control Sample (LCS)                      |
| 1202023863       | 245114003(RE15-10-8411) Matrix Spike (MS)            |
| 1202023864       | 245114003(RE15-10-8411) 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-040 REV# 14.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

**Calibration Information**

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

**Initial Calibration**

All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

**Continuing Calibration Verification (CCV) Requirements**

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

**Quality Control (QC) Information****Method Blank (MB) Statement**

The MB analyzed with this SDG met the acceptance criteria.

**Surrogate Recoveries**

All surrogate recoveries were within the established acceptance criteria for this SDG.

**Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries met the acceptance limits.

**QC Sample Designation**

Sample 245114003 (RE15-10-8411) was selected for the matrix spike and matrix spike duplicate analysis.

**Matrix Spike (MS) Recovery Statement**

The MS recoveries for this SDG were within the established acceptance limits.

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

The MSD recoveries for this SDG were within the established acceptance limits.

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

The RPD between the MS and MSD met the acceptance limits.

**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.

**Preparation/Analytical Method Verification**

All procedures were performed as stated in the SOP. All sample extracts were cleaned using alumina. Additionally, copper was added to all sample extracts to remove sulfur.

**Sample Dilutions**

The samples in this SDG did not require dilutions.

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

Re-extractions were not required in this SDG.

**Miscellaneous Information****Electronic Package Comment**

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually 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. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. 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 report (DER) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A DER was not required for this SDG.

#### **Manual Integration**

Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

#### **Additional Comments**

The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

#### **System Configuration**

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

| <b>Instrument ID</b> | <b>Instrument</b>    | <b>System Configuration</b> | <b>Column ID</b> | <b>Column Description</b>                |
|----------------------|----------------------|-----------------------------|------------------|--|
| ECD1A.I_1            | HP Gas Chromatograph | HP6890 Series ECD           | Rtx-CLP I        | 30m x 0.25mm, 0.25um (Rtx-CLPesticide)   |
| ECD1A.I_2            | HP Gas Chromatograph | HP6890 Series ECD           | Rtx-CLP II       | 30m x 0.25mm, 0.20um (Rtx-CLPesticideII) |

#### **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: Jimmy Cao

Date: 2/15/10

## Roadmap for LANL 10-1324 PCB

This roadmap was analyzed by YIP00818 on 01-29-2010, 14:18.

This roadmap was reviewed by jim01140 on 02-01-2010, 15:38.

This roadmap was packaged by yml on 02-15-2010, 10:43.

This roadmap was validated by jim01140 on 02-15-2010, 14:26.

Front Sample Column

| exclude                             | manual | datafile                           | sampleid  | sampletype | injdte      | inftime | sublist     | clientid     | dilution | prepbatchid | comment                         |
|-------------------------------------|--------|------------------------------------|-----------|------------|-------------|---------|-------------|--------------|----------|-------------|---------------------------------|
| <input type="checkbox"/>            | N      | /chem/ccd1a.i/012710.b/049b4901.d  | 245114002 | sample     | 27-JAN-2010 | 15:40   | 10-1324.sub | RE15-10-8410 | 1.00000  | 944883      | UPLOAD BOTH COLUMNS, HIGHER     |
| <input checked="" type="checkbox"/> | N      | /chem/ccd1a.i/012710.b/059b5901.d  | 245114003 | sample     | 27-JAN-2010 | 17:46   | 10-1324.sub | RE15-10-8411 | 1.00000  | 944883      | DUSE RR                         |
| <input type="checkbox"/>            | N      | /chem/ccd1a.i/012810a.b/046b4601.d | 245114003 | sample     | 28-JAN-2010 | 17:33   | 10-1324.sub | RE15-10-8411 | 1.00000  | 944883      | UPLOAD BOTH COLUMNS, USE HIGHER |
| <input checked="" type="checkbox"/> | N      | /chem/ccd1a.i/012710.b/056b5601.d  | 245114004 | sample     | 27-JAN-2010 | 17:09   | 10-1324.sub | RE15-10-8412 | 1.00000  | 944883      | DUSE RR                         |
| <input type="checkbox"/>            | N      | /chem/ccd1a.i/012810a.b/049b4901.d | 245114004 | sample     | 28-JAN-2010 | 18:11   | 10-1324.sub | RE15-10-8412 | 1.00000  | 944883      | UPLOAD BOTH COLUMNS, USE HIGHER |
| <input checked="" type="checkbox"/> | N      | /chem/ccd1a.i/012710.b/055b5501.d  | 245114005 | sample     | 27-JAN-2010 | 16:56   | 10-1324.sub | RE15-10-8441 | 1.00000  | 944883      | DUSE RR                         |
| <input type="checkbox"/>            | N      | /chem/ccd1a.i/012810a.b/050b5001.d | 245114005 | sample     | 28-JAN-2010 | 18:23   | 10-1324.sub | RE15-10-8441 | 1.00000  | 944883      | UPLOAD BOTH COLUMNS, USE HIGHER |
| <input checked="" type="checkbox"/> | N      | /chem/ccd1a.i/012710.b/054b5401.d  | 245114006 | sample     | 27-JAN-2010 | 16:43   | 10-1324.sub | RE15-10-8413 | 1.00000  | 944883      | DUSE RR                         |
| <input type="checkbox"/>            | N      | /chem/ccd1a.i/012810a.b/053b5301.d | 245114006 | sample     | 28-JAN-2010 | 19:03   | 10-1324.sub | RE15-10-8413 | 1.00000  | 944883      | UPLOAD BOTH COLUMNS, USE HIGHER |

Back Sample Column

| exclude                             | manual | datafile                           | sampleid  | sampletype | injdte      | inftime | sublist     | clientid     | dilution | prepbatchid | comment                         |
|-------------------------------------|--------|------------------------------------|-----------|------------|-------------|---------|-------------|--------------|----------|-------------|---------------------------------|
| <input type="checkbox"/>            | N      | /chem/ccd1a.i/012710.b/049b4901.d  | 245114002 | sample     | 27-JAN-2010 | 15:40   | 10-1324.sub | RE15-10-8410 | 1.00000  | 944883      | UPLOAD BOTH COLUMNS, HIGHER     |
| <input checked="" type="checkbox"/> | N      | /chem/ccd1a.i/012710.b/059b5901.d  | 245114003 | sample     | 27-JAN-2010 | 17:46   | 10-1324.sub | RE15-10-8411 | 1.00000  | 944883      | DUSE RR                         |
| <input type="checkbox"/>            | N      | /chem/ccd1a.i/012810a.b/046b4601.d | 245114003 | sample     | 28-JAN-2010 | 17:33   | 10-1324.sub | RE15-10-8411 | 1.00000  | 944883      | UPLOAD BOTH COLUMNS, USE HIGHER |
| <input checked="" type="checkbox"/> | N      | /chem/ccd1a.i/012710.b/056b5601.d  | 245114004 | sample     | 27-JAN-2010 | 17:09   | 10-1324.sub | RE15-10-8412 | 1.00000  | 944883      | DUSE RR                         |
| <input type="checkbox"/>            | N      | /chem/ccd1a.i/012810a.b/049b4901.d | 245114004 | sample     | 28-JAN-2010 | 18:11   | 10-1324.sub | RE15-10-8412 | 1.00000  | 944883      | UPLOAD BOTH COLUMNS, USE HIGHER |
| <input checked="" type="checkbox"/> | N      | /chem/ccd1a.i/012710.b/055b5501.d  | 245114005 | sample     | 27-JAN-2010 | 16:56   | 10-1324.sub | RE15-10-8441 | 1.00000  | 944883      | DUSE RR                         |
| <input type="checkbox"/>            | N      | /chem/ccd1a.i/012810a.b/050b5001.d | 245114005 | sample     | 28-JAN-2010 | 18:23   | 10-1324.sub | RE15-10-8441 | 1.00000  | 944883      | UPLOAD BOTH COLUMNS, USE HIGHER |
| <input checked="" type="checkbox"/> | N      | /chem/ccd1a.i/012710.b/054b5401.d  | 245114006 | sample     | 27-JAN-2010 | 16:43   | 10-1324.sub | RE15-10-8413 | 1.00000  | 944883      | DUSE RR                         |
| <input type="checkbox"/>            | N      | /chem/ccd1a.i/012810a.b/053b5301.d | 245114006 | sample     | 28-JAN-2010 | 19:03   | 10-1324.sub | RE15-10-8413 | 1.00000  | 944883      | UPLOAD BOTH COLUMNS, USE HIGHER |

Front QC Sample Column

| exclude                             | manual | datafile                            | sampleid   | sampletype | injdte      | inftime | sublist     | clientid       | dilution | prepbatchid | comment |
|-------------------------------------|--------|-------------------------------------|------------|------------|-------------|---------|-------------|----------------|----------|-------------|---------|
| <input type="checkbox"/>            | N      | /chem/ccd1a.i/012710.b/034b3401-2.d | 1202023521 | mb         | 27-JAN-2010 | 12:40   | 10-1324.sub | PBLK01         | 1.00000  | 944883      |         |
| <input type="checkbox"/>            | N      | /chem/ccd1a.i/012710.b/035b3501-2.d | 1202023522 | fcw        | 27-JAN-2010 | 12:51   | 10-1324.sub | PBLK01LCS      | 1.00000  | 944883      |         |
| <input checked="" type="checkbox"/> | N      | /chem/ccd1a.i/012710.b/058b5801.d   | 1202023863 | ms         | 27-JAN-2010 | 17:34   | 10-1324.sub | RE15-10-8411MS | 1.00000  | 944883      | DUSE RR |



|                                     |   |                                    |            |     |             |       |             |                 |         |        |                                 |
|-------------------------------------|---|------------------------------------|------------|-----|-------------|-------|-------------|-----------------|---------|--------|---------------------------------|
| <input type="checkbox"/>            | N | /chem/ccd1a.i/012810a.b/0476701.d  | 1202023863 | ms  | 28-JAN-2010 | 17:45 | 10-1324.sub | RE15-10-8411MS  | 1.00000 | 944883 | UPLOAD BOTH COLUMNS, USE HIGHER |
| <input checked="" type="checkbox"/> | N | /chem/ccd1a.i/012710.b/0575701.d   | 1202023864 | msd | 27-JAN-2010 | 17:21 | 10-1324.sub | RE15-10-8411MSD | 1.00000 | 944883 | DUSE RR                         |
| <input type="checkbox"/>            | N | /chem/ccd1a.i/012810a.b/04864801.d | 1202023864 | msd | 28-JAN-2010 | 17:58 | 10-1324.sub | RE15-10-8411MSD | 1.00000 | 944883 | UPLOAD BOTH COLUMNS, USE HIGHER |

Back QC Sample Column

| exclude                             | manual | datafile                            | stupid     | sampletype | injdate     | injtime | sublist     | clientid        | dilution | probatchid | comment                         |
|-------------------------------------|--------|-------------------------------------|------------|------------|-------------|---------|-------------|-----------------|----------|------------|---------------------------------|
| <input type="checkbox"/>            | N      | /chem/ccd1a.i/012710.b/03463401.2.d | 1202023521 | mb         | 27-JAN-2010 | 12:40   | 10-1324.sub | PBLK01          | 1.00000  | 944883     |                                 |
| <input type="checkbox"/>            | N      | /chem/ccd1a.i/012710.b/03563501.2.d | 1202023522 | lcs        | 27-JAN-2010 | 12:51   | 10-1324.sub | PBLK01LCS       | 1.00000  | 944883     |                                 |
| <input checked="" type="checkbox"/> | N      | /chem/ccd1a.i/012710.b/05865801.d   | 1202023863 | ms         | 27-JAN-2010 | 17:34   | 10-1324.sub | RE15-10-8411MS  | 1.00000  | 944883     | DUSE RR                         |
| <input type="checkbox"/>            | N      | /chem/ccd1a.i/012810a.b/0476701.d   | 1202023863 | ms         | 28-JAN-2010 | 17:45   | 10-1324.sub | RE15-10-8411MS  | 1.00000  | 944883     | UPLOAD BOTH COLUMNS, USE HIGHER |
| <input checked="" type="checkbox"/> | N      | /chem/ccd1a.i/012710.b/0575701.d    | 1202023864 | msd        | 27-JAN-2010 | 17:21   | 10-1324.sub | RE15-10-8411MSD | 1.00000  | 944883     | DUSE RR                         |
| <input type="checkbox"/>            | N      | /chem/ccd1a.i/012810a.b/04864801.d  | 1202023864 | msd        | 28-JAN-2010 | 17:58   | 10-1324.sub | RE15-10-8411MSD | 1.00000  | 944883     | UPLOAD BOTH COLUMNS, USE HIGHER |

# SAMPLE DATA SUMMARY

## PCB

Page 1 of 1

Certificate of Analysis  
Sample SummarySDG Number: 10-1324  
Lab Sample ID: 245114002

Date Collected: 01/14/2010 12:00

Matrix: R

Date Received: 01/20/2010 08:45

%Moisture: 24.9

Client: LANL010

Project: LANL01004

Client ID: RE15-10-8410

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 944883

Inst: ECD1A.J

Dilution: 1

Run Date: 01/27/2010 15:40

Analyst: YS1

Inj. Vol: 1 uL

Prep Date: 01/25/2010 20:44

Aliquot: 30.04 g

Final Volume: 1 mL

Data File: 049f4901.d

Column: 1 CLP1

Level: LOW

049b4901.d

2 CLP2

| CAS No.    | Parmname     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ | Column |
|------------|--------------|-----------|--------|-------|---------|---------|--------|
| 12674-11-2 | Aroclor-1016 | U         | 4.43   | ug/kg | 1.48    | 4.43    | 1      |
| 11104-28-2 | Aroclor-1221 | U         | 4.43   | ug/kg | 1.48    | 4.43    | 1      |
| 11141-16-5 | Aroclor-1232 | U         | 4.43   | ug/kg | 1.48    | 4.43    | 1      |
| 53469-21-9 | Aroclor-1242 | U         | 4.43   | ug/kg | 1.48    | 4.43    | 1      |
| 12672-29-6 | Aroclor-1248 | U         | 4.43   | ug/kg | 1.48    | 4.43    | 1      |
| 11097-69-1 | Aroclor-1254 | U         | 4.43   | ug/kg | 1.48    | 4.43    | 1      |
| 11096-82-5 | Aroclor-1260 | U         | 4.43   | ug/kg | 1.48    | 4.43    | 1      |

**PCB**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114003

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.07 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 15.4  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8411  
Batch ID: 944883  
Run Date: 01/28/2010 17:33  
Prep Date: 01/25/2010 20:44  
Data File: 046f4601.d  
046b4601.d

| CAS No.    | Parmname     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ | Column |
|------------|--------------|-----------|--------|-------|---------|---------|--------|
| 12674-11-2 | Aroclor-1016 | U         | 3.93   | ug/kg | 1.31    | 3.93    | 1      |
| 11104-28-2 | Aroclor-1221 | U         | 3.93   | ug/kg | 1.31    | 3.93    | 1      |
| 11141-16-5 | Aroclor-1232 | U         | 3.93   | ug/kg | 1.31    | 3.93    | 1      |
| 53469-21-9 | Aroclor-1242 | U         | 3.93   | ug/kg | 1.31    | 3.93    | 1      |
| 12672-29-6 | Aroclor-1248 | U         | 3.93   | ug/kg | 1.31    | 3.93    | 1      |
| 11097-69-1 | Aroclor-1254 | U         | 3.93   | ug/kg | 1.31    | 3.93    | 1      |
| 11096-82-5 | Aroclor-1260 | U         | 3.93   | ug/kg | 1.31    | 3.93    | 1      |

## PCB

Page 1 of 1

Certificate of Analysis  
Sample SummarySDG Number: 10-1324  
Lab Sample ID: 245114004

Date Collected: 01/14/2010 12:00

Matrix: R

Date Received: 01/20/2010 08:45

%Moisture: 7.6

Client: LANL010

Project: LANL01004

Client ID: RE15-10-8412

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 944883

Inst: ECD1A.I

Dilution: 1

Run Date: 01/28/2010 18:11

Analyst: YS1

Inj. Vol: 1 uL

Prep Date: 01/25/2010 20:44

Aliquot: 30.15 g

Final Volume: 1 mL

Data File: 049f4901.d

Column: 1 CLP1

Level: LOW

049b4901.d

2 CLP2

| CAS No.    | Parmname     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ | Column |
|------------|--------------|-----------|--------|-------|---------|---------|--------|
| 12674-11-2 | Aroclor-1016 | U         | 3.59   | ug/kg | 1.20    | 3.59    | 1      |
| 11104-28-2 | Aroclor-1221 | U         | 3.59   | ug/kg | 1.20    | 3.59    | 1      |
| 11141-16-5 | Aroclor-1232 | U         | 3.59   | ug/kg | 1.20    | 3.59    | 1      |
| 53469-21-9 | Aroclor-1242 | U         | 3.59   | ug/kg | 1.20    | 3.59    | 1      |
| 12672-29-6 | Aroclor-1248 | U         | 3.59   | ug/kg | 1.20    | 3.59    | 1      |
| 11097-69-1 | Aroclor-1254 | P         | 4.60   | ug/kg | 1.20    | 3.59    | 1      |
| 11096-82-5 | Aroclor-1260 | J         | 2.50   | ug/kg | 1.20    | 3.59    | 1      |

**PCB**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 1

SDG Number: 10-1324  
Lab Sample ID: 245114006

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.17 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 10.6  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8413  
Batch ID: 944883  
Run Date: 01/28/2010 19:03  
Prep Date: 01/25/2010 20:44  
Data File: 053f5301.d  
053b5301.d

| CAS No.    | Parmname     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ | Column |
|------------|--------------|-----------|--------|-------|---------|---------|--------|
| 12674-11-2 | Aroclor-1016 | U         | 3.71   | ug/kg | 1.23    | 3.71    | 1      |
| 11104-28-2 | Aroclor-1221 | U         | 3.71   | ug/kg | 1.23    | 3.71    | 1      |
| 11141-16-5 | Aroclor-1232 | U         | 3.71   | ug/kg | 1.23    | 3.71    | 1      |
| 53469-21-9 | Aroclor-1242 | U         | 3.71   | ug/kg | 1.23    | 3.71    | 1      |
| 12672-29-6 | Aroclor-1248 | U         | 3.71   | ug/kg | 1.23    | 3.71    | 1      |
| 11097-69-1 | Aroclor-1254 | P         | 6.50   | ug/kg | 1.23    | 3.71    | 1      |
| 11096-82-5 | Aroclor-1260 | U         | 3.71   | ug/kg | 1.23    | 3.71    | 1      |

## PCB

Page 1 of 1

Certificate of Analysis  
Sample SummarySDG Number: 10-1324  
Lab Sample ID: 245114005Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45Matrix: R  
%Moisture: 9.6  
Project: LANL01004  
SOP Ref: GL-OA-E-040Client ID: RE15-10-8441  
Batch ID: 944883  
Run Date: 01/28/2010 18:23  
Prep Date: 01/25/2010 20:44  
Data File: 050f5001.d  
050b5001.dClient: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.18 g  
Column: 1 CLP1  
2 CLP2Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parmname     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ | Column |
|------------|--------------|-----------|--------|-------|---------|---------|--------|
| 12674-11-2 | Aroclor-1016 | U         | 3.66   | ug/kg | 1.22    | 3.66    | 1      |
| 11104-28-2 | Aroclor-1221 | U         | 3.66   | ug/kg | 1.22    | 3.66    | 1      |
| 11141-16-5 | Aroclor-1232 | U         | 3.66   | ug/kg | 1.22    | 3.66    | 1      |
| 53469-21-9 | Aroclor-1242 | U         | 3.66   | ug/kg | 1.22    | 3.66    | 1      |
| 12672-29-6 | Aroclor-1248 | U         | 3.66   | ug/kg | 1.22    | 3.66    | 1      |
| 11097-69-1 | Aroclor-1254 | P         | 5.00   | ug/kg | 1.22    | 3.66    | 1      |
| 11096-82-5 | Aroclor-1260 | U         | 3.66   | ug/kg | 1.22    | 3.66    | 1      |

# QUALITY CONTROL SUMMARY



**PCB**  
**Surrogate Recovery Report**

Page 1 of 1

SDG Number: 10-1324

Matrix Type: SOLID

CAP Column (1) : CLP1

CAP Column (2) : CLP2

| Sample ID  | Client ID            | 4CMX 1<br>%REC # | 4CMX 2<br>%REC # | DCB 1<br>%REC # | DCB 2<br>%REC # |
|------------|----------------------|------------------|------------------|-----------------|-----------------|
| 1202023521 | MB for batch 944882  | 68               | 65               | 70              | 66              |
| 1202023522 | LCS for batch 944882 | 63               | 60               | 67              | 63              |
| 245114002  | RE15-10-8410         | 44               | 43               | 38              | 36              |
| 245114003  | RE15-10-8411         | 39               | 40               | 39              | 44              |
| 1202023863 | RE15-10-8411MS       | 39               | 40               | 38              | 44              |
| 1202023864 | RE15-10-8411MSD      | 37               | 38               | 38              | 43              |
| 245114004  | RE15-10-8412         | 53               | 52               | 48              | 57              |
| 245114005  | RE15-10-8441         | 58               | 57               | 54              | 63              |
| 245114006  | RE15-10-8413         | 49               | 48               | 45              | 54              |

**Surrogate****Acceptance Limits**

4CMX = 4cmx

(34%-105%)

DCB = Decachlorobiphenyl

(33%-115%)

\* Recovery outside Acceptance Limits

# Column to be used to flag recovery values

D Sample Diluted

PCB

Page 1 of 1

**Quality Control Summary  
Spike Recovery Report**

SDG Number: 10-1324

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 944882

Matrix: SOIL

Lab Sample ID:1202023522

Instrument: ECD1A.I

Analysis Date: 01/27/2010 12:51

Dilution: 1

Analyst: YS1

Prep Batch ID: 944882

Inj. Vol: 1 uL

Batch ID: 944883

| CAS No     | Paramname        | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits |
|------------|------------------|--------------------------|--------------------------|-------------------------|---------------|----------------------|
| 12674-11-2 | LCS Aroclor-1016 | 33.3                     | 0.0                      | 21.1                    | 63            | 41-110               |
| 11096-82-5 | LCS Aroclor-1260 | 33.3                     | 0.0                      | 24.5                    | 74            | 48-110               |

PCB

Page 1 of 2

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1324

Sample Type: Matrix Spike

Client ID: RE15-10-8411MS

Matrix: R

Lab Sample ID:1202023863

%Moisture: 15.4

Instrument: ECD1A.I

Analysis Date: 01/28/2010 17:45

Dilution: 1

Analyst: YS1

Prep Batch II 944882

Inj. Vol: 1 uL

Batch ID: 944883

| CAS No     | Parmname        | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits |
|------------|-----------------|--------------------------|--------------------------|-------------------------|---------------|----------------------|
| 12674-11-2 | MS Aroclor-1016 | 39.2                     | 0.00 U                   | 15.2                    | 39            | 23-117               |
| 11096-82-5 | MS Aroclor-1260 | 39.2                     | 0.00 U                   | 15.5                    | 40            | 27-116               |

## PCB

Page 2 of 2

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1324

Sample Type: Matrix Spike Duplicate

Client ID: RE15-10-8411MSD

Matrix: R

Lab Sample ID: 1202023864

%Moisture: 15.4

Instrument: ECD1A.I

Analysis Date: 01/28/2010 17:58

Dilution: 1

Analyst: YS1

Prep Batch ID: 944882

Inj. Vol: 1 uL

Batch ID: 944883

| CAS No     | Paramname        | Amount<br>Added<br>ug/kg | Sample<br>Conc.<br>ug/kg | Spike<br>Conc.<br>ug/kg | Recovery<br>% | Acceptance<br>Limits | RPD<br>% | Acceptance<br>Limits |
|------------|------------------|--------------------------|--------------------------|-------------------------|---------------|----------------------|----------|----------------------|
| 12674-11-2 | MSD Aroclor-1016 | 39.4                     | 0.00 U                   | 14.9                    | 38            | 23-117               | 2        | 0-30                 |
| 11096-82-5 | MSD Aroclor-1260 | 39.4                     | 0.00 U                   | 15.3                    | 39            | 27-116               | 1        | 0-30                 |

## Method Blank Summary

Page 1 of 1

|                |                     |                |                  |            |                |
|----------------|---------------------|----------------|------------------|------------|----------------|
| SDG Number:    | 10-1324             | Client:        | LANL010          | Matrix:    | SOIL           |
| Client ID:     | MB for batch 944882 | Instrument ID: | ECD1A.I_2        | Data File: | 034b3401-1.d   |
| Lab Sample ID: | 1202023521          |                | ECD1A.I_1        |            | 034f3401-1.d   |
| Column:        | CLP2                | Prep Date:     | 01/25/2010 20:44 | Analyzed:  | 01/27/10 12:40 |
|                | CLP1                | Level:         | LOW              |            |                |

This method blank applies to the following samples and quality control samples:

| Client Sample ID        | Lab Sample ID | File ID                      | Date Analyzed | Time Analyzed |
|-------------------------|---------------|------------------------------|---------------|---------------|
| 01 LCS for batch 944882 | 1202023522    | 035f3501-1.d<br>035b3501-1.d | 01/27/10      | 1251          |
| 02 RE15-10-8410         | 245114002     | 049f4901.d<br>049b4901.d     | 01/27/10      | 1540          |
| 03 RE15-10-8411         | 245114003     | 046f4601.d<br>046b4601.d     | 01/28/10      | 1733          |
| 04 RE15-10-8411MS       | 1202023863    | 047f4701.d<br>047b4701.d     | 01/28/10      | 1745          |
| 05 RE15-10-8411MSD      | 1202023864    | 048f4801.d<br>048b4801.d     | 01/28/10      | 1758          |
| 06 RE15-10-8412         | 245114004     | 049f4901.d<br>049b4901.d     | 01/28/10      | 1811          |
| 07 RE15-10-8441         | 245114005     | 050f5001.d<br>050b5001.d     | 01/28/10      | 1823          |
| 08 RE15-10-8413         | 245114006     | 053f5301.d<br>053b5301.d     | 01/28/10      | 1903          |

# SAMPLE DATA

## PCB

Page 1 of 1

Certificate of Analysis  
Sample Summary

|                |                  |                 |                  |               |             |
|----------------|------------------|-----------------|------------------|---------------|-------------|
| SDG Number:    | 10-1324          | Date Collected: | 01/14/2010 12:00 | Matrix:       | R           |
| Lab Sample ID: | 245114002        | Date Received:  | 01/20/2010 08:45 | %Moisture:    | 24.9        |
| Client ID:     | RE15-10-8410     | Client:         | LANL010          | Project:      | LANL01004   |
| Batch ID:      | 944883           | Method:         | SW846 8082       | SOP Ref:      | GL-OA-E-040 |
| Run Date:      | 01/27/2010 15:40 | Inst:           | ECD1A.I          | Dilution:     | 1           |
| Prep Date:     | 01/25/2010 20:44 | Analyst:        | YS1              | Inj. Vol:     | 1 uL        |
| Data File:     | 049f4901.d       | Aliquot:        | 30.04 g          | Final Volume: | 1 mL        |
|                | 049b4901.d       | Column:         | 1 CLP1           | Level:        | LOW         |
|                |                  |                 | 2 CLP2           |               |             |

| CAS No.    | Parmname     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ | Column |
|------------|--------------|-----------|--------|-------|---------|---------|--------|
| 12674-11-2 | Aroclor-1016 | U         | 4.43   | ug/kg | 1.48    | 4.43    | 1      |
| 11104-28-2 | Aroclor-1221 | U         | 4.43   | ug/kg | 1.48    | 4.43    | 1      |
| 11141-16-5 | Aroclor-1232 | U         | 4.43   | ug/kg | 1.48    | 4.43    | 1      |
| 53469-21-9 | Aroclor-1242 | U         | 4.43   | ug/kg | 1.48    | 4.43    | 1      |
| 12672-29-6 | Aroclor-1248 | U         | 4.43   | ug/kg | 1.48    | 4.43    | 1      |
| 11097-69-1 | Aroclor-1254 | U         | 4.43   | ug/kg | 1.48    | 4.43    | 1      |
| 11096-82-5 | Aroclor-1260 | U         | 4.43   | ug/kg | 1.48    | 4.43    | 1      |

Data File: /chem/ecdl1a.i/012710.b/049f4901.d  
Report Date: 28-Jan-2010 09:11

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/049f4901.d

Lab Smp Id: 245114002

Client Smp ID: RE15-10-8410

Inj Date : 27-JAN-2010 15:40

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |245114002|1|

Misc Info : |ECD82P\_1S|944883|SVA|LANL|SOIL|RE15-10-8410|

Comment :

Method : /chem/ecdl1a.i/012710.b/ECD1-F-8082-121409.m

Meth Date : 28-Jan-2010 09:06 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 49

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1324.sub

Target Version: 3.50

Sample Matrix: Soil

Processing Host: hpclp1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value    | Description                    |
|------|----------|--------------------------------|
| DF   | 1.00000  | Dilution Factor                |
| Uf   | 1.00000  | Correction factor              |
| Vt   | 1.00000  | Volume of final extract (mL)   |
| Vi   | 1.00000  | Volume injected (uL)           |
| Ws   | 30.04000 | Weight of sample extracted (g) |
| M    | 24.92040 | % Moisture                     |

Cpnd Variable Local Compound Variable

CONCENTRATIONS

ON-COL FINAL

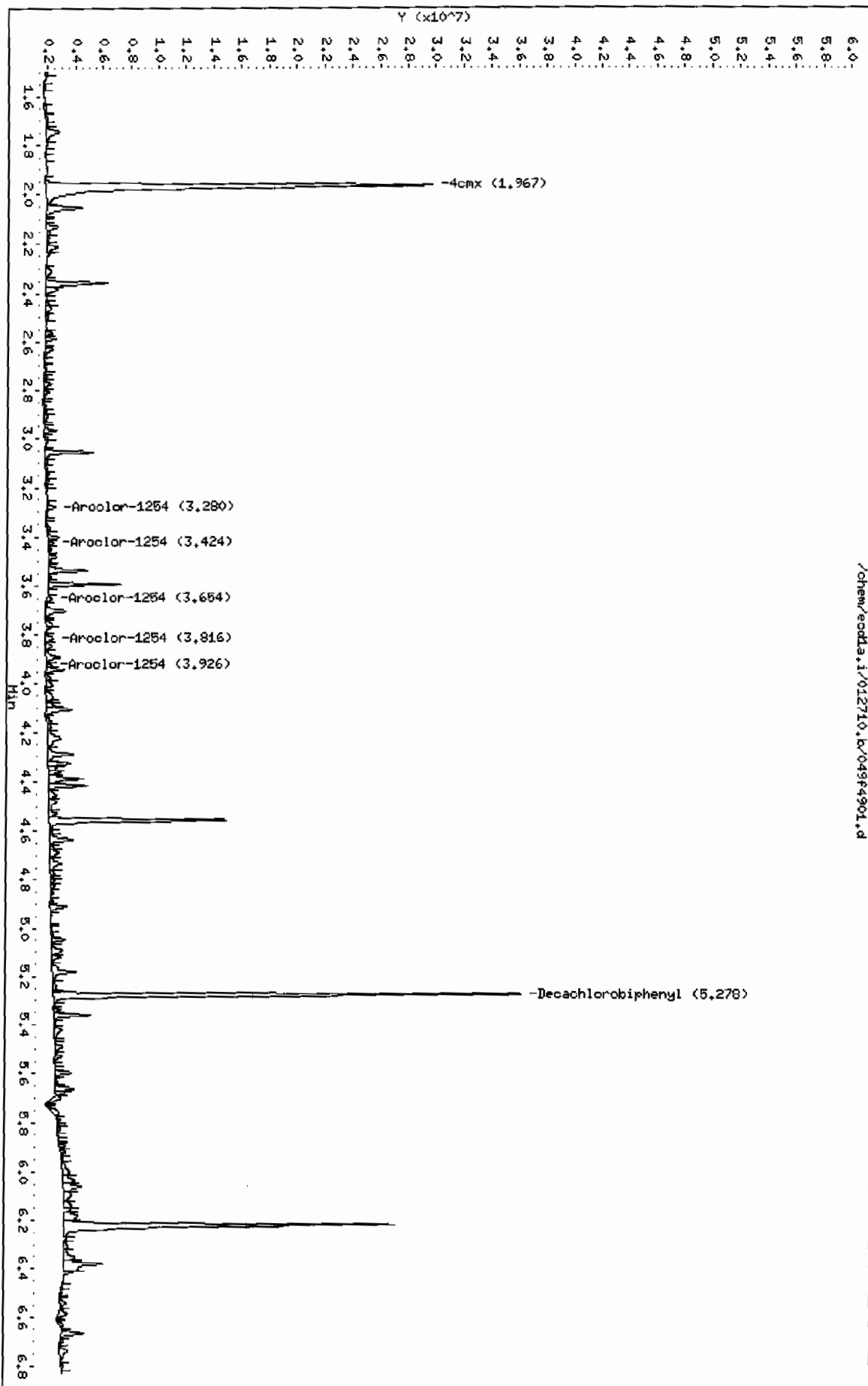
| RT                       | EXP RT | DLT RT | RESPONSE ( ug/L) | (ug/Kg) | TARGET RANGE     | RATIO  |
|--------------------------|--------|--------|------------------|---------|------------------|--------|
| \$ 11 4cmx               |        |        |                  |         | CAS #: 877-09-8  |        |
| 1.967                    | 1.967  | 0.000  | 34277762 87.2333 | 3.9     | 80.00- 120.00    | 100.00 |
| \$ 12 Decachlorobiphenyl |        |        |                  |         | CAS #: 2051-24-3 |        |
| 5.278                    | 5.279  | -0.001 | 25375561 76.9302 | 3.4     | 80.00- 120.00    | 100.00 |



Data File: /chem/ecdda.i/012710.b/049f4901.d  
Date: 27-JAN-2010 15:40  
Client ID: REIS-10-8410  
Sample Info: 1245114002141  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdda.i  
Operator: YSL  
Column diameter: 0.25

Page 1



Data File: /chem/ecdla.i/012710.b/049b4901.d  
Report Date: 28-Jan-2010 09:11

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012710.b/049b4901.d

Lab Smp Id: 245114002

Client Smp ID: RE15-10-8410

Inj Date : 27-JAN-2010 15:40

Operator : YS1

Inst ID: ecdla.i

Smp Info : |245114002|1|

Misc Info : |ECD82P\_1S|944883|SVA|LANL|SOIL|RE15-10-8410|

Comment :

Method : /chem/ecdla.i/012710.b/ECD1-B-8082-121409.m

Meth Date : 28-Jan-2010 09:06 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:12

Cal File: 014b1401.d

Als bottle: 49

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1324.sub

Target Version: 3.50

Sample Matrix: Soil

Processing Host: hpclp1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value    | Description                    |
|------|----------|--------------------------------|
| DF   | 1.00000  | Dilution Factor                |
| Uf   | 1.00000  | Correction factor              |
| Vt   | 1.00000  | Volume of final extract (mL)   |
| Vi   | 1.00000  | Volume injected (uL)           |
| Ws   | 30.04000 | Weight of sample extracted (g) |
| M    | 24.92040 | % Moisture                     |

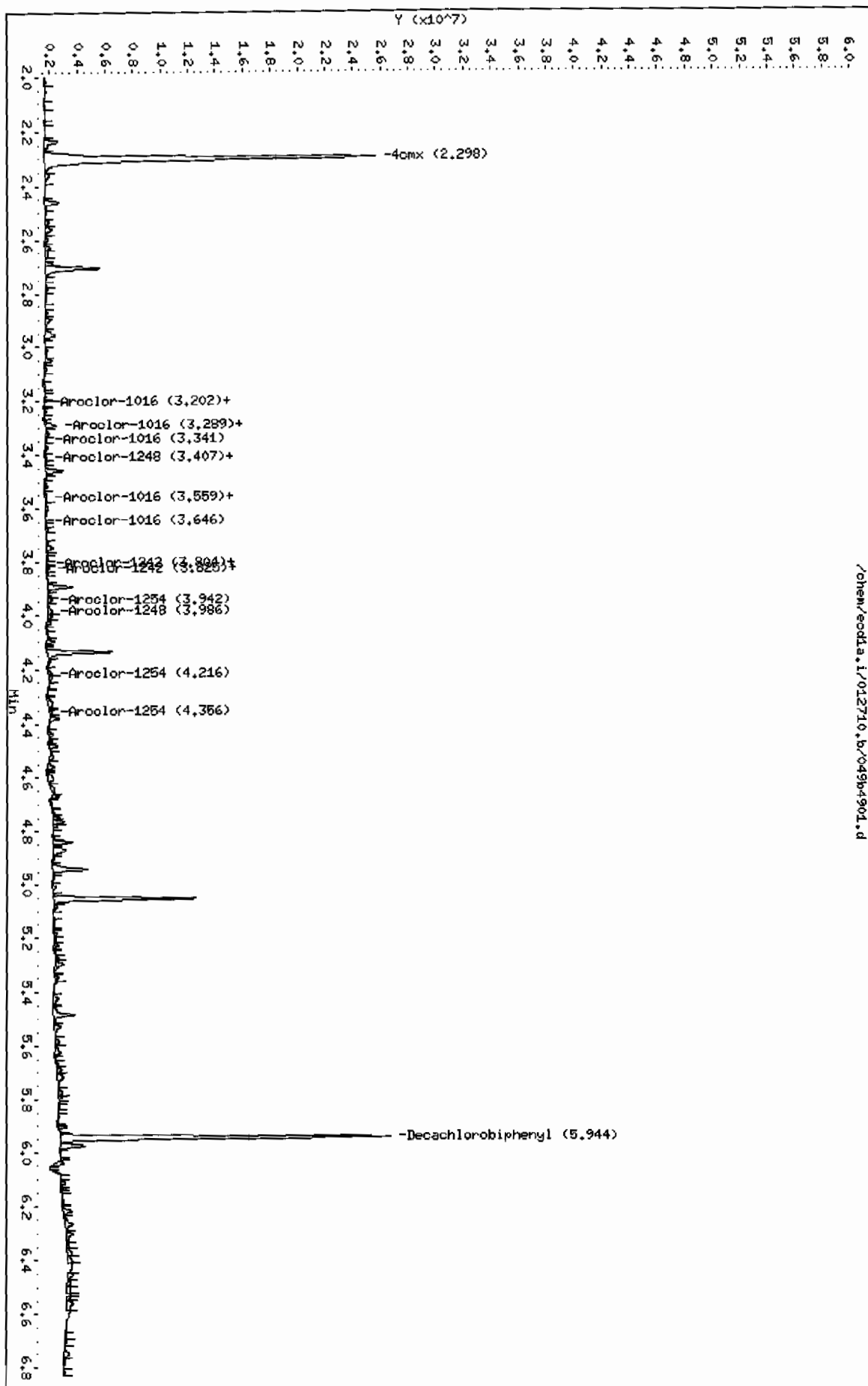
Cpnd Variable

Local Compound Variable

| CONCENTRATIONS           |        |        |                  |         |                   |        |
|--------------------------|--------|--------|------------------|---------|-------------------|--------|
|                          |        |        | ON-COL           | FINAL   |                   |        |
| RT                       | EXP RT | DLT RT | RESPONSE ( ug/L) | (ug/Kg) | TARGET RANGE      | RATIO  |
| \$ 11 4cmx               |        |        |                  |         | CAS #: 877-09-8   |        |
| 2.298                    | 2.299  | -0.001 | 24902300         | 85.8096 | 3.8 80.00- 120.00 | 100.00 |
| -----                    |        |        |                  |         |                   |        |
| \$ 12 Decachlorobiphenyl |        |        |                  |         | CAS #: 2051-24-3  |        |
| 5.944                    | 5.945  | -0.001 | 17378523         | 71.2309 | 3.2 80.00- 120.00 | 100.00 |

Data File: /chem/ecod1a.i/012710.b/049b4901.d  
 Date: 27-JAN-2010 15:40  
 Client ID: RELS-10-8410  
 Sample Info: 12461400211  
 Volume Injected (uL): 1.0  
 Column phase: CLP2

Instrument: ecod1a.i  
 Operator: Y31  
 Column diameter: 0.25



**PCB**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114003

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL.010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.07 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 15.4  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parname      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ | Column |
|------------|--------------|-----------|--------|-------|---------|---------|--------|
| 12674-11-2 | Aroclor-1016 | U         | 3.93   | ug/kg | 1.31    | 3.93    | 1      |
| 11104-28-2 | Aroclor-1221 | U         | 3.93   | ug/kg | 1.31    | 3.93    | 1      |
| 11141-16-5 | Aroclor-1232 | U         | 3.93   | ug/kg | 1.31    | 3.93    | 1      |
| 53469-21-9 | Aroclor-1242 | U         | 3.93   | ug/kg | 1.31    | 3.93    | 1      |
| 12672-29-6 | Aroclor-1248 | U         | 3.93   | ug/kg | 1.31    | 3.93    | 1      |
| 11097-69-1 | Aroclor-1254 | U         | 3.93   | ug/kg | 1.31    | 3.93    | 1      |
| 11096-82-5 | Aroclor-1260 | U         | 3.93   | ug/kg | 1.31    | 3.93    | 1      |

Data File: /chem/ecdl1a.i/012810a.b/046f4601.d  
Report Date: 29-Jan-2010 07:27

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/046f4601.d

Lab Smp Id: 245114003

Client Smp ID: RE15-10-8411

Inj Date : 28-JAN-2010 17:33

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |245114003|1|

Misc Info : |ECD82P\_1S|944883|SVA|LANL|SOIL|RE15-10-8411|

Comment :

Method : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m

Meth Date : 29-Jan-2010 06:55 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 46

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1324.sub

Target Version: 3.50

Sample Matrix: Soil

Processing Host: hpclp1

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

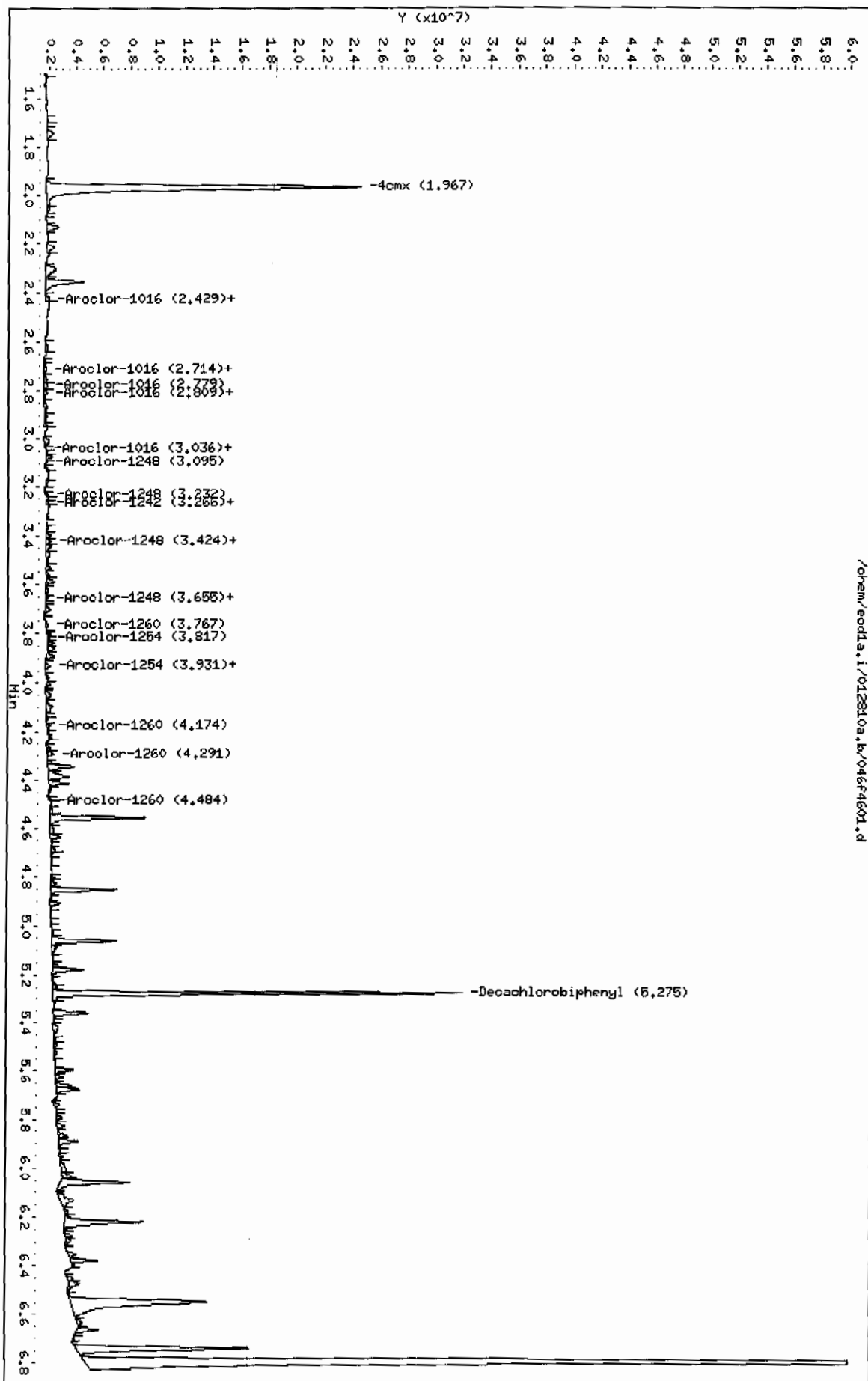
| Name | Value    | Description                    |
|------|----------|--------------------------------|
| DF   | 1.00000  | Dilution Factor                |
| Uf   | 1.00000  | Correction factor              |
| Vt   | 1.00000  | Volume of final extract (mL)   |
| Vi   | 1.00000  | Volume injected (uL)           |
| Ws   | 30.07000 | Weight of sample extracted (g) |
| M    | 15.35810 | % Moisture                     |

Cpnd Variable                      Local Compound Variable

| CONCENTRATIONS           |        |        |                  |         |                  |        |
|--------------------------|--------|--------|------------------|---------|------------------|--------|
|                          |        |        | ON-COL           | FINAL   |                  |        |
| RT                       | EXP RT | DLT RT | RESPONSE ( ug/L) | (ug/Kg) | TARGET RANGE     | RATIO  |
| -----                    |        |        |                  |         |                  |        |
| \$ 11 4cmx               |        |        |                  |         | CAS #: 877-09-8  |        |
| 1.967                    | 1.966  | 0.001  | 30335408 78.3948 | 3.1     | 80.00- 120.00    | 100.00 |
| -----                    |        |        |                  |         |                  |        |
| \$ 12 Decachlorobiphenyl |        |        |                  |         | CAS #: 2051-24-3 |        |
| 5.275                    | 5.278  | -0.003 | 22216545 77.3660 | 3.0     | 80.00- 120.00    | 100.00 |
| -----                    |        |        |                  |         |                  |        |

Data File: /chem/ecdd1a.i/012810a.b/046f4601.d  
Date: 28-JAN-2010 17:33  
Client ID: RE15-10-8411  
Sample Info: 124514003111  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdd1a.i  
Operator: YSL  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012810a.b/046b4601.d  
 Lab Smp Id: 245114003 Client Smp ID: RE15-10-8411  
 Inj Date : 28-JAN-2010 17:33  
 Operator : YS1 Inst ID: ecdla.i  
 Smp Info : |245114003|1|  
 Misc Info : |ECD82P\_1S|944883|SVA|LANL|SOIL|RE15-10-8411|||  
 Comment :  
 Method : /chem/ecdla.i/012810a.b/ECD1-B-8082-121409.m  
 Meth Date : 29-Jan-2010 06:54 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
 Als bottle: 46  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1324.sub  
 Target Version: 3.50 Sample Matrix: Soil  
 Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

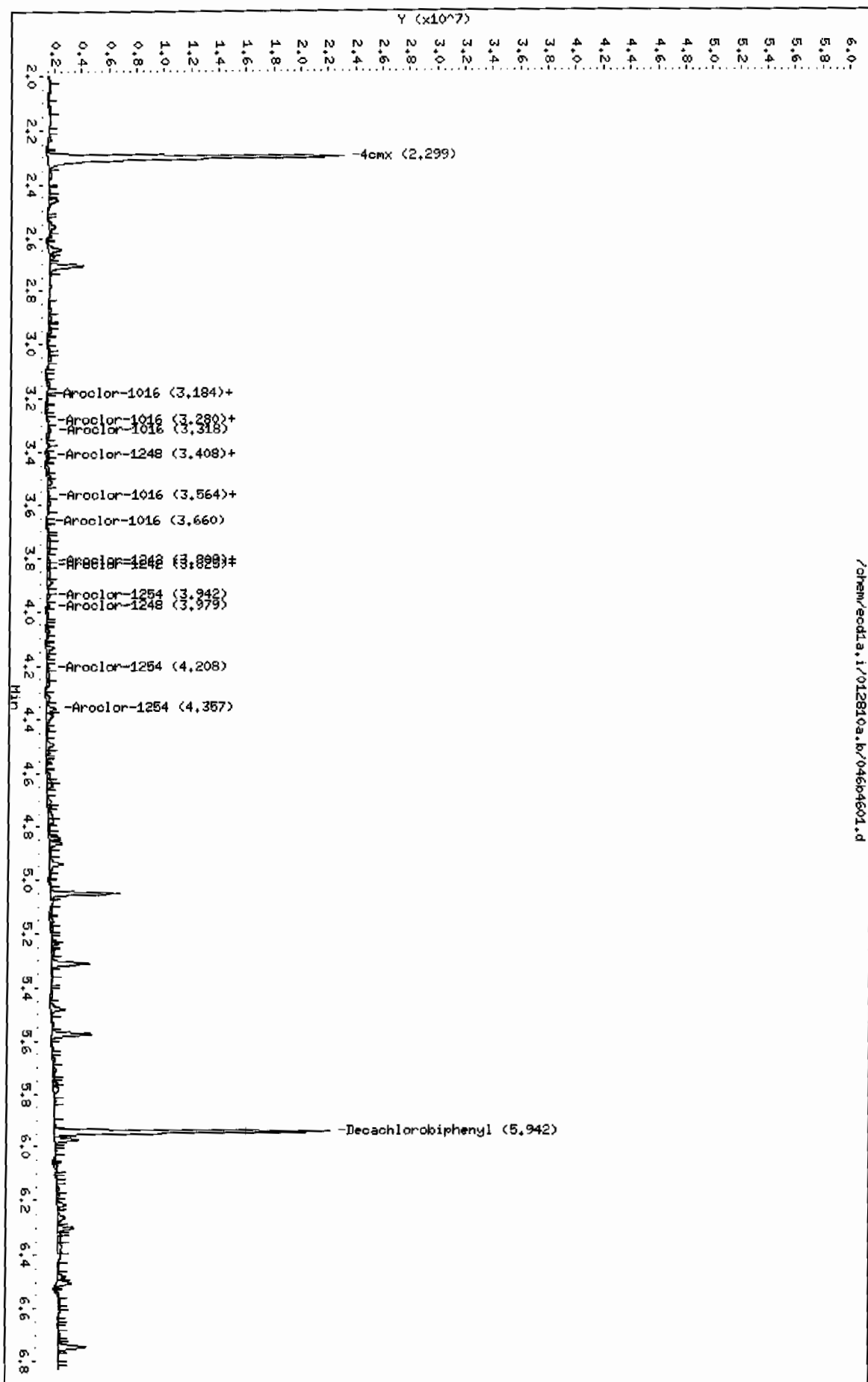
| Name | Value    | Description                    |
|------|----------|--------------------------------|
| DF   | 1.00000  | Dilution Factor                |
| Uf   | 1.00000  | Correction factor              |
| Vt   | 1.00000  | Volume of final extract (mL)   |
| Vi   | 1.00000  | Volume injected (uL)           |
| Ws   | 30.07000 | Weight of sample extracted (g) |
| M    | 15.35810 | % Moisture                     |

Cpnd Variable Local Compound Variable

| CONCENTRATIONS           |        |        |                  |                      |               |        |
|--------------------------|--------|--------|------------------|----------------------|---------------|--------|
| RT                       | EXP RT | DLT RT | RESPONSE ( ug/L) | ON-COL FINAL (ug/Kg) | TARGET RANGE  | RATIO  |
| \$ 11 4cmx               |        |        |                  | CAS #: 877-09-8      |               |        |
| 2.299                    | 2.298  | 0.001  | 22324928 79.9668 | 3.1                  | 80.00- 120.00 | 100.00 |
| \$ 12 Decachlorobiphenyl |        |        |                  | CAS #: 2051-24-3     |               |        |
| 5.942                    | 5.944  | -0.002 | 15211672 87.1153 | 3.4                  | 80.00- 120.00 | 100.00 |

Data File: /chem/ecdl1a.i/012810a.b/04604601.d  
Date : 28-JAN-2010 17:33  
Client ID: RE15-10-8441  
Sample Info: 1245114003/11  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdl1a.i  
Operator: YSL  
Column diameter: 0.25





## PCB

Page 1 of 1

Certificate of Analysis  
Sample SummarySDG Number: 10-1324  
Lab Sample ID: 245114004

Date Collected: 01/14/2010 12:00

Matrix: R

Date Received: 01/20/2010 08:45

%Moisture: 7.6

Client: LANL010

Project: LANL01004

Method: SW846 8082

SOP Ref: GL-OA-E-040

Inst: ECD1A.I

Dilution: 1

Analyst: YS1

Inj. Vol: 1 uL

Client ID: RE15-10-8412

Batch ID: 944883

Run Date: 01/28/2010 18:11

Prep Date: 01/25/2010 20:44

Data File: 049f4901.d

Aliquot: 30.15 g

Final Volume: 1 mL

Column: 1 CLP1

Level: LOW

049b4901.d

2 CLP2

| CAS No.    | Paramname    | Qualifier | Result | Units | MDL/LOD | PQL/LOQ | Column |
|------------|--------------|-----------|--------|-------|---------|---------|--------|
| 12674-11-2 | Aroclor-1016 | U         | 3.59   | ug/kg | 1.20    | 3.59    | 1      |
| 11104-28-2 | Aroclor-1221 | U         | 3.59   | ug/kg | 1.20    | 3.59    | 1      |
| 11141-16-5 | Aroclor-1232 | U         | 3.59   | ug/kg | 1.20    | 3.59    | 1      |
| 53469-21-9 | Aroclor-1242 | U         | 3.59   | ug/kg | 1.20    | 3.59    | 1      |
| 12672-29-6 | Aroclor-1248 | U         | 3.59   | ug/kg | 1.20    | 3.59    | 1      |
| 11097-69-1 | Aroclor-1254 | P         | 4.60   | ug/kg | 1.20    | 3.59    | 1      |
| 11096-82-5 | Aroclor-1260 | J         | 2.50   | ug/kg | 1.20    | 3.59    | 1      |

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

| Name | Value    | Description                    |
|------|----------|--------------------------------|
| DF   | 1.00000  | Dilution Factor                |
| Uf   | 1.00000  | Correction factor              |
| Vt   | 1.00000  | Volume of final extract (mL)   |
| Vi   | 1.00000  | Volume injected (uL)           |
| Ws   | 30.15000 | Weight of sample extracted (g) |
| M    | 7.60210  | % Moisture                     |

| Cpnd Variable | Local Compound Variable |
|---------------|-------------------------|
| 1             | 1                       |
| 2             | 2                       |
| 3             | 3                       |
| 4             | 4                       |
| 5             | 5                       |
| 6             | 6                       |
| 7             | 7                       |
| 8             | 8                       |
| 9             | 9                       |
| 10            | 10                      |
| 11            | 11                      |
| 12            | 12                      |
| 13            | 13                      |
| 14            | 14                      |
| 15            | 15                      |
| 16            | 16                      |
| 17            | 17                      |
| 18            | 18                      |
| 19            | 19                      |
| 20            | 20                      |
| 21            | 21                      |
| 22            | 22                      |
| 23            | 23                      |
| 24            | 24                      |
| 25            | 25                      |
| 26            | 26                      |
| 27            | 27                      |
| 28            | 28                      |
| 29            | 29                      |
| 30            | 30                      |
| 31            | 31                      |
| 32            | 32                      |
| 33            | 33                      |
| 34            | 34                      |
| 35            | 35                      |
| 36            | 36                      |
| 37            | 37                      |
| 38            | 38                      |
| 39            | 39                      |
| 40            | 40                      |
| 41            | 41                      |
| 42            | 42                      |
| 43            | 43                      |
| 44            | 44                      |
| 45            | 45                      |
| 46            | 46                      |
| 47            | 47                      |
| 48            | 48                      |
| 49            | 49                      |
| 50            | 50                      |
| 51            | 51                      |
| 52            | 52                      |
| 53            | 53                      |
| 54            | 54                      |
| 55            | 55                      |
| 56            | 56                      |
| 57            | 57                      |
| 58            | 58                      |
| 59            | 59                      |
| 60            | 60                      |
| 61            | 61                      |
| 62            | 62                      |
| 63            | 63                      |
| 64            | 64                      |
| 65            | 65                      |
| 66            | 66                      |
| 67            | 67                      |
| 68            | 68                      |
| 69            | 69                      |
| 70            | 70                      |
| 71            | 71                      |
| 72            | 72                      |
| 73            | 73                      |
| 74            | 74                      |
| 75            | 75                      |
| 76            | 76                      |
| 77            | 77                      |
| 78            | 78                      |
| 79            | 79                      |
| 80            | 80                      |
| 81            | 81                      |
| 82            | 82                      |
| 83            | 83                      |
| 84            | 84                      |
| 85            | 85                      |
| 86            | 86                      |
| 87            | 87                      |
| 88            | 88                      |
| 89            | 89                      |
| 90            | 90                      |
| 91            | 91                      |
| 92            | 92                      |
| 93            | 93                      |
| 94            | 94                      |
| 95            | 95                      |
| 96            | 96                      |
| 97            | 97                      |
| 98            | 98                      |
| 99            | 99                      |
| 100           | 100                     |

| RT                       | EXP RT | DLT RT | CONCENTRATIONS |                |                   | TARGET RANGE   | RATIO  |
|--------------------------|--------|--------|----------------|----------------|-------------------|----------------|--------|
|                          |        |        | RESPONSE       | ON-COL ( ug/L) | FINAL (ug/Kg)     |                |        |
| \$ 11 4cmx               |        |        |                |                | CAS #: 877-09-8   |                |        |
| 1.966                    | 1.966  | 0.000  | 40794994       | 105.425        | 3.8               | 80.00- 120.00  | 100.00 |
| -----                    |        |        |                |                |                   |                |        |
| \$ 12 Decachlorobiphenyl |        |        |                |                | CAS #: 2051-24-3  |                |        |
| 5.277                    | 5.278  | -0.001 | 27442771       | 95.5656        | 3.4               | 80.00- 120.00  | 100.00 |
| -----                    |        |        |                |                |                   |                |        |
| 6 Aroclor-1254           |        |        |                |                | CAS #: 11097-69-1 |                |        |
| 3.266                    | 3.267  | -0.001 | 884535         | 70.8451        | 2.5               | 80.00- 120.00  | 100.00 |
| 3.421                    | 3.422  | -0.001 | 1555228        | 93.0052        | 3.3               | 115.55- 155.55 | 175.82 |
| 3.655                    | 3.656  | -0.001 | 2922790        | 141.103        | 5.1               | 157.83- 197.83 | 330.43 |
| 3.818                    | 3.820  | -0.002 | 1592573        | 101.475        | 3.6               | 114.44- 154.44 | 180.05 |

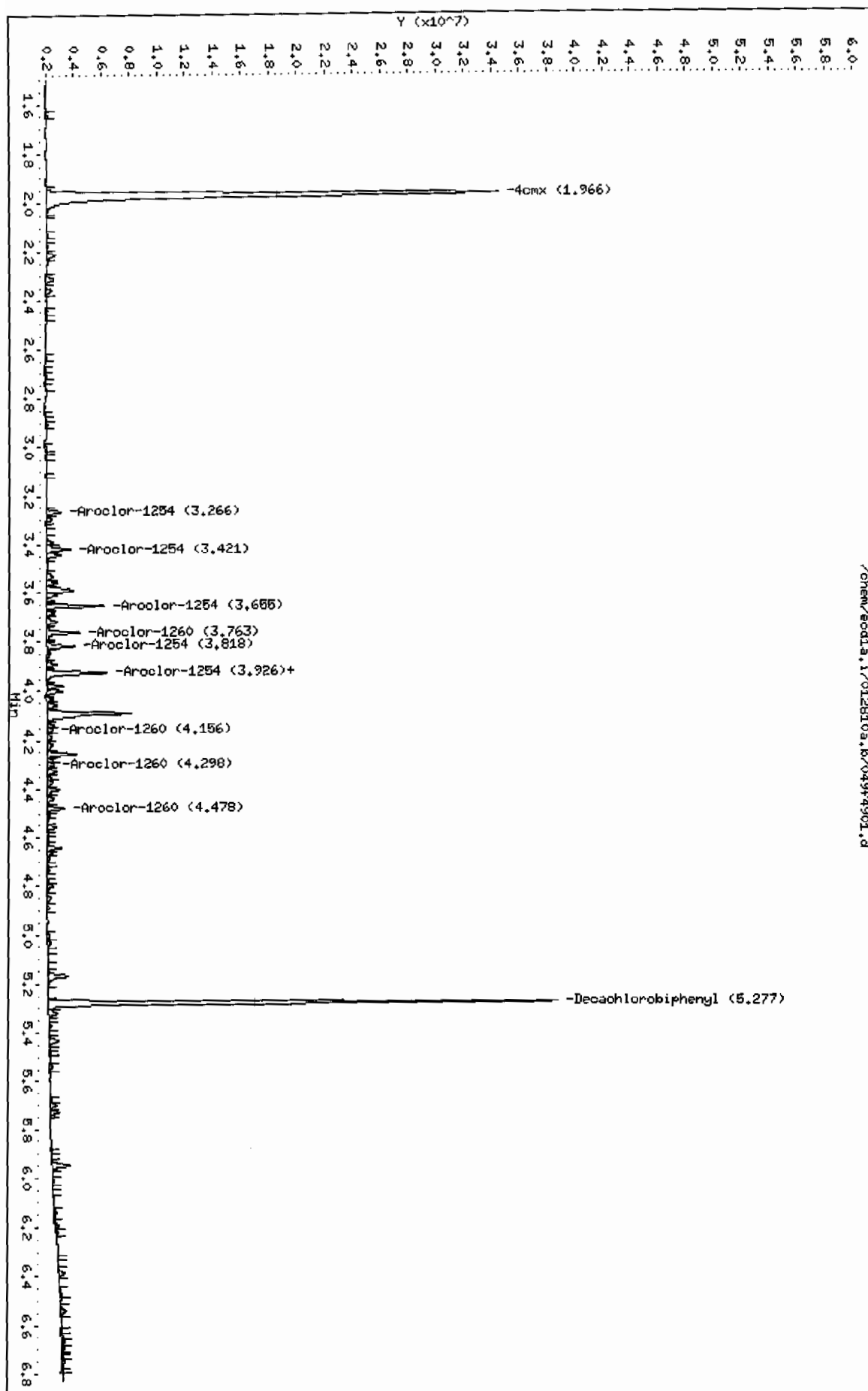
| CONCENTRATIONS                   |        |        |                   |         |         |                         |
|----------------------------------|--------|--------|-------------------|---------|---------|-------------------------|
|                                  |        |        | ON-COL            |         | FINAL   |                         |
| RT                               | EXP RT | DLT RT | RESPONSE ( ug/L)  |         | (ug/Kg) | TARGET RANGE RATIO      |
| ==                               | =====  | =====  | =====             | =====   | =====   | =====                   |
| 6 Aroclor-1254 (continued)       |        |        |                   |         |         |                         |
| 3.926                            | 3.928  | -0.002 | 3634751           | 239.562 | 8.6     | 106.96- 146.96 410.92   |
| Average of Peak Concentrations = |        |        |                   |         | 4.6     |                         |
| -----                            |        |        |                   |         |         |                         |
| 7 Aroclor-1260                   |        |        | CAS #: 11096-82-5 |         |         |                         |
| 3.763                            | 3.765  | -0.002 | 2072931           | 123.553 | 4.4     | 80.00- 120.00 100.00(a) |
| 3.926                            | 3.928  | -0.002 | 3634751           | 143.473 | 5.2     | 131.11- 171.11 175.34   |
| 4.156                            | 4.158  | -0.002 | 341383            | 22.7910 | 0.82    | 68.60- 108.60 16.47     |
| 4.298                            | 4.301  | -0.003 | 473450            | 30.4241 | 1.1     | 71.52- 111.52 22.84     |
| 4.478                            | 4.480  | -0.002 | 1032325           | 29.7965 | 1.1     | 185.98- 225.98 49.80    |
| Average of Peak Concentrations = |        |        |                   |         | 2.5     |                         |
| -----                            |        |        |                   |         |         |                         |

#### QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecdl1.i/012810a.k/049f4901.d  
Date: 28-JAN-2010 18:11  
Client ID: RE15-10-6412  
Sample Info: 1245114004/11  
Volume Injected (uL): 1.0  
Column Phase: CLP1

Instrument: ecdl1.i  
Operator: YSL  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/049b4901.d  
 Lab Smp Id: 245114004 Client Smp ID: RE15-10-8412  
 Inj Date : 28-JAN-2010 18:11  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |245114004|1|  
 Misc Info : |ECD82P\_1S|944883|SVA|LANL|SOIL|RE15-10-8412|||  
 Comment :  
 Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m  
 Meth Date : 29-Jan-2010 06:54 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
 Als bottle: 49  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1324.sub  
 Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value    | Description                    |
|------|----------|--------------------------------|
| DF   | 1.00000  | Dilution Factor                |
| Uf   | 1.00000  | Correction factor              |
| Vt   | 1.00000  | Volume of final extract (mL)   |
| Vi   | 1.00000  | Volume injected (uL)           |
| Ws   | 30.15000 | Weight of sample extracted (g) |
| M    | 7.60210  | % Moisture                     |

Cpnd Variable Local Compound Variable

| CONCENTRATIONS                   |        |        |                  |         |                   |              |        |           |
|----------------------------------|--------|--------|------------------|---------|-------------------|--------------|--------|-----------|
|                                  |        |        | ON-COL           | FINAL   |                   |              |        |           |
| RT                               | EXP RT | DLT RT | RESPONSE ( ug/L) |         | (ug/Kg)           | TARGET RANGE |        | RATIO     |
| ==                               | =====  | =====  | =====            | =====   | =====             | =====        | =====  | =====     |
| \$ 11 4cmx                       |        |        |                  |         | CAS #: 877-09-8   |              |        |           |
| 2.297                            | 2.298  | -0.001 | 28998980         | 103.873 | 3.7               | 80.00-       | 120.00 | 100.00    |
| -----                            |        |        |                  |         |                   |              |        |           |
| \$ 12 Decachlorobiphenyl         |        |        |                  |         | CAS #: 2051-24-3  |              |        |           |
| 5.943                            | 5.944  | -0.001 | 19810088         | 113.450 | 4.1               | 80.00-       | 120.00 | 100.00    |
| -----                            |        |        |                  |         |                   |              |        |           |
| 6 Aroclor-1254                   |        |        |                  |         | CAS #: 11097-69-1 |              |        |           |
| 3.405                            | 3.403  | 0.002  | 134030           | 20.8275 | 0.75              | 80.00-       | 120.00 | 100.00(a) |
| 3.824                            | 3.825  | -0.001 | 449809           | 38.9131 | 1.4               | 154.13-      | 194.13 | 335.60    |
| 3.941                            | 3.942  | -0.001 | 1026294          | 82.5574 | 3.0               | 177.97-      | 217.97 | 765.72    |
| 4.217                            | 4.218  | -0.001 | 2114939          | 125.292 | 4.5               | 254.08-      | 294.08 | 1577.96   |
| 4.354                            | 4.355  | -0.001 | 964216           | 77.5375 | 2.8               | 182.44-      | 222.44 | 719.40    |
| Average of Peak Concentrations = |        |        |                  |         | 2.5               |              |        |           |

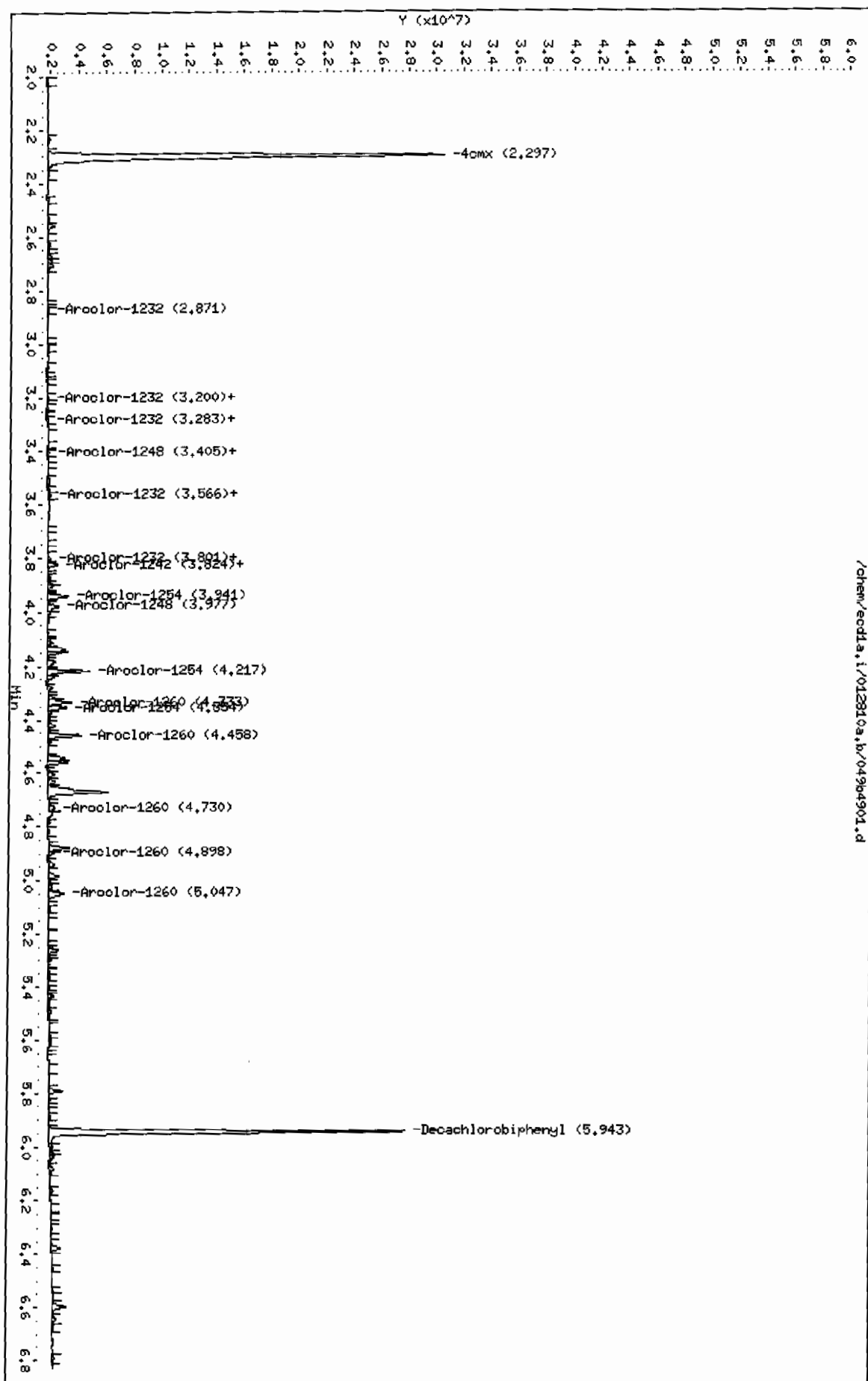
|                                  |        |        | CONCENTRATIONS |         |                   |                |             |
|----------------------------------|--------|--------|----------------|---------|-------------------|----------------|-------------|
|                                  |        |        | ON-COI.        |         | FINAL             |                |             |
| RT                               | EXP RT | DLT RT | RESPONSE       | ( ug/L) | (ug/Kg)           | TARGET RANGE   | RATIO       |
| ==                               | =====  | =====  | =====          | =====   | =====             | =====          | =====       |
| 7 Aroclor-1260                   |        |        |                |         | CAS #: 11096-82-5 |                |             |
| 4.333                            | 4.335  | -0.002 | 1344968        | 112.768 | 4.0               | 80.00- 120.00  | 100.00 (aM) |
| 4.458                            | 4.459  | -0.001 | 1706819        | 118.791 | 4.3               | 101.61- 141.61 | 126.90      |
| 4.730                            | 4.725  | 0.005  | 456525         | 41.8500 | 1.5               | 71.00- 111.00  | 33.94       |
| 4.898                            | 4.899  | -0.001 | 268018         | 23.9186 | 0.86              | 73.09- 113.09  | 19.93       |
| 5.047                            | 5.046  | 0.001  | 1147009        | 47.2742 | 1.7               | 185.37- 225.37 | 85.28       |
| Average of Peak Concentrations = |        |        |                |         | 2.5               |                |             |

QC Flag Legend

- a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

Data File: /chem/ecdl.a.i/012810a.b/049b4901.d  
Date: 28-JAN-2010 18:14  
Client ID: RE15-10-8412  
Sample Info: 124511400411  
Volume Injected (uL): 1.0  
Column phase: CLP2

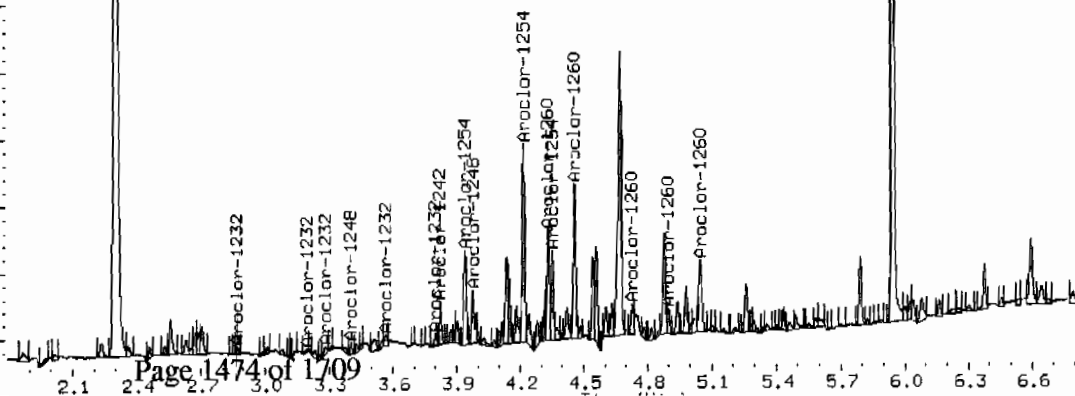
Instrument: ecdl.a.i  
Operator: YSI  
Column diameter: 0.25



Comment: Manually Integrated  
Data File: /chem/ecdl1a.i/012810a.b/049b4901.d  
Operator: YS1  
Injection Date: 28-JAN-2010 18:11  
Instrument: ecdl1a.i  
Client Sample ID: RE15-10-8412

Y (x10<sup>7</sup>)

Decachlorobiphenyl

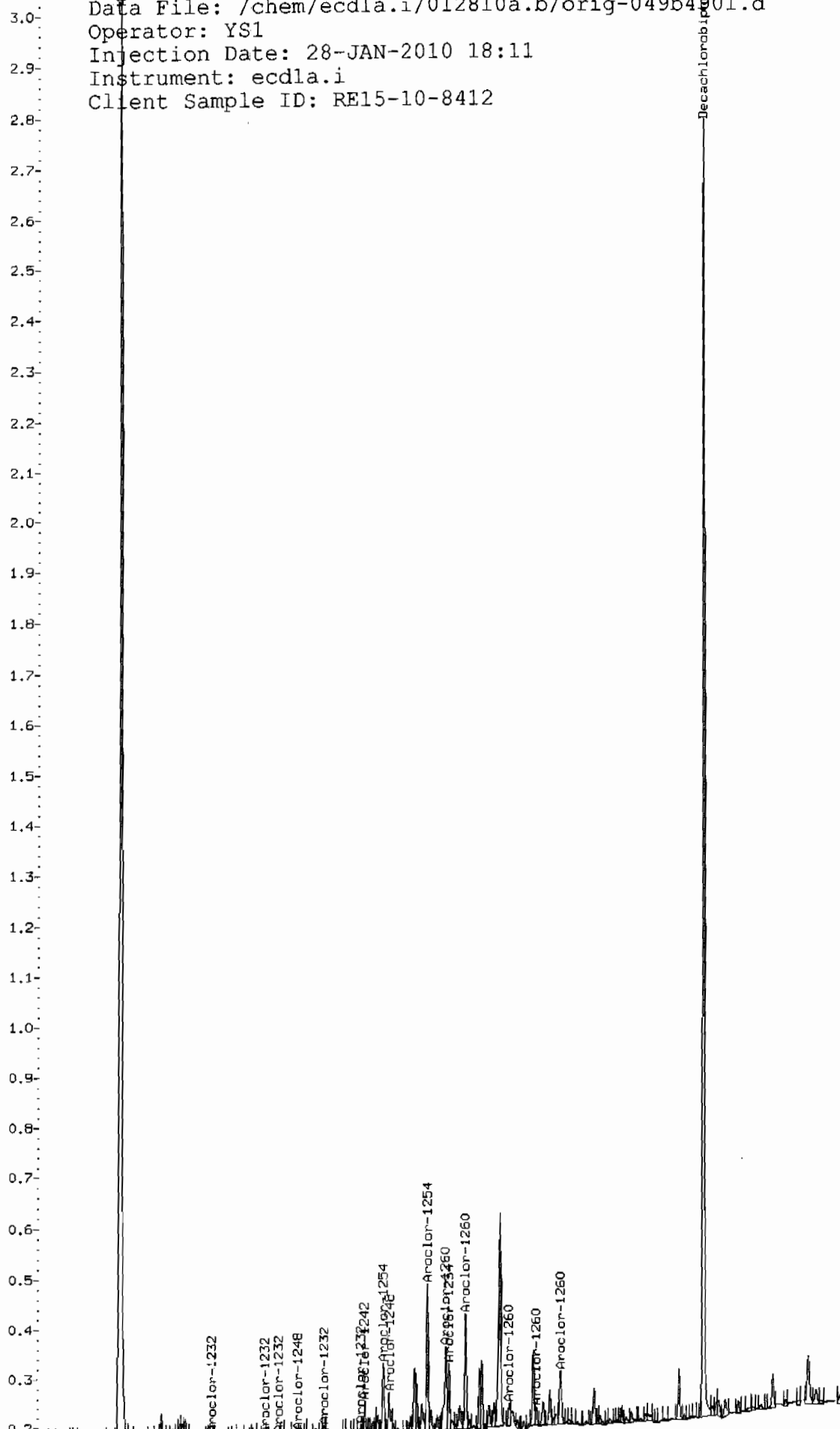




Comment: Before manual integration  
Data File: /chem/ecdl1a.i/012810a.b/orig-049b4001.d  
Operator: YS1  
Injection Date: 28-JAN-2010 18:11  
Instrument: ecd1a.i  
Client Sample ID: RE15-10-8412

Y (x10<sup>-7</sup>)

Decachlorobiphenyl



**PCB**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 245114006

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45

Matrix: R  
% Moisture: 10.6  
Project: LANL01004  
SOP Ref: GL-OA-E-040

Client ID: RE15-10-8413  
Batch ID: 944883  
Run Date: 01/28/2010 19:03  
Prep Date: 01/25/2010 20:44  
Data File: 053f5301.d  
053b5301.d

Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.17 g  
Column: 1 CLP1  
2 CLP2

Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parname      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ | Column |
|------------|--------------|-----------|--------|-------|---------|---------|--------|
| 12674-11-2 | Aroclor-1016 | U         | 3.71   | ug/kg | 1.23    | 3.71    | 1      |
| 11104-28-2 | Aroclor-1221 | U         | 3.71   | ug/kg | 1.23    | 3.71    | 1      |
| 11141-16-5 | Aroclor-1232 | U         | 3.71   | ug/kg | 1.23    | 3.71    | 1      |
| 53469-21-9 | Aroclor-1242 | U         | 3.71   | ug/kg | 1.23    | 3.71    | 1      |
| 12672-29-6 | Aroclor-1248 | U         | 3.71   | ug/kg | 1.23    | 3.71    | 1      |
| 11097-69-1 | Aroclor-1254 | P         | 6.50   | ug/kg | 1.23    | 3.71    | 1      |
| 11096-82-5 | Aroclor-1260 | U         | 3.71   | ug/kg | 1.23    | 3.71    | 1      |

Data File: /chem/ecdl1a.i/012810a.b/053f5301.d  
Report Date: 29-Jan-2010 07:48

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/053f5301.d

Lab Smp Id: 245114006

Client Smp ID: RE15-10-8413

Inj Date : 28-JAN-2010 19:03

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |245114006|1|

Misc Info : |ECD82P\_1S|944883|SVA|LANL|SOIL|RE15-10-8413|

Comment :

Method : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m

Meth Date : 29-Jan-2010 06:55 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 53

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1324.sub

Target Version: 3.50

Sample Matrix: Soil

Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

| Name | Value    | Description                    |
|------|----------|--------------------------------|
| DF   | 1.00000  | Dilution Factor                |
| Uf   | 1.00000  | Correction factor              |
| Vt   | 1.00000  | Volume of final extract (mL)   |
| Vi   | 1.00000  | Volume injected (uL)           |
| Ws   | 30.17000 | Weight of sample extracted (g) |
| M    | 10.61900 | % Moisture                     |

Cpnd Variable Local Compound Variable

CONCENTRATIONS

ON-COL FINAL

| RT | EXP RT | DLT RT | RESPONSE ( ug/L) | (ug/Kg) | TARGET RANGE | RATIO |
|----|--------|--------|------------------|---------|--------------|-------|
|----|--------|--------|------------------|---------|--------------|-------|

|            |       |       |          |         |                   |        |
|------------|-------|-------|----------|---------|-------------------|--------|
| \$ 11 4cmx |       |       |          |         | CAS #: 877-09-8   |        |
| 1.967      | 1.966 | 0.001 | 37650052 | 97.2978 | 3.6 80.00- 120.00 | 100.00 |

|                          |       |        |          |         |                   |        |
|--------------------------|-------|--------|----------|---------|-------------------|--------|
| \$ 12 Decachlorobiphenyl |       |        |          |         | CAS #: 2051-24-3  |        |
| 5.276                    | 5.278 | -0.002 | 25988792 | 90.5023 | 3.4 80.00- 120.00 | 100.00 |

|                |       |        |         |         |                    |        |
|----------------|-------|--------|---------|---------|--------------------|--------|
| 6 Aroclor-1254 |       |        |         |         | CAS #: 11097-69-1  |        |
| 3.266          | 3.267 | -0.001 | 1447533 | 115.937 | 4.3 80.00- 120.00  | 100.00 |
| 3.422          | 3.422 | 0.000  | 1691957 | 101.182 | 3.8 115.55- 155.55 | 116.89 |
| 3.655          | 3.656 | -0.001 | 4505499 | 217.511 | 8.1 157.83- 197.83 | 311.25 |
| 3.818          | 3.820 | -0.002 | 1699511 | 108.289 | 4.0 114.44- 154.44 | 117.41 |

CONCENTRATIONS

ON-COL      FINAL

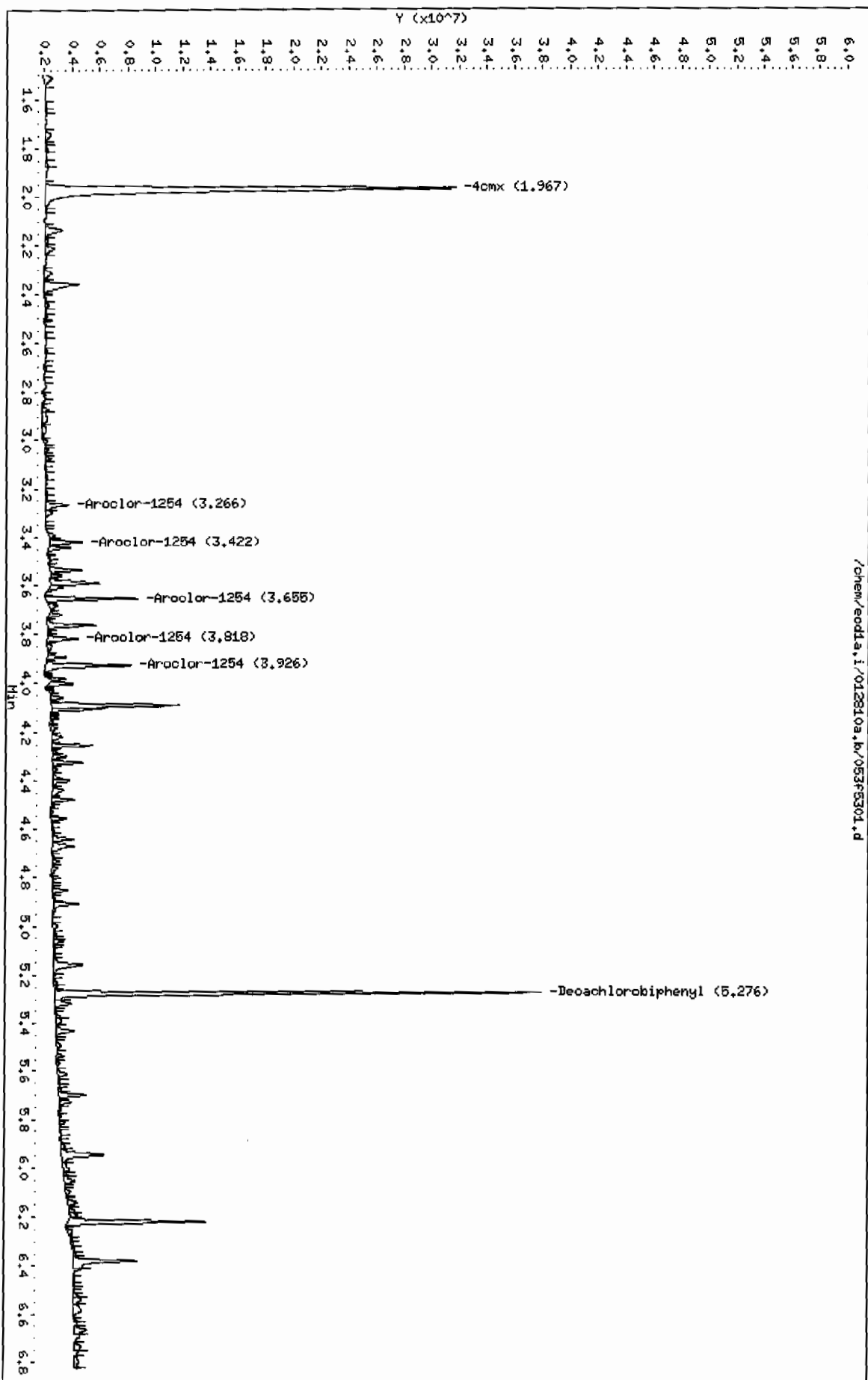
| RT | EXP RT | DLT RT | RESPONSE ( ug/L) | (ug/Kg) | TARGET RANGE | RATIO |
|----|--------|--------|------------------|---------|--------------|-------|
|----|--------|--------|------------------|---------|--------------|-------|

6 Aroclor-1254 (continued)

|                                  |       |        |         |         |                     |        |
|----------------------------------|-------|--------|---------|---------|---------------------|--------|
| 3.926                            | 3.928 | -0.002 | 5000508 | 329.577 | 12.2 106.96- 146.96 | 345.45 |
| Average of Peak Concentrations = |       |        |         | 6.5     |                     |        |

Data File: /chem/eod1a.i/012810a,b/053f5301.d  
Date: 28-JUN-2010 19:03  
Client ID: RE15-10-8413  
Sample Info: 1245114006/11  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: eod1a.i  
Operator: YSL  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/053b5301.d

Lab Smp Id: 245114006

Client Smp ID: RE15-10-8413

Inj Date : 28-JAN-2010 19:03

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |245114006|1|

Misc Info : |ECD82P\_1S|944883|SVA|LANL|SOIL|RE15-10-8413|

Comment :

Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m

Meth Date : 29-Jan-2010 06:54 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 53

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1324.sub

Target Version: 3.50

Sample Matrix: Soil

Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

| Name | Value    | Description                    |
|------|----------|--------------------------------|
| DF   | 1.00000  | Dilution Factor                |
| Uf   | 1.00000  | Correction factor              |
| Vt   | 1.00000  | Volume of final extract (mL)   |
| Vi   | 1.00000  | Volume injected (uL)           |
| Ws   | 30.17000 | Weight of sample extracted (g) |
| M    | 10.61900 | % Moisture                     |

Cpnd Variable

Local Compound Variable

CONCENTRATIONS

| RT                       | EXP RT | DLT RT | ON-COL   | FINAL   | RESPONSE ( ug/L) | (ug/Kg)        | TARGET RANGE      | RATIO |
|--------------------------|--------|--------|----------|---------|------------------|----------------|-------------------|-------|
| \$ 11 4cmx               |        |        |          |         |                  |                | CAS #: 877-09-8   |       |
| 2.299                    | 2.298  | 0.001  | 26744493 | 95.7975 | 3.6              | 80.00- 120.00  | 100.00            |       |
| \$ 12 Decachlorobiphenyl |        |        |          |         |                  |                | CAS #: 2051-24-3  |       |
| 5.944                    | 5.944  | 0.000  | 18919248 | 108.348 | 4.0              | 80.00- 120.00  | 100.00            |       |
| 6 Aroclor-1254           |        |        |          |         |                  |                | CAS #: 11097-69-1 |       |
| 3.405                    | 3.403  | 0.002  | 141262   | 21.9513 | 0.81             | 80.00- 120.00  | 100.00(a)         |       |
| 3.824                    | 3.825  | -0.001 | 802423   | 69.4179 | 2.6              | 154.13- 194.13 | 568.04            |       |
| 3.941                    | 3.942  | -0.001 | 1448161  | 116.493 | 4.3              | 177.97- 217.97 | 1025.16           |       |
| 4.217                    | 4.218  | -0.001 | 3159433  | 187.170 | 6.9              | 254.08- 294.08 | 2236.58           |       |

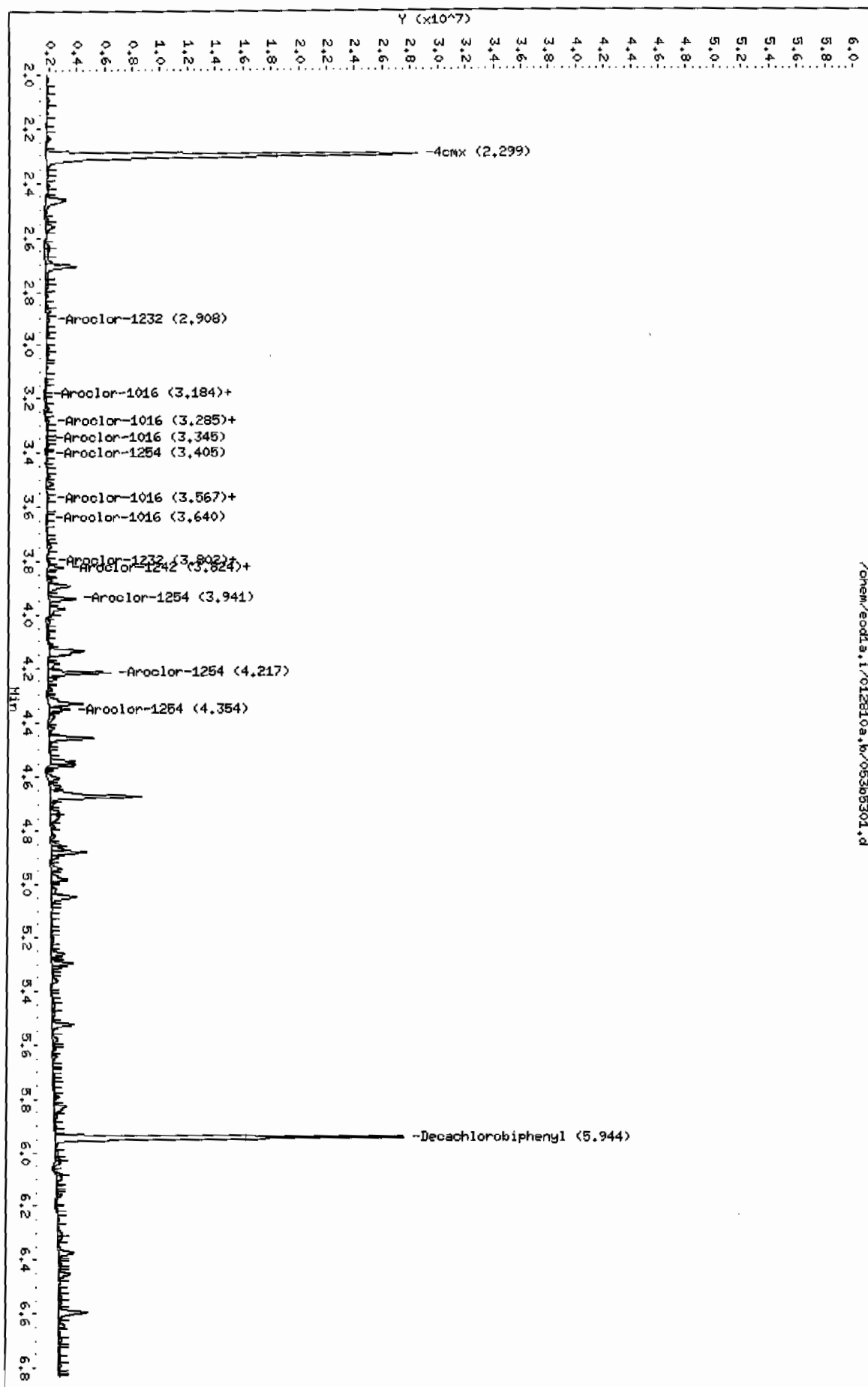
| CONCENTRATIONS                   |        |        |                  |         |         |                       |
|----------------------------------|--------|--------|------------------|---------|---------|-----------------------|
|                                  |        |        | ON-COL           |         | FINAL   |                       |
| RT                               | EXP RT | DLT RT | RESPONSE ( ug/L) |         | (ug/Kg) | TARGET RANGE RATIO    |
| ==                               | =====  | =====  | =====            | =====   | =====   | =====                 |
| 6 Aroclor-1254 (continued)       |        |        |                  |         |         |                       |
| 4.354                            | 4.355  | -0.001 | 1011357          | 81.3284 | 3.0     | 182.44- 222.44 715.94 |
| Average of Peak Concentrations = |        |        |                  |         | 3.5     |                       |
| -----                            |        |        |                  |         |         |                       |

#### QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecdl1a.i/012810a,b/05365301.d  
Date: 28-JUN-2010 19:03  
Client ID: REIS-10-8413  
Sample Info: 124511400611  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdl1a.i  
Operator: YSL  
Column diameter: 0.25





## PCB

Page 1 of 1

Certificate of Analysis  
Sample SummarySDG Number: 10-1324  
Lab Sample ID: 245114005

Date Collected: 01/14/2010 12:00

Date Received: 01/20/2010 08:45

Matrix: R

%Moisture: 9.6

Client ID: RE15-10-8441

Client: LANL010

Project: LANL01004

Batch ID: 944883

Method: SW846 8082

SOP Ref: GI.-OA-E-040

Run Date: 01/28/2010 18:23

Inst: ECD1A.I

Dilution: 1

Prep Date: 01/25/2010 20:44

Analyst: YS1

Inj. Vol: 1 uL

Data File: 050f5001.d

Aliquot: 30.18 g

Final Volume: 1 mL

Column: 1 CLP1

Level: LOW

050b5001.d

2 CLP2

| CAS No.    | Parmname     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ | Column |
|------------|--------------|-----------|--------|-------|---------|---------|--------|
| 12674-11-2 | Aroclor-1016 | U         | 3.66   | ug/kg | 1.22    | 3.66    | 1      |
| 11104-28-2 | Aroclor-1221 | U         | 3.66   | ug/kg | 1.22    | 3.66    | 1      |
| 11141-16-5 | Aroclor-1232 | U         | 3.66   | ug/kg | 1.22    | 3.66    | 1      |
| 53469-21-9 | Aroclor-1242 | U         | 3.66   | ug/kg | 1.22    | 3.66    | 1      |
| 12672-29-6 | Aroclor-1248 | U         | 3.66   | ug/kg | 1.22    | 3.66    | 1      |
| 11097-69-1 | Aroclor-1254 | P         | 5.00   | ug/kg | 1.22    | 3.66    | 1      |
| 11096-82-5 | Aroclor-1260 | U         | 3.66   | ug/kg | 1.22    | 3.66    | 1      |

Data File: /chem/ecdla.i/012810a.b/050f5001.d  
Report Date: 01-Feb-2010 14:54

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012810a.b/050f5001.d  
Lab Smp Id: 245114005 Client Smp ID: RE15-10-8441  
Inj Date : 28-JAN-2010 18:23  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |245114005|1|  
Misc Info : |ECD82P\_1S|944883|SVA|LANL|SOIL|RE15-10-8441|||  
Comment :  
Method : /chem/ecdla.i/012810a.b/ECD1-F-8082-121409.m  
Meth Date : 29-Jan-2010 09:10 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 50  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1324.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpclp1

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

| Name | Value    | Description                    |
|------|----------|--------------------------------|
| DF   | 1.00000  | Dilution Factor                |
| Uf   | 1.00000  | Correction factor              |
| Vt   | 1.00000  | Volume of final extract (mL)   |
| Vi   | 1.00000  | Volume injected (uL)           |
| Ws   | 30.18000 | Weight of sample extracted (g) |
| M    | 9.58090  | % Moisture                     |

Cpnd Variable Local Compound Variable

| CONCENTRATIONS                            |        |        |                  |         |                |           |
|---|--------|--------|------------------|---------|----------------|-----------|
|   |        |        | ON-COL           | FINAL   |                |           |
| RT  | EXP RT | DLT RT | RESPONSE ( ug/L) | (ug/Kg) | TARGET RANGE   | RATIO     |
| ==  | =====  | =====  | =====            | =====   | =====          | =====     |
| \$ 11 4cmx CAS #: 877-09-8                |        |        |                  |         |                |           |
| 1.966                                     | 1.966  | 0.000  | 45263741 116.974 | 4.3     | 80.00- 120.00  | 100.00    |
| -----                                     |        |        |                  |         |                |           |
| \$ 12 Decachlorobiphenyl CAS #: 2051-24-3 |        |        |                  |         |                |           |
| 5.277                                     | 5.278  | -0.001 | 30804027 107.271 | 3.9     | 80.00- 120.00  | 100.00    |
| -----                                     |        |        |                  |         |                |           |
| 6 Aroclor-1254 CAS #: 11097-69-1          |        |        |                  |         |                |           |
| 3.276                                     | 3.267  | 0.009  | 1362728 109.145  | 4.0     | 80.00- 120.00  | 100.00(M) |
| 3.422                                     | 3.422  | 0.000  | 1406561 84.1147  | 3.1     | 115.55- 155.55 | 103.22    |
| 3.655                                     | 3.656  | -0.001 | 3256485 157.212  | 5.8     | 157.83- 197.83 | 238.97    |
| 3.819                                     | 3.820  | -0.001 | 1727842 110.094  | 4.0     | 114.44- 154.44 | 126.79    |

CONCENTRATIONS

ON-COL FINAL

| RT | EXP RT | DLT RT | RESPONSE ( ug/l.) | (ug/Kg) | TARGET RANGE | RATIO |
|----|--------|--------|-------------------|---------|--------------|-------|
|----|--------|--------|-------------------|---------|--------------|-------|

6 Aroclor-1254 (continued)

|       |       |        |         |         |                    |        |
|-------|-------|--------|---------|---------|--------------------|--------|
| 3.927 | 3.928 | -0.001 | 3450243 | 227.401 | 8.3 106.96- 146.96 | 253.19 |
|-------|-------|--------|---------|---------|--------------------|--------|

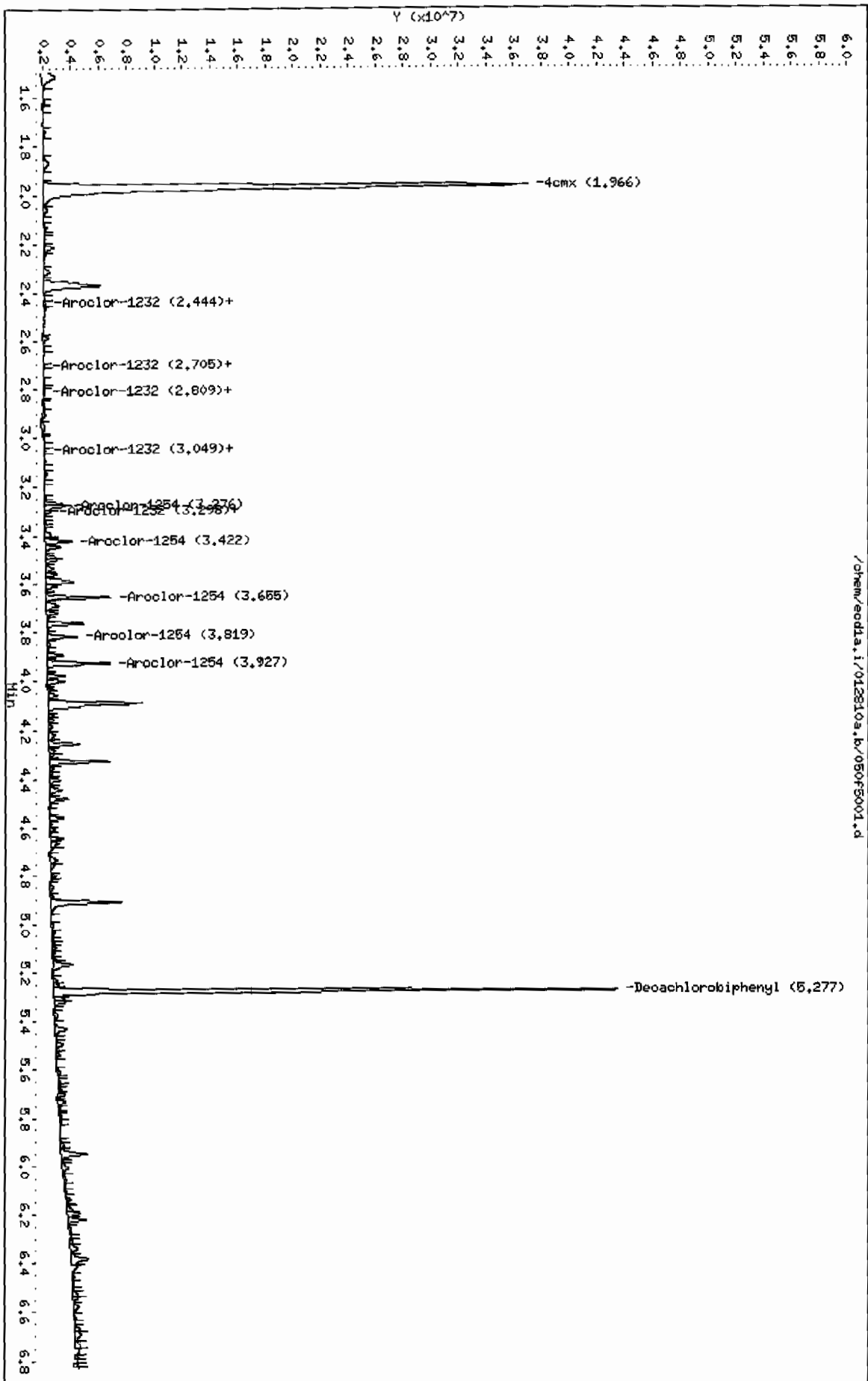
Average of Peak Concentrations = 5.0

QC Flag Legend

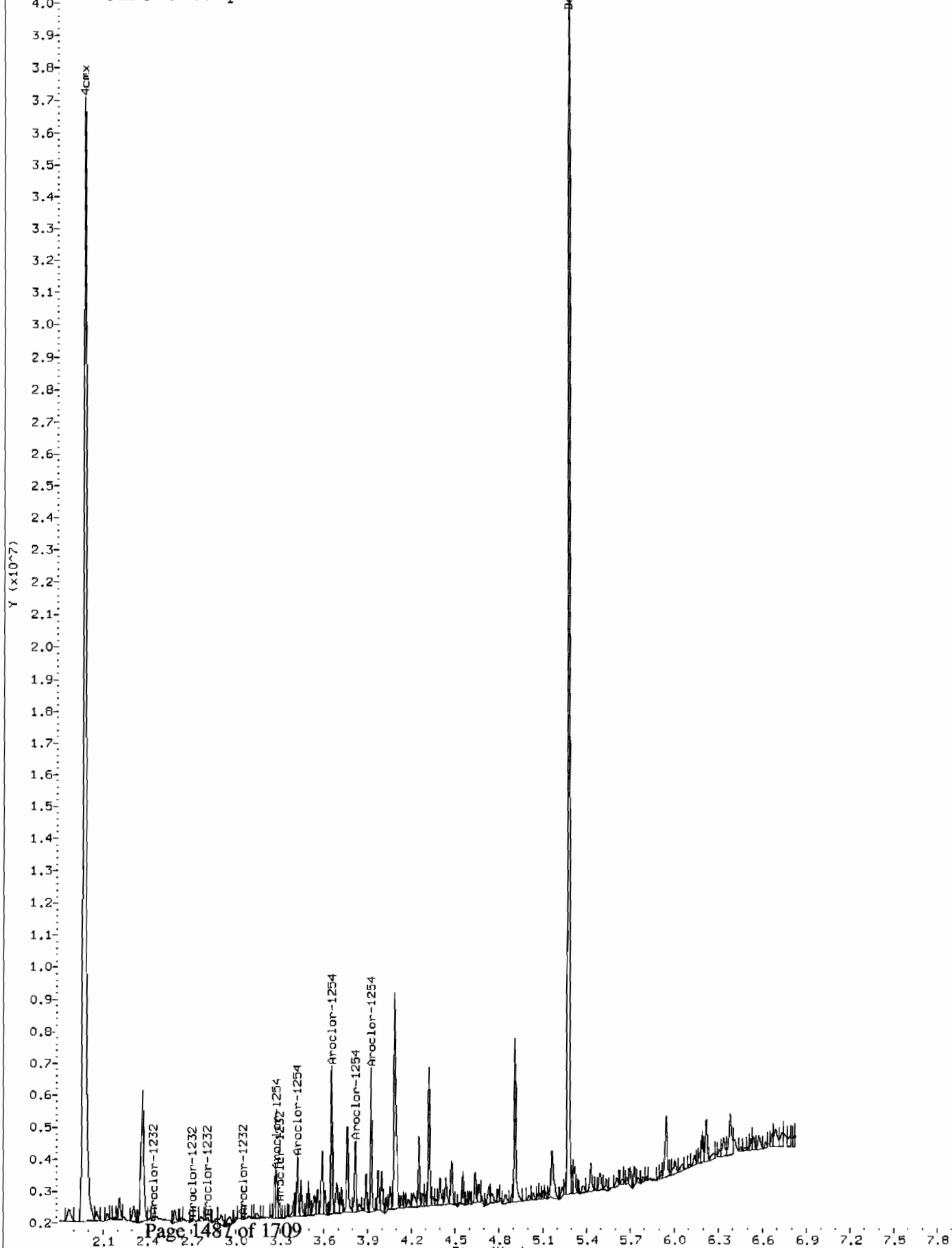
M - Compound response manually integrated.

Data File: /chem/ecdl1a.i/012810a.b/050F5001.d  
 Date: 28-JAN-2010 18:23  
 Client ID: RELS-10-8441  
 Sample Info: 124511400511  
 Volume Injected (UL): 1.0  
 Column Phase: CLP1

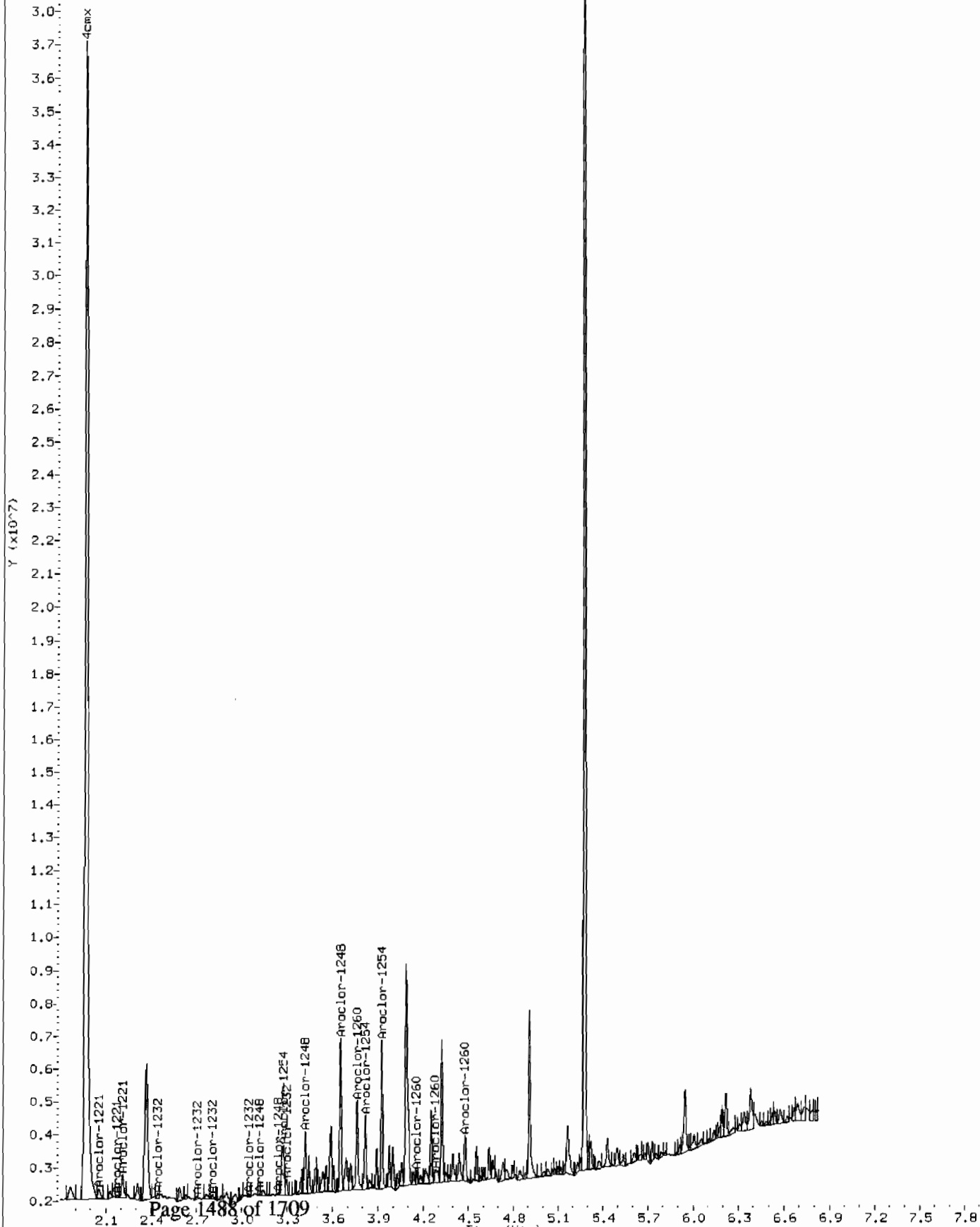
Instrument: ecdl1a.i  
 Operator: YSL  
 Column diameter: 0.25



Client Sample ID: RE15-10-8441



Client Sample ID: RE15-10-8441



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecdl1a.i/012810a.b/050b5001.d  
 Lab Smp Id: 245114005 Client Smp ID: RE15-10-8441  
 Inj Date : 28-JAN-2010 18:23  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |245114005|1|  
 Misc Info : |ECD82P\_1S|944883|SVA|LANL|SOIL|RE15-10-8441|||  
 Comment :  
 Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m  
 Meth Date : 29-Jan-2010 09:10 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
 Als bottle: 50  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1324.sub  
 Target Version: 3.50 Sample Matrix: Soil  
 Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value    | Description                    |
|------|----------|--------------------------------|
| DF   | 1.00000  | Dilution Factor                |
| Uf   | 1.00000  | Correction factor              |
| Vt   | 1.00000  | Volume of final extract (mL)   |
| Vi   | 1.00000  | Volume injected (uL)           |
| Ws   | 30.18000 | Weight of sample extracted (g) |
| M    | 9.58090  | % Moisture                     |

Cpnd Variable Local Compound Variable

| CONCENTRATIONS           |        |        |                  |        |                   |                |            |
|--------------------------|--------|--------|------------------|--------|-------------------|----------------|------------|
| RT                       | EXP RT | DLT RT | RESPONSE ( ug/L) | ON-COL | FINAL             | TARGET RANGE   | RATIO      |
| \$ 11 4cmx               |        |        |                  |        | CAS #: 877-09-8   |                |            |
| 2.298                    | 2.298  | 0.000  | 32068098 114.866 |        | 4.2               | 80.00- 120.00  | 100.00     |
| \$ 12 Decachlorobiphenyl |        |        |                  |        | CAS #: 2051-24-3  |                |            |
| 5.944                    | 5.944  | 0.000  | 22007163 126.032 |        | 4.6               | 80.00- 120.00  | 100.00     |
| 6 Aroclor-1254           |        |        |                  |        | CAS #: 11097-69-1 |                |            |
| 3.404                    | 3.403  | 0.001  | 101552 15.7806   |        | 0.58              | 80.00- 120.00  | 100.00 (a) |
| 3.824                    | 3.825  | -0.001 | 637277 55.1310   |        | 2.0               | 154.13- 194.13 | 627.54     |
| 3.942                    | 3.942  | 0.000  | 1105463 88.9259  |        | 3.2               | 177.97- 217.97 | 1088.57    |
| 4.217                    | 4.218  | -0.001 | 2567659 152.112  |        | 5.6               | 254.08- 294.08 | 2528.42    |

|                                  |        |        |    | CONCENTRATIONS    |         |        |         |        |
|----------------------------------|--------|--------|----|-------------------|---------|--------|---------|--------|
|                                  |        |        |    | ON-COL            | FINAL   |        |         |        |
| RT                               | EXP RT | DLT RT | RT | RESPONSE ( ug/l.) | (ug/Kg) | TARGET | RANGE   | RATIO  |
| ==                               | =====  | =====  |    | =====             | =====   | =====  | =====   | =====  |
| 6 Aroclor-1254 (continued)       |        |        |    |                   |         |        |         |        |
| 4.354                            | 4.355  | -0.001 |    | 1031254           | 82.9284 | 3.0    | 182.44- | 222.44 |
| Average of Peak Concentrations = |        |        |    |                   | 2.9     |        |         |        |

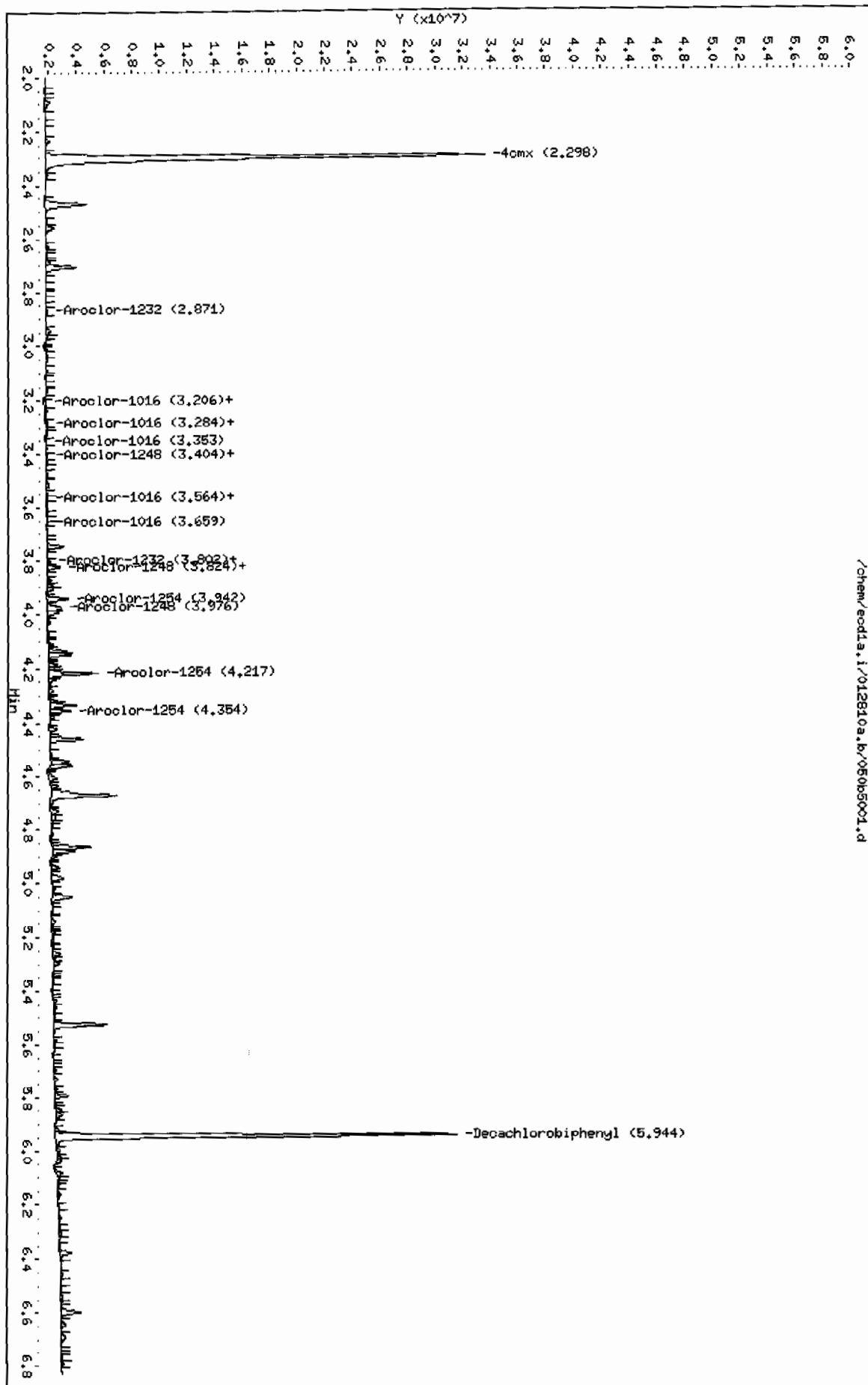
#### QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).



Data File: /chem/ecdl1a.i/012810a.k/050b5001.d  
 Date: 28-JAN-2010 18:23  
 Client ID: RE15-10-8441  
 Sample Info: 1245114005111  
 Volume Injected (µL): 1.0  
 Column phase: CLP2

Instrument: ecdl1a.i  
 Operator: YSL  
 Column diameter: 0.25



# STANDARDS DATA

Report Date: 28-Jan-2010 11:08

### Calibration History

Method : /chem/ecd1a.i/012710.b/ECD1-F-8082-121409.m  
Start Cal Date: 14-DEC-2009 05:36  
End Cal Date : 22-JAN-2010 09:50

#### Initial Calibration

| Injection Date                       | Sublist | Calibration File                  |
|--------------------------------------|---------|-----------------------------------|
| Cal Level: 1 , Cal Amount: 100.00000 |         |                                   |
| 22-JAN-2010 08:01                    | AR1262  | /chem/ecd1a.i/012210.b/013f1301.d |
| 22-JAN-2010 06:48                    | AR1232  | /chem/ecd1a.i/012210.b/006f0601.d |
| 14-DEC-2009 11:34                    | AR1268  | /chem/ecd1a.i/121409.b/040f4001.d |
| 14-DEC-2009 09:28                    | AR1248  | /chem/ecd1a.i/121409.b/028f2801.d |
| 14-DEC-2009 08:25                    | AR1242  | /chem/ecd1a.i/121409.b/022f2201.d |
| 14-DEC-2009 07:22                    | AR1254  | /chem/ecd1a.i/121409.b/016f1601.d |
| 22-JAN-2010 09:08                    | AR1660  | /chem/ecd1a.i/012210.b/019f1901.d |

|                                      |        |                                   |
|--------------------------------------|--------|-----------------------------------|
| Cal Level: 2 , Cal Amount: 250.00000 |        |                                   |
| 22-JAN-2010 08:12                    | AR1262 | /chem/ecd1a.i/012210.b/014f1401.d |
| 22-JAN-2010 06:58                    | AR1232 | /chem/ecd1a.i/012210.b/007f0701.d |
| 14-DEC-2009 11:44                    | AR1268 | /chem/ecd1a.i/121409.b/041f4101.d |
| 14-DEC-2009 09:38                    | AR1248 | /chem/ecd1a.i/121409.b/029f2901.d |
| 14-DEC-2009 08:35                    | AR1242 | /chem/ecd1a.i/121409.b/023f2301.d |
| 14-DEC-2009 07:32                    | AR1254 | /chem/ecd1a.i/121409.b/017f1701.d |
| 22-JAN-2010 09:19                    | AR1660 | /chem/ecd1a.i/012210.b/020f2001.d |

|                                      |        |                                   |
|--------------------------------------|--------|-----------------------------------|
| Cal Level: 3 , Cal Amount: 500.00000 |        |                                   |
| 22-JAN-2010 08:22                    | AR1262 | /chem/ecd1a.i/012210.b/015f1501.d |
| 22-JAN-2010 07:09                    | AR1232 | /chem/ecd1a.i/012210.b/008f0801.d |
| 14-DEC-2009 11:55                    | AR1268 | /chem/ecd1a.i/121409.b/042f4201.d |
| 14-DEC-2009 09:49                    | AR1248 | /chem/ecd1a.i/121409.b/030f3001.d |
| 14-DEC-2009 08:46                    | AR1242 | /chem/ecd1a.i/121409.b/024f2401.d |
| 14-DEC-2009 07:43                    | AR1254 | /chem/ecd1a.i/121409.b/018f1801.d |
| 22-JAN-2010 09:29                    | AR1660 | /chem/ecd1a.i/012210.b/021f2101.d |

|                                       |              |                                   |
|---------------------------------------|--------------|-----------------------------------|
| Cal Level: 4 , Cal Amount: 1000.00000 |              |                                   |
| 14-DEC-2009 12:37                     | DDTANALOGSTD | /chem/ecd1a.i/121409.b/046f4601.d |
| 14-DEC-2009 09:59                     | AR1248       | /chem/ecd1a.i/121409.b/031f3101.d |
| 14-DEC-2009 08:56                     | AR1242       | /chem/ecd1a.i/121409.b/025f2501.d |
| 14-DEC-2009 07:53                     | AR1254       | /chem/ecd1a.i/121409.b/019f1901.d |
| 22-JAN-2010 09:40                     | AR1660       | /chem/ecd1a.i/012210.b/022f2201.d |
| 14-DEC-2009 12:06                     | AR1268       | /chem/ecd1a.i/121409.b/043f4301.d |
| 22-JAN-2010 08:36                     | AR1262       | /chem/ecd1a.i/012210.b/016f1601.d |
| 14-DEC-2009 05:47                     | AR1221       | /chem/ecd1a.i/121409.b/007f0701.d |
| 22-JAN-2010 07:19                     | AR1232       | /chem/ecd1a.i/012210.b/009f0901.d |

|                                       |  |  |
|---------------------------------------|--|--|
| Cal Level: 5 , Cal Amount: 4000.00000 |  |  |
|---------------------------------------|--|--|

|                   |        |                                   |
|-------------------|--------|-----------------------------------|
| 22-JAN-2010 07:30 | AR1232 | /chem/ecdla.i/012210.b/010f1001.d |
| 14-DEC-2009 12:16 | AR1268 | /chem/ecdla.i/121409.b/044f4401.d |
| 14-DEC-2009 10:10 | AR1248 | /chem/ecdla.i/121409.b/032f3201.d |
| 14-DEC-2009 09:07 | AR1242 | /chem/ecdla.i/121409.b/026f2601.d |
| 14-DEC-2009 08:04 | AR1254 | /chem/ecdla.i/121409.b/020f2001.d |
| 22-JAN-2010 09:50 | AR1660 | /chem/ecdla.i/012210.b/023f2301.d |

# Continuing Calibration

Ccal Level Mode: GLOBAL LEVEL 4

|                                   |        |                                   |
|-----------------------------------|--------|-----------------------------------|
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                   |
| 27-JAN-2010 18:37                 | AR1660 | /chem/ecdla.i/012710.b/063f6301.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                   |
| 27-JAN-2010 16:18                 | AR1660 | /chem/ecdla.i/012710.b/052f5201.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                   |
| 27-JAN-2010 14:42                 | AR1660 | /chem/ecdla.i/012710.b/044f4401.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                   |
| 27-JAN-2010 12:19                 | AR1660 | /chem/ecdla.i/012710.b/032f3201.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                   |
| 27-JAN-2010 10:09                 | AR1660 | /chem/ecdla.i/012710.b/021f2101.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                   |
| 27-JAN-2010 07:51                 | AR1268 | /chem/ecdla.i/012710.b/009f0901.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                   |
| 27-JAN-2010 07:41                 | AR1262 | /chem/ecdla.i/012710.b/008f0801.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                   |
| 27-JAN-2010 07:30                 | AR1221 | /chem/ecdla.i/012710.b/007f0701.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                   |
| 27-JAN-2010 07:20                 | AR1232 | /chem/ecdla.i/012710.b/006f0601.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                   |
| 27-JAN-2010 07:09                 | AR1248 | /chem/ecdla.i/012710.b/005f0501.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                   |
| 27-JAN-2010 06:59                 | AR1242 | /chem/ecdla.i/012710.b/004f0401.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                   |
| 27-JAN-2010 06:49                 | AR1254 | /chem/ecdla.i/012710.b/003f0301.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                   |
| 27-JAN-2010 06:38                 | AR1660 | /chem/ecdla.i/012710.b/002f0201.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                   |
| 22-JAN-2010 09:40                 | AR1660 | /chem/ecdla.i/012210.b/022f2201.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                   |
| 22-JAN-2010 08:36                 | AR1262 | /chem/ecdla.i/012210.b/016f1601.d |



Report Date: 28-Jan-2010 11:08

### Calibration History

Method : /chem/ecdl1a.i/012710.b/ECD1-B-8082-121409.m  
Start Cal Date: 11-DEC-2009 10:17  
End Cal Date : 22-JAN-2010 09:50

#### Initial Calibration

| Injection Date                       | Sublist | Calibration File                   |
|--------------------------------------|---------|------------------------------------|
| Cal Level: 1 , Cal Amount: 100.00000 |         |                                    |
| 22-JAN-2010 08:01                    | AR1262  | /chem/ecdl1a.i/012210.b/013b1301.d |
| 22-JAN-2010 06:48                    | AR1232  | /chem/ecdl1a.i/012210.b/006b0601.d |
| 14-DEC-2009 11:34                    | AR1268  | /chem/ecdl1a.i/121409.b/040b4001.d |
| 14-DEC-2009 09:28                    | AR1248  | /chem/ecdl1a.i/121409.b/028b2801.d |
| 14-DEC-2009 08:25                    | AR1242  | /chem/ecdl1a.i/121409.b/022b2201.d |
| 14-DEC-2009 07:22                    | AR1254  | /chem/ecdl1a.i/121409.b/016b1601.d |
| 22-JAN-2010 09:08                    | AR1660  | /chem/ecdl1a.i/012210.b/019b1901.d |

|                                      |        |                                    |
|--------------------------------------|--------|------------------------------------|
| Cal Level: 2 , Cal Amount: 250.00000 |        |                                    |
| 22-JAN-2010 08:12                    | AR1262 | /chem/ecdl1a.i/012210.b/014b1401.d |
| 22-JAN-2010 06:58                    | AR1232 | /chem/ecdl1a.i/012210.b/007b0701.d |
| 14-DEC-2009 11:44                    | AR1268 | /chem/ecdl1a.i/121409.b/041b4101.d |
| 14-DEC-2009 09:38                    | AR1248 | /chem/ecdl1a.i/121409.b/029b2901.d |
| 14-DEC-2009 08:35                    | AR1242 | /chem/ecdl1a.i/121409.b/023b2301.d |
| 14-DEC-2009 07:32                    | AR1254 | /chem/ecdl1a.i/121409.b/017b1701.d |
| 22-JAN-2010 09:19                    | AR1660 | /chem/ecdl1a.i/012210.b/020b2001.d |

|                                      |        |                                    |
|--------------------------------------|--------|------------------------------------|
| Cal Level: 3 , Cal Amount: 500.00000 |        |                                    |
| 22-JAN-2010 08:22                    | AR1262 | /chem/ecdl1a.i/012210.b/015b1501.d |
| 22-JAN-2010 07:09                    | AR1232 | /chem/ecdl1a.i/012210.b/008b0801.d |
| 14-DEC-2009 11:55                    | AR1268 | /chem/ecdl1a.i/121409.b/042b4201.d |
| 14-DEC-2009 09:49                    | AR1248 | /chem/ecdl1a.i/121409.b/030b3001.d |
| 14-DEC-2009 08:46                    | AR1242 | /chem/ecdl1a.i/121409.b/024b2401.d |
| 14-DEC-2009 07:43                    | AR1254 | /chem/ecdl1a.i/121409.b/018b1801.d |
| 22-JAN-2010 09:29                    | AR1660 | /chem/ecdl1a.i/012210.b/021b2101.d |

|                                       |              |                                    |
|---------------------------------------|--------------|------------------------------------|
| Cal Level: 4 , Cal Amount: 1000.00000 |              |                                    |
| 14-DEC-2009 12:37                     | DDTANALOGSTD | /chem/ecdl1a.i/121409.b/046b4601.d |
| 14-DEC-2009 12:06                     | AR1268       | /chem/ecdl1a.i/121409.b/043b4301.d |
| 22-JAN-2010 08:36                     | AR1262       | /chem/ecdl1a.i/012210.b/016b1601.d |
| 14-DEC-2009 05:47                     | AR1221       | /chem/ecdl1a.i/121409.b/007b0701.d |
| 22-JAN-2010 07:19                     | AR1232       | /chem/ecdl1a.i/012210.b/009b0901.d |
| 14-DEC-2009 09:59                     | AR1248       | /chem/ecdl1a.i/121409.b/031b3101.d |
| 14-DEC-2009 08:56                     | AR1242       | /chem/ecdl1a.i/121409.b/025b2501.d |
| 14-DEC-2009 07:53                     | AR1254       | /chem/ecdl1a.i/121409.b/019b1901.d |
| 22-JAN-2010 09:40                     | AR1660       | /chem/ecdl1a.i/012210.b/022b2201.d |

|                                       |        |                                    |
|---------------------------------------|--------|------------------------------------|
| Cal Level: 5 , Cal Amount: 4000.00000 |        |                                    |
| 22-JAN-2010 08:47                     | AR1262 | /chem/ecdl1a.i/012210.b/017b1701.d |
| 22-JAN-2010 07:30                     | AR1232 | /chem/ecdl1a.i/012210.b/010b1001.d |
| 14-DEC-2009 12:16                     | AR1268 | /chem/ecdl1a.i/121409.b/044b4401.d |
| 14-DEC-2009 10:10                     | AR1248 | /chem/ecdl1a.i/121409.b/032b3201.d |
| 14-DEC-2009 09:07                     | AR1242 | /chem/ecdl1a.i/121409.b/026b2601.d |

| 22-JAN-2010 09:50 | AR1660 | /chem/ecd1a.i/012210.b/023b2301.d |

Continuing Calibration  
Ccal Level Mode: GLOBAL LEVEL 4

| Ccal Level: 4 , Ccal Amount: 1000 |

| 27-JAN-2010 18:37 | AR1660 | /chem/ecd1a.i/012710.b/063b6301.d |

| Ccal Level: 4 , Ccal Amount: 1000 |

| 27-JAN-2010 16:18 | AR1660 | /chem/ecd1a.i/012710.b/052b5201.d |

| Ccal Level: 4 , Ccal Amount: 1000 |

| 27-JAN-2010 14:42 | AR1660 | /chem/ecd1a.i/012710.b/044b4401.d |

| Ccal Level: 4 , Ccal Amount: 1000 |

| 27-JAN-2010 12:19 | AR1660 | /chem/ecd1a.i/012710.b/032b3201.d |

| Ccal Level: 4 , Ccal Amount: 1000 |

| 27-JAN-2010 10:09 | AR1660 | /chem/ecd1a.i/012710.b/021b2101.d |

| Ccal Level: 4 , Ccal Amount: 1000 |

| 27-JAN-2010 06:38 | AR1660 | /chem/ecd1a.i/012710.b/002b0201.d |

| Ccal Level: 4 , Ccal Amount: 1000 |

| 22-JAN-2010 09:40 | AR1660 | /chem/ecd1a.i/012210.b/022b2201.d |

| Ccal Level: 4 , Ccal Amount: 1000 |

| 27-JAN-2010 07:51 | AR1268 | /chem/ecd1a.i/012710.b/009b0901.d |

| Ccal Level: 4 , Ccal Amount: 1000 |

| 27-JAN-2010 07:41 | AR1262 | /chem/ecd1a.i/012710.b/008b0801.d |

| Ccal Level: 4 , Ccal Amount: 1000 |

| 27-JAN-2010 07:30 | AR1221 | /chem/ecd1a.i/012710.b/007b0701.d |

| Ccal Level: 4 , Ccal Amount: 1000 |

| 27-JAN-2010 07:20 | AR1232 | /chem/ecd1a.i/012710.b/006b0601.d |

| Ccal Level: 4 , Ccal Amount: 1000 |

| 27-JAN-2010 07:09 | AR1248 | /chem/ecd1a.i/012710.b/005b0501.d |

| Ccal Level: 4 , Ccal Amount: 1000 |

| 27-JAN-2010 06:59 | AR1242 | /chem/ecd1a.i/012710.b/004b0401.d |

| Ccal Level: 4 , Ccal Amount: 1000 |

| 27-JAN-2010 06:49 | AR1254 | /chem/ecd1a.i/012710.b/003b0301.d |

| Ccal Level: 4 , Ccal Amount: 1000 |

| 22-JAN-2010 08:36 | AR1262 | /chem/ecd1a.i/012210.b/016b1601.d |

| Ccal Level: 4 , Ccal Amount: 1000 |

| 22-JAN-2010 07:19 | AR1232 | /chem/ecd1a.i/012210.b/009b0901.d |

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdla.i/012710.b/ECD1-F-8082-121409.m  
Quant Method : ESTD Target Version : 3.50  
Last Update : 28-Jan-2010 10:52 Number of Cpnds : 15  
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events

Values

-----  
Initial:Start Threshold 12031.000000  
Initial:End Threshold 6015.500000  
Initial:Area Threshold 15489.000000  
Initial:P-P Resolution 1.000000  
Initial:Bunch Factor 2.000000  
Initial:Negative Peaks OFF  
Initial:Tension 0.500000

| Compound       | RT    | RT Window   | RF        |
|----------------|-------|-------------|-----------|
| 1 Aroclor-1016 | 2.423 | 2.393-2.453 | 1.445e+04 |
|                | 2.710 | 2.680-2.740 | 1.820e+04 |
|                | 2.791 | 2.761-2.821 | 1.198e+04 |
|                | 2.829 | 2.799-2.859 | 7.178e+03 |
|                | 3.039 | 3.009-3.069 | 9.259e+03 |
| 63 4,4-DDD     | 3.953 | 3.933-3.973 | 3.938e+05 |
| 64 4,4-DDE     | 3.603 | 3.583-3.623 | 4.795e+05 |
| 62 4,4-DDT     | 4.118 | 4.098-4.138 | 3.238e+05 |
| 2 Aroclor-1221 | 2.081 | 2.051-2.111 | 4.301e+03 |
|                | 2.174 | 2.144-2.204 | 2.440e+03 |
|                | 2.200 | 2.170-2.230 | 1.027e+04 |
| 3 Aroclor-1232 | 2.423 | 2.393-2.453 | 6.849e+03 |
|                | 2.711 | 2.681-2.741 | 8.426e+03 |
|                | 2.792 | 2.762-2.822 | 5.627e+03 |
|                | 3.040 | 3.010-3.070 | 3.983e+03 |
|                | 3.294 | 3.264-3.324 | 3.858e+03 |
| 4 Aroclor-1242 | 2.422 | 2.392-2.452 | 1.166e+04 |
|                | 2.711 | 2.681-2.741 | 1.345e+04 |
|                | 2.829 | 2.799-2.859 | 5.506e+03 |
|                | 3.039 | 3.009-3.069 | 7.245e+03 |
|                | 3.293 | 3.263-3.323 | 6.811e+03 |



## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdl1a.i/012710.b/ECD1-F-8082-121409.m

| Compound                 | RT    | RT Window   | RF        |
|--------------------------|-------|-------------|-----------|
| 5 Aroclor-1248           | 3.091 | 3.062-3.122 | 7.848e+03 |
|                          | 3.242 | 3.212-3.272 | 6.870e+03 |
|                          | 3.293 | 3.263-3.323 | 1.331e+04 |
|                          | 3.426 | 3.396-3.456 | 1.101e+04 |
|                          | 3.658 | 3.628-3.688 | 7.455e+03 |
| 6 Aroclor-1254           | 3.268 | 3.238-3.298 | 1.249e+04 |
|                          | 3.423 | 3.393-3.453 | 1.672e+04 |
|                          | 3.658 | 3.628-3.688 | 2.071e+04 |
|                          | 3.820 | 3.790-3.850 | 1.569e+04 |
|                          | 3.929 | 3.899-3.959 | 1.517e+04 |
| 7 Aroclor-1260           | 3.765 | 3.735-3.795 | 1.772e+04 |
|                          | 3.928 | 3.898-3.958 | 2.693e+04 |
|                          | 4.158 | 4.128-4.188 | 1.619e+04 |
|                          | 4.300 | 4.270-4.330 | 1.691e+04 |
|                          | 4.480 | 4.450-4.510 | 3.767e+04 |
| 8 Aroclor-1262           | 3.765 | 3.735-3.795 | 1.500e+04 |
|                          | 3.929 | 3.899-3.959 | 2.038e+04 |
|                          | 4.159 | 4.129-4.189 | 2.520e+04 |
|                          | 4.301 | 4.271-4.331 | 2.299e+04 |
|                          | 4.481 | 4.451-4.511 | 4.717e+04 |
| 9 Aroclor-1268           | 4.667 | 4.637-4.697 | 5.438e+04 |
|                          | 4.689 | 4.659-4.719 | 5.419e+04 |
|                          | 4.802 | 4.772-4.832 | 4.052e+04 |
|                          | 5.005 | 4.975-5.035 | 1.833e+04 |
|                          | 5.171 | 5.141-5.201 | 1.233e+05 |
| M 10 Aroclor-Total       | 1.000 | 0.980-1.020 |           |
| \$ 11 4cmx               | 1.967 | 1.937-1.997 | 3.929e+05 |
| \$ 12 Decachlorobiphenyl | 5.279 | 5.249-5.309 | 3.299e+05 |

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecd1a.i/012710.b/ECD1-B-8082-121409.m  
 Quant Method : ESTD Target Version : 3.50  
 Last Update : 28-Jan-2010 10:52 Number of Cpnds : 15  
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events

Values

```

-----
Initial:Start Threshold      7222.000000
Initial:End Threshold        3611.000000
Initial:Area Threshold       6833.000000
Initial:P-P Resolution       0.000000
Initial:Bunch Factor         2.000000
Initial:Negative Peaks      OFF
Initial:Tension              0.500000
  
```

| Compound       | RT    | RT Window   | RF        |
|----------------|-------|-------------|-----------|
| 1 Aroclor-1016 | 3.195 | 3.165-3.225 | 1.269e+04 |
|                | 3.279 | 3.249-3.309 | 8.798e+03 |
|                | 3.342 | 3.312-3.372 | 5.479e+03 |
|                | 3.569 | 3.539-3.599 | 6.997e+03 |
|                | 3.644 | 3.614-3.674 | 6.564e+03 |
| 62 4,4-DDT     | 4.670 | 4.650-4.690 | 2.436e+05 |
| 63 4,4-DDE     | 4.139 | 4.119-4.159 | 3.580e+05 |
| 64 4,4-DDD     | 4.483 | 4.463-4.503 | 2.893e+05 |
| 2 Aroclor-1221 | 2.497 | 2.467-2.527 | 3.640e+03 |
|                | 2.591 | 2.561-2.621 | 2.329e+03 |
|                | 2.632 | 2.602-2.662 | 8.119e+03 |
| 3 Aroclor-1232 | 2.898 | 2.868-2.928 | 5.892e+03 |
|                | 3.196 | 3.166-3.226 | 6.222e+03 |
|                | 3.279 | 3.249-3.309 | 4.345e+03 |
|                | 3.570 | 3.540-3.600 | 3.111e+03 |
| 4 Aroclor-1242 | 3.803 | 3.773-3.833 | 3.193e+03 |
|                | 3.195 | 3.165-3.225 | 1.059e+04 |
|                | 3.279 | 3.249-3.309 | 8.054e+03 |
|                | 3.569 | 3.539-3.599 | 5.962e+03 |
|                | 3.803 | 3.773-3.833 | 6.057e+03 |
|                | 3.831 | 3.801-3.861 | 6.701e+03 |

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdla.i/012710.b/ECD1-B-8082-121409.m

| Compound                 | RT    | RT Window   | RF        |
|--------------------------|-------|-------------|-----------|
| 5 Aroclor-1248           | 3.404 | 3.374-3.434 | 8.054e+03 |
|                          | 3.570 | 3.540-3.600 | 9.874e+03 |
|                          | 3.803 | 3.773-3.833 | 1.122e+04 |
|                          | 3.832 | 3.801-3.861 | 1.248e+04 |
|                          | 3.968 | 3.938-3.998 | 1.210e+04 |
| 6 Aroclor-1254           | 3.403 | 3.373-3.433 | 6.435e+03 |
|                          | 3.826 | 3.796-3.856 | 1.156e+04 |
|                          | 3.943 | 3.913-3.973 | 1.243e+04 |
|                          | 4.218 | 4.188-4.248 | 1.688e+04 |
|                          | 4.355 | 4.325-4.385 | 1.244e+04 |
| 7 Aroclor-1260           | 4.335 | 4.305-4.365 | 1.328e+04 |
|                          | 4.459 | 4.429-4.489 | 1.616e+04 |
|                          | 4.725 | 4.695-4.755 | 1.250e+04 |
|                          | 4.899 | 4.869-4.929 | 1.293e+04 |
|                          | 5.046 | 5.016-5.076 | 2.845e+04 |
| 8 Aroclor-1262           | 4.460 | 4.430-4.490 | 1.356e+04 |
|                          | 4.726 | 4.696-4.756 | 1.889e+04 |
|                          | 4.900 | 4.870-4.930 | 1.747e+04 |
|                          | 5.047 | 5.017-5.077 | 3.453e+04 |
|                          | 5.260 | 5.230-5.290 | 2.487e+04 |
| 9 Aroclor-1268           | 5.259 | 5.229-5.289 | 4.358e+04 |
|                          | 5.287 | 5.257-5.317 | 4.039e+04 |
|                          | 5.437 | 5.407-5.467 | 3.144e+04 |
|                          | 5.601 | 5.571-5.631 | 1.427e+04 |
|                          | 5.794 | 5.764-5.824 | 8.886e+04 |
| M 10 Aroclor-Total       | 1.000 | 0.980-1.020 |           |
| \$ 11 4cmx               | 2.299 | 2.269-2.329 | 2.902e+05 |
| \$ 12 Decachlorobiphenyl | 5.945 | 5.915-5.975 | 2.440e+05 |

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2009 05:36  
 End Cal Date : 22-JAN-2010 09:50  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecdl1a.i/012710.b/ECD1-F-8082-121409.m  
 Cal Date : 28-Jan-2010 10:52 yip00818  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/ecdl1a.i/012210.b/013f1301.d  
 Level 2: /chem/ecdl1a.i/012210.b/014f1401.d  
 Level 3: /chem/ecdl1a.i/012210.b/015f1501.d  
 Level 4: /chem/ecdl1a.i/121409.b/046f4601.d  
 Level 5: /chem/ecdl1a.i/012210.b/017f1701.d

| Compound          | 100.000<br>Level 1 | 250.000<br>Level 2 | 500.000<br>Level 3 | 1000.000<br>Level 4 | 4000.000<br>Level 5 | RRF    | % RSD  |
|-------------------|--------------------|--------------------|--------------------|---------------------|---------------------|--------|--------|
| 1 Aroclor-1016(1) | 17152              | 15723              | 14340              | 13165               | 11871               | 14450  | 14.366 |
| (2)               | 20222              | 18880              | 18157              | 17319               | 16420               | 18200  | 8.008  |
| (3)               | 13841              | 12775              | 11738              | 11182               | 10381               | 11983  | 11.310 |
| (4)               | 8068               | 7610               | 7065               | 6751                | 6396                | 7178   | 9.308  |
| (5)               | 10742              | 9730               | 9060               | 8692                | 8073                | 9259   | 11.051 |
| 63 4,4-DDD        | ++++               | ++++               | ++++               | 393799              | ++++                | 393799 | 0.000  |
| 64 4,4-DDE        | ++++               | ++++               | ++++               | 479509              | ++++                | 479509 | 0.000  |
| 62 4,4-DDT        | ++++               | ++++               | ++++               | 323817              | ++++                | 323817 | 0.000  |
| 2 Aroclor-1221(1) | ++++               | ++++               | ++++               | 4301                | ++++                | 4301   | 0.000  |
| (2)               | ++++               | ++++               | ++++               | 2440                | ++++                | 2440   | 0.000  |
| (3)               | ++++               | ++++               | ++++               | 10272               | ++++                | 10272  | 0.000  |
| 3 Aroclor-1232(1) | 8031               | 7459               | 6765               | 6313                | 5679                | 6849   | 13.524 |
| (2)               | 9246               | 8871               | 8229               | 8095                | 7686                | 8426   | 7.427  |
| (3)               | 6376               | 6076               | 5599               | 5256                | 4827                | 5627   | 11.031 |
| (4)               | 4642               | 4328               | 3905               | 3655                | 3384                | 3983   | 12.710 |
| (5)               | 4445               | 4061               | 3757               | 3587                | 3443                | 3858   | 10.378 |
| 4 Aroclor-1242(1) | 13692              | 12467              | 11522              | 10819               | 9798                | 11660  | 12.846 |
| (2)               | 14782              | 14429              | 13236              | 12555               | 12263               | 13453  | 8.301  |
| (3)               | 6076               | 5890               | 5423               | 5191                | 4949                | 5506   | 8.563  |
| (4)               | 8395               | 7578               | 7079               | 6747                | 6426                | 7245   | 10.645 |
| (5)               | 7587               | 7189               | 6604               | 6378                | 6296                | 6811   | 8.178  |
| 5 Aroclor-1248(1) | 9070               | 8103               | 7743               | 7247                | 7078                | 7848   | 10.119 |
| (2)               | 7785               | 7181               | 6827               | 6444                | 6114                | 6870   | 9.456  |
| (3)               | 15108              | 13267              | 13037              | 12915               | 12225               | 13310  | 8.094  |
| (4)               | 12682              | 11331              | 10815              | 10392               | 9852                | 11015  | 9.799  |
| (5)               | 8605               | 7806               | 7405               | 7124                | 6336                | 7455   | 11.244 |

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2009 05:36  
 End Cal Date : 22-JAN-2010 09:50  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecdl1a.i/012710.b/ECD1-F-8082-121409.m  
 Cal Date : 28-Jan-2010 10:52 yip00818  
 Curve Type : Average

| Compound                 | 100.000<br>Level 1 | 250.000<br>Level 2 | 500.000<br>Level 3 | 1000.000<br>Level 4 | 4000.000<br>Level 5 | RRF    | % RSD |
|--------------------------|--------------------|--------------------|--------------------|---------------------|---------------------|--------|-------|
| 6 Aroclor-1254(1)        | 14281              | 12975              | 12313              | 11911               | 10947               | 12485  | 9.963 |
| (2)                      | 18803              | 17181              | 16666              | 15949               | 15010               | 16722  | 8.494 |
| (3)                      | 22492              | 20906              | 20786              | 20326               | 19059               | 20714  | 5.957 |
| (4)                      | 16753              | 15627              | 15809              | 15513               | 14770               | 15694  | 4.535 |
| (5)                      | 16595              | 15169              | 15433              | 15075               | 13591               | 15172  | 7.071 |
| 7 Aroclor-1260(1)        | 19893              | 18582              | 17373              | 16964               | 15783               | 17719  | 8.883 |
| (2)                      | 29870              | 28088              | 26601              | 25873               | 24210               | 26928  | 8.011 |
| (3)                      | 18146              | 16901              | 15831              | 15388               | 14665               | 16186  | 8.420 |
| (4)                      | 18726              | 17599              | 16558              | 16161               | 15497               | 16908  | 7.512 |
| (5)                      | 40163              | 39110              | 37340              | 36803               | 34911               | 37666  | 5.434 |
| 8 Aroclor-1262(1)        | 16796              | 15375              | 14585              | 14470               | 13775               | 15000  | 7.687 |
| (2)                      | 22563              | 20964              | 19865              | 19587               | 18936               | 20383  | 6.975 |
| (3)                      | 27641              | 25661              | 24522              | 24605               | 23554               | 25197  | 6.179 |
| (4)                      | 25041              | 23378              | 22465              | 22352               | 21708               | 22989  | 5.624 |
| (5)                      | 49563              | 47861              | 46825              | 46728               | 44852               | 47166  | 3.655 |
| 9 Aroclor-1268(1)        | 56914              | 55996              | 53872              | 52565               | 52528               | 54375  | 3.680 |
| (2)                      | 57500              | 55307              | 54092              | 52376               | 51697               | 54194  | 4.300 |
| (3)                      | 43006              | 41368              | 40020              | 38976               | 39247               | 40524  | 4.120 |
| (4)                      | 19620              | 18932              | 18085              | 17425               | 17569               | 18326  | 5.094 |
| (5)                      | 128350             | 126812             | 122798             | 118830              | 119599              | 123278 | 3.436 |
| M 10 Aroclor-Total       | +++++              | +++++              | +++++              | +++++               | +++++               | +++++  | +++++ |
| \$ 11 4cmx               | 418599             | 402993             | 390421             | 384479              | 368225              | 392944 | 4.842 |
| \$ 12 Decachlorobiphenyl | 365576             | 343871             | 322200             | 315067              | 302545              | 329852 | 7.572 |

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 11-DEC-2009 10:17  
 End Cal Date : 22-JAN-2010 09:50  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecdla.i/012710.b/ECD1-B-8082-121409.m  
 Cal Date : 28-Jan-2010 10:52 yip00818  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/ecdla.i/012210.b/013b1301.d  
 Level 2: /chem/ecdla.i/012210.b/014b1401.d  
 Level 3: /chem/ecdla.i/012210.b/015b1501.d  
 Level 4: /chem/ecdla.i/121409.b/046b4601.d  
 Level 5: /chem/ecdla.i/012210.b/017b1701.d

| Compound          | 100.000<br>Level 1 | 250.000<br>Level 2 | 500.000<br>Level 3 | 1000.000<br>Level 4 | 4000.000<br>Level 5 | RRR    | % RSD  |
|-------------------|--------------------|--------------------|--------------------|---------------------|---------------------|--------|--------|
| 1 Aroclor-1016(1) | 14547              | 13492              | 12382              | 12014               | 10999               | 12687  | 10.796 |
| (2)               | 10711              | 9528               | 8572               | 8001                | 7178                | 8798   | 15.569 |
| (3)               | 6657               | 5897               | 5299               | 4960                | 4582                | 5479   | 14.907 |
| (4)               | 8356               | 7487               | 6966               | 6298                | 5879                | 6997   | 13.980 |
| (5)               | 7909               | 7061               | 6442               | 5919                | 5487                | 6564   | 14.548 |
| 62 4,4-DDT        | +++++              | +++++              | +++++              | 243613              | +++++               | 243613 | 0.000  |
| 63 4,4-DDE        | +++++              | +++++              | +++++              | 357996              | +++++               | 357996 | 0.000  |
| 64 4,4-DDD        | +++++              | +++++              | +++++              | 289343              | +++++               | 289343 | 0.000  |
| 2 Aroclor-1221(1) | +++++              | +++++              | +++++              | 3640                | +++++               | 3640   | 0.000  |
| (2)               | +++++              | +++++              | +++++              | 2329                | +++++               | 2329   | 0.000  |
| (3)               | +++++              | +++++              | +++++              | 8119                | +++++               | 8119   | 0.000  |
| 3 Aroclor-1232(1) | 7405               | 6518               | 5773               | 5260                | 4504                | 5892   | 19.017 |
| (2)               | 7294               | 6687               | 6058               | 5769                | 5299                | 6222   | 12.576 |
| (3)               | 5336               | 4800               | 4249               | 3912                | 3427                | 4345   | 17.180 |
| (4)               | 3854               | 3418               | 3039               | 2783                | 2462                | 3111   | 17.466 |
| (5)               | 3940               | 3492               | 3102               | 2870                | 2562                | 3193   | 16.853 |
| 4 Aroclor-1242(1) | 12348              | 11309              | 9989               | 9755                | 9542                | 10589  | 11.338 |
| (2)               | 9730               | 8628               | 7875               | 7358                | 6677                | 8054   | 14.627 |
| (3)               | 7163               | 6326               | 5763               | 5452                | 5107                | 5962   | 13.534 |
| (4)               | 7183               | 6468               | 5900               | 5548                | 5185                | 6057   | 12.997 |
| (5)               | 7820               | 7123               | 6589               | 6229                | 5746                | 6701   | 11.977 |
| 5 Aroclor-1248(1) | 9914               | 8542               | 7972               | 7289                | 6553                | 8054   | 15.880 |
| (2)               | 11996              | 10356              | 9798               | 9046                | 8173                | 9874   | 14.605 |
| (3)               | 13306              | 11756              | 11119              | 10365               | 9555                | 11220  | 12.723 |
| (4)               | 14720              | 13121              | 12480              | 11577               | 10516               | 12483  | 12.732 |
| (5)               | 14361              | 12633              | 11977              | 11210               | 10342               | 12104  | 12.596 |

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 11-DEC-2009 10:17  
 End Cal Date : 22-JAN-2010 09:50  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecdl1a.i/012710.b/ECD1-B-8082-121409.m  
 Cal Date : 28-Jan-2010 10:52 yip00818  
 Curve Type : Average

| Compound                 | 100.000<br>Level 1 | 250.000<br>Level 2 | 500.000<br>Level 3 | 1000.000<br>Level 4 | 4000.000<br>Level 5 | RRF    | % RSD  |
|--------------------------|--------------------|--------------------|--------------------|---------------------|---------------------|--------|--------|
| 6 Aroclor-1254(1)        | 7857               | 6938               | 6317               | 5878                | 5185                | 6435   | 15.850 |
| (2)                      | 13759              | 12316              | 11389              | 10708               | 9625                | 11559  | 13.615 |
| (3)                      | 14674              | 13172              | 12243              | 11576               | 10492               | 12431  | 12.786 |
| (4)                      | 19102              | 17554              | 16808              | 16165               | 14771               | 16880  | 9.533  |
| (5)                      | 14276              | 12708              | 12612              | 11843               | 10739               | 12435  | 10.425 |
| 7 Aroclor-1260(1)        | 15831              | 14170              | 12897              | 12253               | 11224               | 13275  | 13.436 |
| (2)                      | 18938              | 17236              | 15730              | 15062               | 13823               | 16158  | 12.272 |
| (3)                      | 14824              | 13336              | 12121              | 11559               | 10656               | 12499  | 12.980 |
| (4)                      | 15326              | 13753              | 12528              | 11996               | 11041               | 12929  | 12.837 |
| (5)                      | 32399              | 30081              | 27859              | 27071               | 24818               | 28446  | 10.204 |
| 8 Aroclor-1262(1)        | 15849              | 14211              | 13033              | 12748               | 11945               | 13557  | 11.192 |
| (2)                      | 21776              | 19630              | 18382              | 17939               | 16725               | 18890  | 10.157 |
| (3)                      | 20222              | 18124              | 16968              | 16542               | 15497               | 17471  | 10.323 |
| (4)                      | 38743              | 35618              | 34053              | 33297               | 30946               | 34532  | 8.384  |
| (5)                      | 28740              | 25266              | 23755              | 23937               | 22633               | 24866  | 9.485  |
| 9 Aroclor-1268(1)        | 48327              | 45655              | 43354              | 41349               | 39206               | 43578  | 8.193  |
| (2)                      | 44968              | 41865              | 39872              | 38249               | 36983               | 40388  | 7.790  |
| (3)                      | 35350              | 32573              | 30975              | 29630               | 28674               | 31440  | 8.372  |
| (4)                      | 16410              | 14977              | 13894              | 13214               | 12876               | 14274  | 10.077 |
| (5)                      | 96769              | 92419              | 87897              | 84047               | 83161               | 88859  | 6.460  |
| M 10 Aroclor-Total       | +++++              | +++++              | +++++              | +++++               | +++++               | +++++  | +++++  |
| \$ 11 4cmx               | 322636             | 305092             | 287884             | 278003              | 257406              | 290204 | 8.621  |
| \$ 12 Decachlorobiphenyl | 286142             | 259289             | 233988             | 227231              | 213222              | 243974 | 11.841 |

Report Date: 29-Jan-2010 15:46

### Calibration History

Method : /chem/ecdla.i/012810a.b/ECD1-F-8082-121409.m  
Start Cal Date: 14-DEC-2009 05:36  
End Cal Date : 28-JAN-2010 13:00

#### Initial Calibration

| Injection Date                       | Sublist | Calibration File                   |
|--------------------------------------|---------|------------------------------------|
| Cal Level: 1 , Cal Amount: 100.00000 |         |                                    |
| 22-JAN-2010 08:01                    | AR1262  | /chem/ecdla.i/012210.b/013f1301.d  |
| 22-JAN-2010 06:48                    | AR1232  | /chem/ecdla.i/012210.b/006f0601.d  |
| 28-JAN-2010 12:18                    | AR1268  | /chem/ecdla.i/012810a.b/018f1801.d |
| 14-DEC-2009 09:28                    | AR1248  | /chem/ecdla.i/121409.b/028f2801.d  |
| 14-DEC-2009 08:25                    | AR1242  | /chem/ecdla.i/121409.b/022f2201.d  |
| 14-DEC-2009 07:22                    | AR1254  | /chem/ecdla.i/121409.b/016f1601.d  |
| 28-JAN-2010 10:51                    | AR1660  | /chem/ecdla.i/012810a.b/010f1001.d |

|                                      |        |                                    |
|--------------------------------------|--------|------------------------------------|
| Cal Level: 2 , Cal Amount: 250.00000 |        |                                    |
| 22-JAN-2010 08:12                    | AR1262 | /chem/ecdla.i/012210.b/014f1401.d  |
| 22-JAN-2010 06:58                    | AR1232 | /chem/ecdla.i/012210.b/007f0701.d  |
| 28-JAN-2010 12:29                    | AR1268 | /chem/ecdla.i/012810a.b/019f1901.d |
| 14-DEC-2009 09:38                    | AR1248 | /chem/ecdla.i/121409.b/029f2901.d  |
| 14-DEC-2009 08:35                    | AR1242 | /chem/ecdla.i/121409.b/023f2301.d  |
| 14-DEC-2009 07:32                    | AR1254 | /chem/ecdla.i/121409.b/017f1701.d  |
| 28-JAN-2010 11:01                    | AR1660 | /chem/ecdla.i/012810a.b/011f1101.d |

|                                      |        |                                    |
|--------------------------------------|--------|------------------------------------|
| Cal Level: 3 , Cal Amount: 500.00000 |        |                                    |
| 22-JAN-2010 08:22                    | AR1262 | /chem/ecdla.i/012210.b/015f1501.d  |
| 22-JAN-2010 07:09                    | AR1232 | /chem/ecdla.i/012210.b/008f0801.d  |
| 28-JAN-2010 12:39                    | AR1268 | /chem/ecdla.i/012810a.b/020f2001.d |
| 14-DEC-2009 09:49                    | AR1248 | /chem/ecdla.i/121409.b/030f3001.d  |
| 14-DEC-2009 08:46                    | AR1242 | /chem/ecdla.i/121409.b/024f2401.d  |
| 14-DEC-2009 07:43                    | AR1254 | /chem/ecdla.i/121409.b/018f1801.d  |
| 28-JAN-2010 11:12                    | AR1660 | /chem/ecdla.i/012810a.b/012f1201.d |

|                                       |              |                                    |
|---------------------------------------|--------------|------------------------------------|
| Cal Level: 4 , Cal Amount: 1000.00000 |              |                                    |
| 14-DEC-2009 12:37                     | DDTANALOGSTD | /chem/ecdla.i/121409.b/046f4601.d  |
| 14-DEC-2009 09:59                     | AR1248       | /chem/ecdla.i/121409.b/031f3101.d  |
| 14-DEC-2009 08:56                     | AR1242       | /chem/ecdla.i/121409.b/025f2501.d  |
| 14-DEC-2009 07:53                     | AR1254       | /chem/ecdla.i/121409.b/019f1901.d  |
| 28-JAN-2010 11:22                     | AR1660       | /chem/ecdla.i/012810a.b/013f1301.d |
| 28-JAN-2010 12:50                     | AR1268       | /chem/ecdla.i/012810a.b/021f2101.d |
| 22-JAN-2010 08:36                     | AR1262       | /chem/ecdla.i/012210.b/016f1601.d  |
| 14-DEC-2009 05:47                     | AR1221       | /chem/ecdla.i/121409.b/007f0701.d  |
| 22-JAN-2010 07:19                     | AR1232       | /chem/ecdla.i/012210.b/009f0901.d  |

|                                       |        |                                    |
|---------------------------------------|--------|------------------------------------|
| Cal Level: 5 , Cal Amount: 4000.00000 |        |                                    |
| 22-JAN-2010 08:47                     | AR1262 | /chem/ecdla.i/012210.b/017f1701.d  |
| 22-JAN-2010 07:30                     | AR1232 | /chem/ecdla.i/012210.b/010f1001.d  |
| 28-JAN-2010 13:00                     | AR1268 | /chem/ecdla.i/012810a.b/022f2201.d |
| 14-DEC-2009 10:10                     | AR1248 | /chem/ecdla.i/121409.b/032f3201.d  |
| 14-DEC-2009 09:07                     | AR1242 | /chem/ecdla.i/121409.b/026f2601.d  |



|                   |        |                                     |
|-------------------|--------|-------------------------------------|
| 28-JAN-2010 11:34 | AR1660 | /chem/ecdl1a.i/012810a.b/014f1401.d |
|-------------------|--------|-------------------------------------|

Continuing Calibration  
Ccal Level Mode: GLOBAL LEVEL 4

|                                   |        |                                     |
|-----------------------------------|--------|-------------------------------------|
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 29-JAN-2010 02:38                 | AR1660 | /chem/ecdl1a.i/012810a.b/089f8901.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 29-JAN-2010 00:19                 | AR1660 | /chem/ecdl1a.i/012810a.b/078f7801.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 21:48                 | AR1660 | /chem/ecdl1a.i/012810a.b/066f6601.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 19:17                 | AR1660 | /chem/ecdl1a.i/012810a.b/054f5401.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 18:38                 | AR1660 | /chem/ecdl1a.i/012810a.b/051f5101.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 16:09                 | AR1268 | /chem/ecdl1a.i/012810a.b/039f3901.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 15:58                 | AR1262 | /chem/ecdl1a.i/012810a.b/038f3801.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 15:48                 | AR1221 | /chem/ecdl1a.i/012810a.b/037f3701.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 15:38                 | AR1232 | /chem/ecdl1a.i/012810a.b/036f3601.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 15:27                 | AR1248 | /chem/ecdl1a.i/012810a.b/035f3501.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 15:16                 | AR1242 | /chem/ecdl1a.i/012810a.b/034f3401.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 15:06                 | AR1254 | /chem/ecdl1a.i/012810a.b/033f3301.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 14:56                 | AR1660 | /chem/ecdl1a.i/012810a.b/032f3201.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 13:11                 | AR1268 | /chem/ecdl1a.i/012810a.b/023f2301.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 12:50                 | AR1268 | /chem/ecdl1a.i/012810a.b/021f2101.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 11:44                 | AR1660 | /chem/ecdl1a.i/012810a.b/015f1501.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 11:22                 | AR1660 | /chem/ecdl1a.i/012810a.b/013f1301.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |

|                                   |        |                                     |
|-----------------------------------|--------|-------------------------------------|
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 10:19                 | AR1221 | /chem/ecdl1a.i/012810a.b/007f0701.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 10:09                 | AR1232 | /chem/ecdl1a.i/012810a.b/006f0601.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 09:58                 | AR1248 | /chem/ecdl1a.i/012810a.b/005f0501.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 09:48                 | AR1242 | /chem/ecdl1a.i/012810a.b/004f0401.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 09:37                 | AR1254 | /chem/ecdl1a.i/012810a.b/003f0301.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 29-JAN-2010 00:57                 | AR1660 | /chem/ecdl1a.i/012810a.b/081f8101.d |

Report Date: 29-Jan-2010 11:16

### Calibration History

Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m  
Start Cal Date: 11-DEC-2009 10:17  
End Cal Date : 28-JAN-2010 13:00

#### Initial Calibration

| Injection Date                       | Sublist | Calibration File                    |
|--------------------------------------|---------|-------------------------------------|
| Cal Level: 1 , Cal Amount: 100.00000 |         |                                     |
| 22-JAN-2010 08:01                    | AR1262  | /chem/ecdl1a.i/012210.b/013b1301.d  |
| 22-JAN-2010 06:48                    | AR1232  | /chem/ecdl1a.i/012210.b/006b0601.d  |
| 28-JAN-2010 12:18                    | AR1268  | /chem/ecdl1a.i/012810a.b/018b1801.d |
| 14-DEC-2009 09:28                    | AR1248  | /chem/ecdl1a.i/121409.b/028b2801.d  |
| 14-DEC-2009 08:25                    | AR1242  | /chem/ecdl1a.i/121409.b/022b2201.d  |
| 14-DEC-2009 07:22                    | AR1254  | /chem/ecdl1a.i/121409.b/016b1601.d  |
| 28-JAN-2010 10:51                    | AR1660  | /chem/ecdl1a.i/012810a.b/010b1001.d |

|                                      |        |                                     |
|--------------------------------------|--------|-------------------------------------|
| Cal Level: 2 , Cal Amount: 250.00000 |        |                                     |
| 22-JAN-2010 08:12                    | AR1262 | /chem/ecdl1a.i/012210.b/014b1401.d  |
| 22-JAN-2010 06:58                    | AR1232 | /chem/ecdl1a.i/012210.b/007b0701.d  |
| 28-JAN-2010 12:29                    | AR1268 | /chem/ecdl1a.i/012810a.b/019b1901.d |
| 14-DEC-2009 09:38                    | AR1248 | /chem/ecdl1a.i/121409.b/029b2901.d  |
| 14-DEC-2009 08:35                    | AR1242 | /chem/ecdl1a.i/121409.b/023b2301.d  |
| 14-DEC-2009 07:32                    | AR1254 | /chem/ecdl1a.i/121409.b/017b1701.d  |
| 28-JAN-2010 11:01                    | AR1660 | /chem/ecdl1a.i/012810a.b/011b1101.d |

|                                      |        |                                     |
|--------------------------------------|--------|-------------------------------------|
| Cal Level: 3 , Cal Amount: 500.00000 |        |                                     |
| 22-JAN-2010 08:22                    | AR1262 | /chem/ecdl1a.i/012210.b/015b1501.d  |
| 22-JAN-2010 07:09                    | AR1232 | /chem/ecdl1a.i/012210.b/008b0801.d  |
| 28-JAN-2010 12:39                    | AR1268 | /chem/ecdl1a.i/012810a.b/020b2001.d |
| 14-DEC-2009 09:49                    | AR1248 | /chem/ecdl1a.i/121409.b/030b3001.d  |
| 14-DEC-2009 08:46                    | AR1242 | /chem/ecdl1a.i/121409.b/024b2401.d  |
| 14-DEC-2009 07:43                    | AR1254 | /chem/ecdl1a.i/121409.b/018b1801.d  |
| 28-JAN-2010 11:12                    | AR1660 | /chem/ecdl1a.i/012810a.b/012b1201.d |

|                                       |              |                                     |
|---------------------------------------|--------------|-------------------------------------|
| Cal Level: 4 , Cal Amount: 1000.00000 |              |                                     |
| 14-DEC-2009 12:37                     | DDTANALOGSTD | /chem/ecdl1a.i/121409.b/046b4601.d  |
| 28-JAN-2010 12:50                     | AR1268       | /chem/ecdl1a.i/012810a.b/021b2101.d |
| 22-JAN-2010 08:36                     | AR1262       | /chem/ecdl1a.i/012210.b/016b1601.d  |
| 14-DEC-2009 05:47                     | AR1221       | /chem/ecdl1a.i/121409.b/007b0701.d  |
| 22-JAN-2010 07:19                     | AR1232       | /chem/ecdl1a.i/012210.b/009b0901.d  |
| 14-DEC-2009 09:59                     | AR1248       | /chem/ecdl1a.i/121409.b/031b3101.d  |
| 14-DEC-2009 08:56                     | AR1242       | /chem/ecdl1a.i/121409.b/025b2501.d  |
| 14-DEC-2009 07:53                     | AR1254       | /chem/ecdl1a.i/121409.b/019b1901.d  |
| 28-JAN-2010 11:22                     | AR1660       | /chem/ecdl1a.i/012810a.b/013b1301.d |

|                                       |        |                                     |
|---------------------------------------|--------|-------------------------------------|
| Cal Level: 5 , Cal Amount: 4000.00000 |        |                                     |
| 22-JAN-2010 08:47                     | AR1262 | /chem/ecdl1a.i/012210.b/017b1701.d  |
| 22-JAN-2010 07:30                     | AR1232 | /chem/ecdl1a.i/012210.b/010b1001.d  |
| 28-JAN-2010 13:00                     | AR1268 | /chem/ecdl1a.i/012810a.b/022b2201.d |
| 14-DEC-2009 10:10                     | AR1248 | /chem/ecdl1a.i/121409.b/032b3201.d  |
| 14-DEC-2009 09:07                     | AR1242 | /chem/ecdl1a.i/121409.b/026b2601.d  |

|28-JAN-2010 11:34 |AR1660 |/chem/ecdl1a.i/012810a.b/014b1401.d |  
+-----+-----+-----+

Continuing Calibration  
Ccal Level Mode: GLOBAL LEVEL 4

|  |
|--|
| Ccal Level: 4 , Ccal Amount: 1000                              |
| 29-JAN-2010 02:38  AR1660  /chem/ecdl1a.i/012810a.b/089b8901.d |
| Ccal Level: 4 , Ccal Amount: 1000                              |
| 29-JAN-2010 00:19  AR1660  /chem/ecdl1a.i/012810a.b/078b7801.d |
| Ccal Level: 4 , Ccal Amount: 1000                              |
| 28-JAN-2010 21:48  AR1660  /chem/ecdl1a.i/012810a.b/066b6601.d |
| Ccal Level: 4 , Ccal Amount: 1000                              |
| 28-JAN-2010 19:17  AR1660  /chem/ecdl1a.i/012810a.b/054b5401.d |
| Ccal Level: 4 , Ccal Amount: 1000                              |
| 28-JAN-2010 18:38  AR1660  /chem/ecdl1a.i/012810a.b/051b5101.d |
| Ccal Level: 4 , Ccal Amount: 1000                              |
| 28-JAN-2010 16:09  AR1268  /chem/ecdl1a.i/012810a.b/039b3901.d |
| Ccal Level: 4 , Ccal Amount: 1000                              |
| 28-JAN-2010 15:58  AR1262  /chem/ecdl1a.i/012810a.b/038b3801.d |
| Ccal Level: 4 , Ccal Amount: 1000                              |
| 28-JAN-2010 15:48  AR1221  /chem/ecdl1a.i/012810a.b/037b3701.d |
| Ccal Level: 4 , Ccal Amount: 1000                              |
| 28-JAN-2010 15:38  AR1232  /chem/ecdl1a.i/012810a.b/036b3601.d |
| Ccal Level: 4 , Ccal Amount: 1000                              |
| 28-JAN-2010 15:27  AR1248  /chem/ecdl1a.i/012810a.b/035b3501.d |
| Ccal Level: 4 , Ccal Amount: 1000                              |
| 28-JAN-2010 15:16  AR1242  /chem/ecdl1a.i/012810a.b/034b3401.d |
| Ccal Level: 4 , Ccal Amount: 1000                              |
| 28-JAN-2010 15:06  AR1254  /chem/ecdl1a.i/012810a.b/033b3301.d |
| Ccal Level: 4 , Ccal Amount: 1000                              |
| 28-JAN-2010 14:56  AR1660  /chem/ecdl1a.i/012810a.b/032b3201.d |
| Ccal Level: 4 , Ccal Amount: 1000                              |
| 28-JAN-2010 13:11  AR1268  /chem/ecdl1a.i/012810a.b/023b2301.d |
| Ccal Level: 4 , Ccal Amount: 1000                              |
| 28-JAN-2010 12:50  AR1268  /chem/ecdl1a.i/012810a.b/021b2101.d |
| Ccal Level: 4 , Ccal Amount: 1000                              |
| 28-JAN-2010 11:44  AR1660  /chem/ecdl1a.i/012810a.b/015b1501.d |
| Ccal Level: 4 , Ccal Amount: 1000                              |
| 28-JAN-2010 11:22  AR1660  /chem/ecdl1a.i/012810a.b/013b1301.d |
| Ccal Level: 4 , Ccal Amount: 1000                              |

|                                   |        |                                     |
|-----------------------------------|--------|-------------------------------------|
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 10:19                 | AR1221 | /chem/ecdl1a.i/012810a.b/007b0701.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 10:09                 | AR1232 | /chem/ecdl1a.i/012810a.b/006b0601.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 09:58                 | AR1248 | /chem/ecdl1a.i/012810a.b/005b0501.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 09:48                 | AR1242 | /chem/ecdl1a.i/012810a.b/004b0401.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 28-JAN-2010 09:37                 | AR1254 | /chem/ecdl1a.i/012810a.b/003b0301.d |
| Ccal Level: 4 , Ccal Amount: 1000 |        |                                     |
| 29-JAN-2010 00:57                 | AR1660 | /chem/ecdl1a.i/012810a.b/081b8101.d |

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m  
Quant Method : ESTD Target Version : 3.50  
Last Update : 28-Jan-2010 13:36 Number of Cpnds : 15  
Data Type : GC MULTI COMP

Global Integrator : Falcon

| Chromat Events          | Values       |
|-------------------------|--------------|
| Initial:Start Threshold | 12031.000000 |
| Initial:End Threshold   | 6015.500000  |
| Initial:Area Threshold  | 15489.000000 |
| Initial:P-P Resolution  | 1.000000     |
| Initial:Bunch Factor    | 2.000000     |
| Initial:Negative Peaks  | OFF          |
| Initial:Tension         | 0.500000     |

| Compound       | RT    | RT Window   | RF        |
|----------------|-------|-------------|-----------|
| 1 Aroclor-1016 | 2.422 | 2.392-2.452 | 1.378e+04 |
|                | 2.710 | 2.680-2.740 | 1.751e+04 |
|                | 2.791 | 2.761-2.821 | 1.150e+04 |
|                | 2.828 | 2.798-2.858 | 6.846e+03 |
|                | 3.039 | 3.009-3.069 | 8.881e+03 |
| 63 4,4-DDD     | 3.953 | 3.933-3.973 | 3.938e+05 |
| 64 4,4-DDE     | 3.603 | 3.583-3.623 | 4.795e+05 |
| 62 4,4-DDT     | 4.118 | 4.098-4.138 | 3.238e+05 |
| 2 Aroclor-1221 | 2.078 | 2.048-2.108 | 4.301e+03 |
|                | 2.171 | 2.141-2.201 | 2.440e+03 |
|                | 2.197 | 2.167-2.227 | 1.027e+04 |
| 3 Aroclor-1232 | 2.421 | 2.391-2.451 | 6.849e+03 |
|                | 2.711 | 2.681-2.741 | 8.426e+03 |
|                | 2.791 | 2.761-2.821 | 5.627e+03 |
|                | 3.040 | 3.010-3.070 | 3.983e+03 |
|                | 3.292 | 3.262-3.322 | 3.858e+03 |
| 4 Aroclor-1242 | 2.421 | 2.391-2.451 | 1.166e+04 |
|                | 2.710 | 2.680-2.740 | 1.345e+04 |
|                | 2.828 | 2.798-2.858 | 5.506e+03 |
|                | 3.038 | 3.008-3.068 | 7.245e+03 |
|                | 3.292 | 3.262-3.322 | 6.811e+03 |

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdla.i/012810a.b/ECD1-F-8082-121409.m

| Compound                 | RT    | RT Window   | RF        |
|--------------------------|-------|-------------|-----------|
| 5 Aroclor-1248           | 3.090 | 3.060-3.120 | 7.848e+03 |
|                          | 3.241 | 3.211-3.271 | 6.870e+03 |
|                          | 3.293 | 3.263-3.323 | 1.331e+04 |
|                          | 3.424 | 3.394-3.454 | 1.101e+04 |
|                          | 3.657 | 3.627-3.687 | 7.455e+03 |
| 6 Aroclor-1254           | 3.267 | 3.237-3.297 | 1.249e+04 |
|                          | 3.422 | 3.392-3.452 | 1.672e+04 |
|                          | 3.656 | 3.626-3.686 | 2.071e+04 |
|                          | 3.820 | 3.790-3.850 | 1.569e+04 |
|                          | 3.928 | 3.898-3.958 | 1.517e+04 |
| 7 Aroclor-1260           | 3.765 | 3.735-3.795 | 1.678e+04 |
|                          | 3.928 | 3.898-3.958 | 2.533e+04 |
|                          | 4.158 | 4.128-4.188 | 1.498e+04 |
|                          | 4.301 | 4.271-4.331 | 1.556e+04 |
|                          | 4.480 | 4.450-4.510 | 3.465e+04 |
| 8 Aroclor-1262           | 3.765 | 3.735-3.795 | 1.500e+04 |
|                          | 3.928 | 3.898-3.958 | 2.038e+04 |
|                          | 4.158 | 4.128-4.188 | 2.520e+04 |
|                          | 4.301 | 4.271-4.331 | 2.299e+04 |
|                          | 4.480 | 4.450-4.510 | 4.717e+04 |
| 9 Aroclor-1268           | 4.665 | 4.635-4.695 | 5.248e+04 |
|                          | 4.688 | 4.658-4.718 | 4.812e+04 |
|                          | 4.800 | 4.770-4.830 | 3.703e+04 |
|                          | 5.003 | 4.973-5.033 | 1.629e+04 |
|                          | 5.169 | 5.139-5.199 | 1.083e+05 |
| M 10 Aroclor-Total       | 1.000 | 0.980-1.020 |           |
| \$ 11 4cmx               | 1.966 | 1.936-1.996 | 3.870e+05 |
| \$ 12 Decachlorobiphenyl | 5.278 | 5.248-5.308 | 2.872e+05 |

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecd1a.i/012810a.b/ECD1-B-8082-121409.m  
Quant Method : ESTD Target Version : 3.50  
Last Update : 28-Jan-2010 13:36 Number of Cpnds : 15  
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events Values

-----  
Initial:Start Threshold 7222.000000  
Initial:End Threshold 3611.000000  
Initial:Area Threshold 6833.000000  
Initial:P-P Resolution 0.000000  
Initial:Bunch Factor 2.000000  
Initial:Negative Peaks OFF  
Initial:Tension 0.500000

| Compound       | RT    | RT Window   | RF        |
|----------------|-------|-------------|-----------|
| 1 Aroclor-1016 | 3.195 | 3.165-3.225 | 1.219e+04 |
|                | 3.278 | 3.248-3.308 | 8.191e+03 |
|                | 3.341 | 3.311-3.371 | 5.077e+03 |
|                | 3.568 | 3.538-3.598 | 6.398e+03 |
|                | 3.644 | 3.614-3.674 | 5.918e+03 |
| 62 4,4-DDT     | 4.670 | 4.650-4.690 | 2.436e+05 |
| 63 4,4-DDE     | 4.139 | 4.119-4.159 | 3.580e+05 |
| 64 4,4-DDD     | 4.483 | 4.463-4.503 | 2.893e+05 |
| 2 Aroclor-1221 | 2.494 | 2.464-2.524 | 3.640e+03 |
|                | 2.589 | 2.559-2.619 | 2.329e+03 |
|                | 2.629 | 2.599-2.659 | 8.119e+03 |
| 3 Aroclor-1232 | 2.897 | 2.867-2.927 | 5.892e+03 |
|                | 3.195 | 3.165-3.225 | 6.222e+03 |
|                | 3.278 | 3.248-3.308 | 4.345e+03 |
|                | 3.569 | 3.539-3.599 | 3.111e+03 |
| 4 Aroclor-1242 | 3.802 | 3.772-3.832 | 3.193e+03 |
|                | 3.195 | 3.165-3.225 | 1.059e+04 |
|                | 3.277 | 3.247-3.307 | 8.054e+03 |
|                | 3.568 | 3.538-3.598 | 5.962e+03 |
|                | 3.802 | 3.772-3.832 | 6.057e+03 |
|                | 3.830 | 3.800-3.860 | 6.701e+03 |



## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecd1a.i/012810a.b/ECD1-B-8082-121409.m

| Compound                 | RT    | RT Window   | RF        |
|--------------------------|-------|-------------|-----------|
| 5 Aroclor-1248           | 3.403 | 3.373-3.433 | 8.054e+03 |
|                          | 3.569 | 3.539-3.599 | 9.874e+03 |
|                          | 3.803 | 3.773-3.833 | 1.122e+04 |
|                          | 3.830 | 3.800-3.860 | 1.248e+04 |
|                          | 3.967 | 3.937-3.997 | 1.210e+04 |
| 6 Aroclor-1254           | 3.403 | 3.373-3.433 | 6.435e+03 |
|                          | 3.825 | 3.795-3.855 | 1.156e+04 |
|                          | 3.942 | 3.912-3.972 | 1.243e+04 |
|                          | 4.218 | 4.188-4.248 | 1.688e+04 |
|                          | 4.355 | 4.325-4.385 | 1.244e+04 |
| 7 Aroclor-1260           | 4.335 | 4.305-4.365 | 1.193e+04 |
|                          | 4.459 | 4.429-4.489 | 1.437e+04 |
|                          | 4.725 | 4.695-4.755 | 1.091e+04 |
|                          | 4.899 | 4.869-4.929 | 1.121e+04 |
|                          | 5.046 | 5.016-5.076 | 2.426e+04 |
| 8 Aroclor-1262           | 4.460 | 4.430-4.490 | 1.356e+04 |
|                          | 4.726 | 4.696-4.756 | 1.889e+04 |
|                          | 4.899 | 4.869-4.929 | 1.747e+04 |
|                          | 5.047 | 5.017-5.077 | 3.453e+04 |
|                          | 5.259 | 5.229-5.289 | 2.487e+04 |
| 9 Aroclor-1268           | 5.258 | 5.228-5.287 | 3.626e+04 |
|                          | 5.286 | 5.256-5.316 | 3.358e+04 |
|                          | 5.435 | 5.405-5.465 | 2.598e+04 |
|                          | 5.599 | 5.569-5.629 | 1.135e+04 |
|                          | 5.793 | 5.763-5.822 | 6.708e+04 |
| M 10 Aroclor-Total       | 1.000 | 0.980-1.020 |           |
| \$ 11 4cmx               | 2.298 | 2.268-2.328 | 2.792e+05 |
| \$ 12 Decachlorobiphenyl | 5.944 | 5.914-5.974 | 1.746e+05 |

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2009 05:36  
 End Cal Date : 28-JAN-2010 13:00  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecdla.i/012810a.b/ECD1-F-8082-121409.m  
 Cal Date : 29-Jan-2010 09:10 yip00818  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/ecdla.i/012210.b/013f1301.d  
 Level 2: /chem/ecdla.i/012210.b/014f1401.d  
 Level 3: /chem/ecdla.i/012210.b/015f1501.d  
 Level 4: /chem/ecdla.i/121409.b/046f4601.d  
 Level 5: /chem/ecdla.i/012210.b/017f1701.d

| Compound          | 100.000 | 250.000 | 500.000 | 1000.000 | 4000.000 | RRF    | % RSD  |
|-------------------|---------|---------|---------|----------|----------|--------|--------|
| Level 1           | Level 2 | Level 3 | Level 4 | Level 5  |          |        |        |
| 1 Aroclor-1016(1) | 16134   | 14486   | 13661   | 12966    | 11652    | 13780  | 12.168 |
| (2)               | 18792   | 17690   | 17879   | 16896    | 16269    | 17505  | 5.515  |
| (3)               | 13185   | 11958   | 11430   | 10875    | 10056    | 11501  | 10.222 |
| (4)               | 7676    | 7050    | 6835    | 6501     | 6164     | 6846   | 8.375  |
| (5)               | 10168   | 9120    | 8829    | 8334     | 7956     | 8881   | 9.537  |
| 63 4,4-DDD        | +++++   | +++++   | +++++   | 393799   | +++++    | 393799 | 0.000  |
| 64 4,4-DDE        | +++++   | +++++   | +++++   | 479509   | +++++    | 479509 | 0.000  |
| 62 4,4-DDT        | +++++   | +++++   | +++++   | 323817   | +++++    | 323817 | 0.000  |
| 2 Aroclor-1221(1) | +++++   | +++++   | +++++   | 4301     | +++++    | 4301   | 0.000  |
| (2)               | +++++   | +++++   | +++++   | 2440     | +++++    | 2440   | 0.000  |
| (3)               | +++++   | +++++   | +++++   | 10272    | +++++    | 10272  | 0.000  |
| 3 Aroclor-1232(1) | 8031    | 7459    | 6765    | 6313     | 5679     | 6849   | 13.524 |
| (2)               | 9246    | 8871    | 8229    | 8095     | 7686     | 8426   | 7.427  |
| (3)               | 6376    | 6076    | 5599    | 5256     | 4827     | 5627   | 11.031 |
| (4)               | 4642    | 4328    | 3905    | 3655     | 3384     | 3983   | 12.710 |
| (5)               | 4445    | 4061    | 3757    | 3587     | 3443     | 3858   | 10.378 |
| 4 Aroclor-1242(1) | 13692   | 12467   | 11522   | 10819    | 9798     | 11660  | 12.846 |
| (2)               | 14782   | 14429   | 13236   | 12555    | 12263    | 13453  | 8.301  |
| (3)               | 6076    | 5890    | 5423    | 5191     | 4949     | 5506   | 8.563  |
| (4)               | 8395    | 7578    | 7079    | 6747     | 6426     | 7245   | 10.645 |
| (5)               | 7587    | 7189    | 6604    | 6378     | 6296     | 6811   | 8.178  |
| 5 Aroclor-1248(1) | 9070    | 8103    | 7743    | 7247     | 7078     | 7848   | 10.119 |
| (2)               | 7785    | 7181    | 6827    | 6444     | 6114     | 6870   | 9.456  |
| (3)               | 15108   | 13267   | 13037   | 12915    | 12225    | 13310  | 8.094  |
| (4)               | 12682   | 11331   | 10815   | 10392    | 9852     | 11015  | 9.799  |
| (5)               | 8605    | 7806    | 7405    | 7124     | 6336     | 7455   | 11.244 |

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2009 05:36  
 End Cal Date : 28-JAN-2010 13:00  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecdla.i/012810a.b/ECD1-F-8082-121409.m  
 Cal Date : 29-Jan-2010 09:10 yip00818  
 Curve Type : Average

| Compound                 | 100.000 | 250.000 | 500.000 | 1000.000 | 4000.000 | RRF    | % RSD |
|--------------------------|---------|---------|---------|----------|----------|--------|-------|
| Level 1                  | Level 2 | Level 3 | Level 4 | Level 5  |          |        |       |
| 6 Aroclor-1254(1)        | 14281   | 12975   | 12313   | 11911    | 10947    | 12485  | 9.963 |
| (2)                      | 18803   | 17181   | 16666   | 15949    | 15010    | 16722  | 8.494 |
| (3)                      | 22492   | 20906   | 20786   | 20326    | 19059    | 20714  | 5.957 |
| (4)                      | 16753   | 15627   | 15809   | 15513    | 14770    | 15694  | 4.535 |
| (5)                      | 16595   | 15169   | 15433   | 15075    | 13591    | 15172  | 7.071 |
| 7 Aroclor-1260(1)        | 18482   | 17000   | 16776   | 16216    | 15414    | 16778  | 6.750 |
| (2)                      | 27693   | 25623   | 25301   | 24615    | 23439    | 25334  | 6.166 |
| (3)                      | 16527   | 15230   | 14827   | 14401    | 13909    | 14979  | 6.644 |
| (4)                      | 16835   | 15754   | 15479   | 15081    | 14660    | 15562  | 5.287 |
| (5)                      | 36480   | 34657   | 34807   | 34164    | 33121    | 34646  | 3.519 |
| 8 Aroclor-1262(1)        | 16796   | 15375   | 14585   | 14470    | 13775    | 15000  | 7.687 |
| (2)                      | 22563   | 20964   | 19865   | 19587    | 18936    | 20383  | 6.975 |
| (3)                      | 27641   | 25661   | 24522   | 24605    | 23554    | 25197  | 6.179 |
| (4)                      | 25041   | 23378   | 22465   | 22352    | 21708    | 22989  | 5.624 |
| (5)                      | 49563   | 47861   | 46825   | 46728    | 44852    | 47166  | 3.655 |
| 9 Aroclor-1268(1)        | 55111   | 53385   | 52967   | 52495    | 48466    | 52485  | 4.676 |
| (2)                      | 51014   | 48609   | 47960   | 48222    | 44786    | 48118  | 4.620 |
| (3)                      | 39244   | 37391   | 36973   | 36968    | 34562    | 37028  | 4.505 |
| (4)                      | 17802   | 16531   | 16072   | 16029    | 15038    | 16294  | 6.158 |
| (5)                      | 113064  | 109648  | 108755  | 109096   | 100824   | 108277 | 4.162 |
| M 10 Aroclor-Total       | +++++   | +++++   | +++++   | +++++    | +++++    | +++++  | +++++ |
| \$ 11 4cmx               | 407237  | 387000  | 390592  | 382838   | 367117   | 386957 | 3.734 |
| \$ 12 Decachlorobiphenyl | 318112  | 288964  | 284032  | 275190   | 269510   | 287162 | 6.575 |

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 11-DEC-2009 10:17  
 End Cal Date : 28-JAN-2010 13:00  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecdla.i/012810a.b/ECD1-B-8082-121409.m  
 Cal Date : 29-Jan-2010 09:10 yip00818  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/ecdla.i/012210.b/013b1301.d  
 Level 2: /chem/ecdla.i/012210.b/014b1401.d  
 Level 3: /chem/ecdla.i/012210.b/015b1501.d  
 Level 4: /chem/ecdla.i/121409.b/046b4601.d  
 Level 5: /chem/ecdla.i/012210.b/017b1701.d

| Compound          | 100.000 | 250.000 | 500.000 | 1000.000 | 4000.000 | RRF    | % RSD  |
|-------------------|---------|---------|---------|----------|----------|--------|--------|
|                   | Level 1 | Level 2 | Level 3 | Level 4  | Level 5  |        |        |
| 1 Aroclor-1016(1) | 13982   | 12726   | 12217   | 11338    | 10711    | 12195  | 10.384 |
| (2)               | 9780    | 8665    | 8148    | 7574     | 6789     | 8191   | 13.781 |
| (3)               | 6025    | 5334    | 5012    | 4694     | 4319     | 5077   | 12.802 |
| (4)               | 7579    | 6747    | 6320    | 5936     | 5407     | 6398   | 12.884 |
| (5)               | 6928    | 6222    | 5792    | 5544     | 5107     | 5918   | 11.725 |
| 62 4,4-DDT        | +++++   | +++++   | +++++   | 243613   | +++++    | 243613 | 0.000  |
| 63 4,4-DDE        | +++++   | +++++   | +++++   | 357996   | +++++    | 357996 | 0.000  |
| 64 4,4-DDD        | +++++   | +++++   | +++++   | 289343   | +++++    | 289343 | 0.000  |
| 2 Aroclor-1221(1) | +++++   | +++++   | +++++   | 3640     | +++++    | 3640   | 0.000  |
| (2)               | +++++   | +++++   | +++++   | 2329     | +++++    | 2329   | 0.000  |
| (3)               | +++++   | +++++   | +++++   | 8119     | +++++    | 8119   | 0.000  |
| 3 Aroclor-1232(1) | 7405    | 6518    | 5773    | 5260     | 4504     | 5892   | 19.017 |
| (2)               | 7294    | 6687    | 6058    | 5769     | 5299     | 6222   | 12.576 |
| (3)               | 5336    | 4800    | 4249    | 3912     | 3427     | 4345   | 17.180 |
| (4)               | 3854    | 3418    | 3039    | 2783     | 2462     | 3111   | 17.466 |
| (5)               | 3940    | 3492    | 3102    | 2870     | 2562     | 3193   | 16.853 |
| 4 Aroclor-1242(1) | 12348   | 11309   | 9989    | 9755     | 9542     | 10589  | 11.338 |
| (2)               | 9730    | 8628    | 7875    | 7358     | 6677     | 8054   | 14.627 |
| (3)               | 7163    | 6326    | 5763    | 5452     | 5107     | 5962   | 13.534 |
| (4)               | 7183    | 6468    | 5900    | 5548     | 5185     | 6057   | 12.997 |
| (5)               | 7820    | 7123    | 6589    | 6229     | 5746     | 6701   | 11.977 |
| 5 Aroclor-1248(1) | 9914    | 8542    | 7972    | 7289     | 6553     | 8054   | 15.880 |
| (2)               | 11996   | 10356   | 9798    | 9046     | 8173     | 9874   | 14.605 |
| (3)               | 13306   | 11756   | 11119   | 10365    | 9555     | 11220  | 12.723 |
| (4)               | 14720   | 13121   | 12480   | 11577    | 10516    | 12483  | 12.732 |
| (5)               | 14361   | 12633   | 11977   | 11210    | 10342    | 12104  | 12.596 |

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 11-DEC-2009 10:17  
 End Cal Date : 28-JAN-2010 13:00  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m  
 Cal Date : 29-Jan-2010 09:10 yip00818  
 Curve Type : Average

| Compound                 | 100.000<br>Level 1 | 250.000<br>Level 2 | 500.000<br>Level 3 | 1000.000<br>Level 4 | 4000.000<br>Level 5 | RRF    | % RSD  |
|--------------------------|--------------------|--------------------|--------------------|---------------------|---------------------|--------|--------|
| 6 Aroclor-1254(1)        | 7857               | 6938               | 6317               | 5878                | 5185                | 6435   | 15.850 |
| (2)                      | 13759              | 12316              | 11389              | 10708               | 9625                | 11559  | 13.615 |
| (3)                      | 14674              | 13172              | 12243              | 11576               | 10492               | 12431  | 12.786 |
| (4)                      | 19102              | 17554              | 16808              | 16165               | 14771               | 16880  | 9.533  |
| (5)                      | 14276              | 12708              | 12612              | 11843               | 10739               | 12435  | 10.425 |
| 7 Aroclor-1260(1)        | 13890              | 12304              | 11796              | 11185               | 10460               | 11927  | 10.863 |
| (2)                      | 16464              | 14760              | 14222              | 13591               | 12805               | 14368  | 9.604  |
| (3)                      | 12572              | 11270              | 10771              | 10249               | 9681                | 10909  | 10.105 |
| (4)                      | 12859              | 11547              | 11081              | 10528               | 10011               | 11205  | 9.728  |
| (5)                      | 26918              | 24616              | 24307              | 23294               | 22179               | 24263  | 7.274  |
| 8 Aroclor-1262(1)        | 15849              | 14211              | 13033              | 12748               | 11945               | 13557  | 11.192 |
| (2)                      | 21776              | 19630              | 18382              | 17939               | 16725               | 18890  | 10.157 |
| (3)                      | 20222              | 18124              | 16968              | 16542               | 15497               | 17471  | 10.323 |
| (4)                      | 38743              | 35618              | 34053              | 33297               | 30946               | 34532  | 8.384  |
| (5)                      | 28740              | 25266              | 23755              | 23937               | 22633               | 24866  | 9.485  |
| 9 Aroclor-1268(1)        | 40076              | 37508              | 36193              | 35765               | 31736               | 36256  | 8.369  |
| (2)                      | 36699              | 34342              | 33454              | 33223               | 30195               | 33583  | 6.968  |
| (3)                      | 29294              | 26633              | 25688              | 25340               | 22957               | 25982  | 8.826  |
| (4)                      | 12990              | 11609              | 11161              | 10996               | 9978                | 11347  | 9.656  |
| (5)                      | 67306              | 67058              | 67598              | 69416               | 64002               | 67076  | 2.911  |
| M 10 Aroclor-Total       | +++++              | +++++              | +++++              | +++++               | +++++               | +++++  | +++++  |
| \$ 11 4cmx               | 304363             | 285683             | 280339             | 271241              | 254259              | 279177 | 6.609  |
| \$ 12 Decachlorobiphenyl | 196626             | 178854             | 170134             | 166074              | 161388              | 174615 | 7.948  |

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324  
 Instrument ID: ECD1A Calibration Date: 01/27/10 Time: 0638  
 Lab File ID: 002F0201 Init. Calib. Date(s): 01/22/10 01/22/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0908 0950  
 GC Column: CLP1 ID: 0.25 (mm)

| COMPOUND           | RRF       | RRF<br>1000 | MIN<br>RRF | %D   | MAX<br>%D |
|--------------------|-----------|-------------|------------|------|-----------|
| Aroclor-1016       | 14450.346 | 13180.285   | 0.01       | -8.8 | 15.0      |
| (2)                | 18199.756 | 17549.438   | 0.01       | -3.6 | 15.0      |
| (3)                | 11983.312 | 10929.610   | 0.01       | -8.8 | 15.0      |
| (4)                | 7177.742  | 6627.786    | 0.01       | -7.7 | 15.0      |
| (5)                | 9259.441  | 8396.142    | 0.01       | -9.3 | 15.0      |
| Aroclor-1260       | 17718.759 | 17015.251   | 0.01       | -4.0 | 15.0      |
| (2)                | 26928.394 | 25808.456   | 0.01       | -4.2 | 15.0      |
| (3)                | 16186.368 | 15394.593   | 0.01       | -4.9 | 15.0      |
| (4)                | 16907.951 | 16117.435   | 0.01       | -4.7 | 15.0      |
| (5)                | 37665.571 | 36837.731   | 0.01       | -2.2 | 15.0      |
| 4cmx               | 392943.52 | 386499.14   | 0.01       | -1.6 | 15.0      |
| DecaChlorobiphenyl | 329851.94 | 309775.97   | 0.01       | -6.1 | 15.0      |

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324  
 Instrument ID: ECD1A Calibration Date: 01/27/10 Time: 0638  
 Lab File ID: 002B0201 Init. Calib. Date(s): 01/22/10 01/22/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0908 0950  
 GC Column: CLP2 ID: 0.25 (mm)

| COMPOUND           | RRF       | RRF<br>1000 | MIN<br>RRF | %D    | MAX<br>%D |
|--------------------|-----------|-------------|------------|-------|-----------|
| Aroclor-1016       | 12686.880 | 11678.065   | 0.01       | -8.0  | 15.0      |
| (2)                | 8798.138  | 7752.303    | 0.01       | -11.9 | 15.0      |
| (3)                | 5479.218  | 4818.670    | 0.01       | -12.0 | 15.0      |
| (4)                | 6997.244  | 6102.985    | 0.01       | -12.8 | 15.0      |
| (5)                | 6563.576  | 5861.011    | 0.01       | -10.7 | 15.0      |
| Aroclor-1260       | 13275.098 | 12036.593   | 0.01       | -9.3  | 15.0      |
| (2)                | 16157.966 | 14779.154   | 0.01       | -8.5  | 15.0      |
| (3)                | 12499.207 | 11279.235   | 0.01       | -9.8  | 15.0      |
| (4)                | 12928.717 | 11702.807   | 0.01       | -9.5  | 15.0      |
| (5)                | 28445.628 | 26365.962   | 0.01       | -7.3  | 15.0      |
| 4cmx               | 290204.15 | 276758.30   | 0.01       | -4.6  | 15.0      |
| Decachlorobiphenyl | 243974.44 | 218045.72   | 0.01       | -10.6 | 15.0      |

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324  
 Instrument ID: ECD1A Calibration Date: 01/27/10 Time: 0649  
 Lab File ID: 003F0301 Init. Calib. Date(s): 12/14/09 12/14/09  
 Heated Purge: (Y/N) N Init. Calib. Times: 0722 0804  
 GC Column: CLP1 ID: 0.25 (mm)

| COMPOUND     | RRF       | RRF<br>1000 | MIN<br>RRF | %D   | MAX<br>%D |
|--------------|-----------|-------------|------------|------|-----------|
| Aroclor-1254 | 12485.476 | 13037.940   | 0.01       | 4.4  | 15.0      |
| (2)          | 16721.938 | 17824.436   | 0.01       | 6.6  | 15.0      |
| (3)          | 20713.923 | 23591.554   | 0.01       | 13.9 | 15.0      |
| (4)          | 15694.205 | 18043.856   | 0.01       | 15.0 | 15.0      |
| (5)          | 15172.491 | 17151.813   | 0.01       | 13.0 | 15.0      |

FORM VII PEST



FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324  
 Instrument ID: ECD1A Calibration Date: 01/27/10 Time: 0649  
 Lab File ID: 003B0301 Init. Calib. Date(s): 12/14/09 12/14/09  
 Heated Purge: (Y/N) N Init. Calib. Times: 0722 0804  
 GC Column: CLP2 ID: 0.25 (mm)

| COMPOUND     | RRF       | RRF<br>1000 | MIN<br>RRF | %D   | MAX<br>%D |
|--------------|-----------|-------------|------------|------|-----------|
| Aroclor-1254 | 6435.255  | 5975.813    | 0.01       | -7.1 | 15.0      |
| (2)          | 11559.316 | 10635.327   | 0.01       | -8.0 | 15.0      |
| (3)          | 12431.285 | 11946.792   | 0.01       | -3.9 | 15.0      |
| (4)          | 16880.060 | 16753.235   | 0.01       | -0.8 | 15.0      |
| (5)          | 12435.475 | 12298.915   | 0.01       | -1.1 | 15.0      |

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324  
 Instrument ID: ECD1A Calibration Date: 01/27/10 Time: 1219  
 Lab File ID: 032F3201 Init. Calib. Date(s): 01/22/10 01/22/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0908 0950  
 GC Column: CLP1 ID: 0.25 (mm)

| COMPOUND           | RRF       | RRF<br>1000 | MIN<br>RRF | %D   | MAX<br>%D |
|--------------------|-----------|-------------|------------|------|-----------|
| Aroclor-1016       | 14450.346 | 13577.456   | 0.01       | -6.0 | 15.0      |
| (2)                | 18199.756 | 17423.956   | 0.01       | -4.3 | 15.0      |
| (3)                | 11983.312 | 11289.690   | 0.01       | -5.8 | 15.0      |
| (4)                | 7177.742  | 6778.474    | 0.01       | -5.6 | 15.0      |
| (5)                | 9259.441  | 8727.797    | 0.01       | -5.7 | 15.0      |
| Aroclor-1260       | 17718.759 | 17375.942   | 0.01       | -1.9 | 15.0      |
| (2)                | 26928.394 | 26471.010   | 0.01       | -1.7 | 15.0      |
| (3)                | 16186.368 | 15743.525   | 0.01       | -2.7 | 15.0      |
| (4)                | 16907.951 | 16500.621   | 0.01       | -2.4 | 15.0      |
| (5)                | 37665.571 | 37661.267   | 0.01       | -0.0 | 15.0      |
| 4cmx               | 392943.52 | 400248.28   | 0.01       | 1.8  | 15.0      |
| Decachlorobiphenyl | 329851.94 | 317239.32   | 0.01       | -3.8 | 15.0      |

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324  
 Instrument ID: ECD1A Calibration Date: 01/27/10 Time: 1219  
 Lab File ID: 032B3201 Init. Calib. Date(s): 01/22/10 01/22/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0908 0950  
 GC Column: CLP2 ID: 0.25 (mm)

| COMPOUND           | RRF       | RRF<br>1000 | MIN<br>RRF | %D    | MAX<br>%D |
|--------------------|-----------|-------------|------------|-------|-----------|
| Aroclor-1016       | 12686.880 | 11724.689   | 0.01       | -7.6  | 15.0      |
| (2)                | 8798.138  | 7830.339    | 0.01       | -11.0 | 15.0      |
| (3)                | 5479.218  | 4863.804    | 0.01       | -11.2 | 15.0      |
| (4)                | 6997.244  | 6166.973    | 0.01       | -11.9 | 15.0      |
| (5)                | 6563.576  | 5742.668    | 0.01       | -12.5 | 15.0      |
| Aroclor-1260       | 13275.098 | 12161.017   | 0.01       | -8.4  | 15.0      |
| (2)                | 16157.966 | 14980.969   | 0.01       | -7.3  | 15.0      |
| (3)                | 12499.207 | 11415.201   | 0.01       | -8.7  | 15.0      |
| (4)                | 12928.717 | 11845.521   | 0.01       | -8.4  | 15.0      |
| (5)                | 28445.628 | 26537.228   | 0.01       | -6.7  | 15.0      |
| 4cmx               | 290204.15 | 279660.03   | 0.01       | -3.6  | 15.0      |
| Decachlorobiphenyl | 243974.44 | 221347.69   | 0.01       | -9.3  | 15.0      |

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324  
 Instrument ID: ECD1A Calibration Date: 01/27/10 Time: 1442  
 Lab File ID: 044F4401 Init. Calib. Date(s): 01/22/10 01/22/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0908 0950  
 GC Column: CLP1 ID: 0.25 (mm)

| COMPOUND           | RRF       | RRF<br>1000 | MIN<br>RRF | %D   | MAX<br>%D |
|--------------------|-----------|-------------|------------|------|-----------|
| Aroclor-1016       | 14450.346 | 13134.245   | 0.01       | -9.1 | 15.0      |
| (2)                | 18199.756 | 17203.527   | 0.01       | -5.5 | 15.0      |
| (3)                | 11983.312 | 11178.908   | 0.01       | -6.7 | 15.0      |
| (4)                | 7177.742  | 6787.876    | 0.01       | -5.4 | 15.0      |
| (5)                | 9259.441  | 8697.748    | 0.01       | -6.1 | 15.0      |
| Aroclor-1260       | 17718.759 | 17186.940   | 0.01       | -3.0 | 15.0      |
| (2)                | 26928.394 | 26162.710   | 0.01       | -2.8 | 15.0      |
| (3)                | 16186.368 | 15516.005   | 0.01       | -4.1 | 15.0      |
| (4)                | 16907.951 | 16254.802   | 0.01       | -3.9 | 15.0      |
| (5)                | 37665.571 | 36996.472   | 0.01       | -1.8 | 15.0      |
| 4cmx               | 392943.52 | 395985.78   | 0.01       | 0.8  | 15.0      |
| Decachlorobiphenyl | 329851.94 | 299939.29   | 0.01       | -9.1 | 15.0      |

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324  
 Instrument ID: ECD1A Calibration Date: 01/27/10 Time: 1442  
 Lab File ID: 044B4401 Init. Calib. Date(s): 01/22/10 01/22/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0908 0950  
 GC Column: CLP2 ID: 0.25 (mm)

| COMPOUND           | RRF       | RRF<br>1000 | MIN<br>RRF | %D    | MAX<br>%D |
|--------------------|-----------|-------------|------------|-------|-----------|
| Aroclor-1016       | 12686.880 | 11792.540   | 0.01       | -7.0  | 15.0      |
| (2)                | 8798.138  | 7865.146    | 0.01       | -10.6 | 15.0      |
| (3)                | 5479.218  | 4903.057    | 0.01       | -10.5 | 15.0      |
| (4)                | 6997.244  | 6139.887    | 0.01       | -12.2 | 15.0      |
| (5)                | 6563.576  | 5825.962    | 0.01       | -11.2 | 15.0      |
| Aroclor-1260       | 13275.098 | 12126.061   | 0.01       | -8.6  | 15.0      |
| (2)                | 16157.966 | 14847.749   | 0.01       | -8.1  | 15.0      |
| (3)                | 12499.207 | 11209.196   | 0.01       | -10.3 | 15.0      |
| (4)                | 12928.717 | 11540.243   | 0.01       | -10.7 | 15.0      |
| (5)                | 28445.628 | 26215.322   | 0.01       | -7.8  | 15.0      |
| 4cmx               | 290204.15 | 280447.74   | 0.01       | -3.4  | 15.0      |
| Decachlorobiphenyl | 243974.44 | 210169.56   | 0.01       | -13.8 | 15.0      |

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324  
 Instrument ID: ECD1A Calibration Date: 01/27/10 Time: 1618  
 Lab File ID: 052F5201 Init. Calib. Date(s): 01/22/10 01/22/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0908 0950  
 GC Column: CLP1 ID: 0.25 (mm)

| COMPOUND           | RRF       | RRF<br>1000 | MIN<br>RRF | %D   | MAX<br>%D |
|--------------------|-----------|-------------|------------|------|-----------|
| Aroclor-1016       | 14450.346 | 13184.340   | 0.01       | -8.8 | 15.0      |
| (2)                | 18199.756 | 17851.368   | 0.01       | -1.9 | 15.0      |
| (3)                | 11983.312 | 11300.173   | 0.01       | -5.7 | 15.0      |
| (4)                | 7177.742  | 6816.586    | 0.01       | -5.0 | 15.0      |
| (5)                | 9259.441  | 8640.188    | 0.01       | -6.7 | 15.0      |
| Aroclor-1260       | 17718.759 | 17380.315   | 0.01       | -1.9 | 15.0      |
| (2)                | 26928.394 | 26468.437   | 0.01       | -1.7 | 15.0      |
| (3)                | 16186.368 | 15722.160   | 0.01       | -2.9 | 15.0      |
| (4)                | 16907.951 | 16493.869   | 0.01       | -2.4 | 15.0      |
| (5)                | 37665.571 | 37612.921   | 0.01       | -0.1 | 15.0      |
| 4cmx               | 392943.52 | 399468.78   | 0.01       | 1.7  | 15.0      |
| Decachlorobiphenyl | 329851.94 | 309008.64   | 0.01       | -6.3 | 15.0      |

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324  
 Instrument ID: ECD1A Calibration Date: 01/27/10 Time: 1618  
 Lab File ID: 052B5201 Init. Calib. Date(s): 01/22/10 01/22/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0908 0950  
 GC Column: CLP2 ID: 0.25 (mm)

| COMPOUND           | RRF       | RRF<br>1000 | MIN<br>RRF | %D    | MAX<br>%D |
|--------------------|-----------|-------------|------------|-------|-----------|
| Aroclor-1016       | 12686.880 | 12337.813   | 0.01       | -2.8  | 15.0      |
| (2)                | 8798.138  | 8016.760    | 0.01       | -8.9  | 15.0      |
| (3)                | 5479.218  | 4976.926    | 0.01       | -9.2  | 15.0      |
| (4)                | 6997.244  | 6334.988    | 0.01       | -9.5  | 15.0      |
| (5)                | 6563.576  | 5933.357    | 0.01       | -9.6  | 15.0      |
| Aroclor-1260       | 13275.098 | 12448.427   | 0.01       | -6.2  | 15.0      |
| (2)                | 16157.966 | 15252.907   | 0.01       | -5.6  | 15.0      |
| (3)                | 12499.207 | 11582.130   | 0.01       | -7.3  | 15.0      |
| (4)                | 12928.717 | 11892.265   | 0.01       | -8.0  | 15.0      |
| (5)                | 28445.628 | 26770.288   | 0.01       | -5.9  | 15.0      |
| 4cmx               | 290204.15 | 285846.37   | 0.01       | -1.5  | 15.0      |
| Decachlorobiphenyl | 243974.44 | 218059.95   | 0.01       | -10.6 | 15.0      |

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324  
 Instrument ID: ECD1A Calibration Date: 01/28/10 Time: 0937  
 Lab File ID: 003F0301 Init. Calib. Date(s): 12/14/09 12/14/09  
 Heated Purge: (Y/N) N Init. Calib. Times: 0722 0804  
 GC Column: CLP1 ID: 0.25 (mm)

| COMPOUND     | RRF       | RRF<br>1000 | MIN<br>RRF | %D  | MAX<br>%D |
|--------------|-----------|-------------|------------|-----|-----------|
| Aroclor-1254 | 12485.476 | 12761.173   | 0.01       | 2.2 | 15.0      |
| (2)          | 16721.938 | 17529.670   | 0.01       | 4.8 | 15.0      |
| (3)          | 20713.923 | 22662.913   | 0.01       | 9.4 | 15.0      |
| (4)          | 15694.205 | 17089.279   | 0.01       | 8.9 | 15.0      |
| (5)          | 15172.491 | 16050.089   | 0.01       | 5.8 | 15.0      |

FORM VII PEST



FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324  
 Instrument ID: ECD1A Calibration Date: 01/28/10 Time: 0937  
 Lab File ID: 003B0301 Init. Calib. Date(s): 12/14/09 12/14/09  
 Heated Purge: (Y/N) N Init. Calib. Times: 0722 0804  
 GC Column: CLP2 ID: 0.25 (mm)

| COMPOUND     | RRF       | RRF<br>1000 | MIN<br>RRF | %D    | MAX<br>%D |
|--------------|-----------|-------------|------------|-------|-----------|
| Aroclor-1254 | 6435.255  | 5761.305    | 0.01       | -10.5 | 15.0      |
| (2)          | 11559.316 | 10125.587   | 0.01       | -12.4 | 15.0      |
| (3)          | 12431.285 | 11368.908   | 0.01       | -8.5  | 15.0      |
| (4)          | 16880.060 | 15759.096   | 0.01       | -6.6  | 15.0      |
| (5)          | 12435.475 | 11362.020   | 0.01       | -8.6  | 15.0      |

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324  
 Instrument ID: ECD1A Calibration Date: 01/28/10 Time: 1144  
 Lab File ID: 015F1501 Init. Calib. Date(s): 01/28/10 01/28/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 1051 1134  
 GC Column: CLP1 ID: 0.25 (mm)

| COMPOUND           | RRF       | RRF<br>1000 | MIN<br>RRF | %D   | MAX<br>%D |
|--------------------|-----------|-------------|------------|------|-----------|
| Aroclor-1016       | 13779.667 | 13239.829   | 0.01       | -3.9 | 15.0      |
| (2)                | 17505.109 | 17830.982   | 0.01       | 1.9  | 15.0      |
| (3)                | 11500.916 | 11177.489   | 0.01       | -2.8 | 15.0      |
| (4)                | 6845.610  | 6706.479    | 0.01       | -2.0 | 15.0      |
| (5)                | 8881.386  | 8669.925    | 0.01       | -2.4 | 15.0      |
| Aroclor-1260       | 16777.675 | 17007.480   | 0.01       | 1.4  | 15.0      |
| (2)                | 25334.129 | 25794.447   | 0.01       | 1.8  | 15.0      |
| (3)                | 14978.848 | 15114.035   | 0.01       | 0.9  | 15.0      |
| (4)                | 15561.673 | 15902.550   | 0.01       | 2.2  | 15.0      |
| (5)                | 34645.808 | 35916.863   | 0.01       | 3.7  | 15.0      |
| 4cmx               | 386956.77 | 401572.33   | 0.01       | 3.8  | 15.0      |
| Decachlorobiphenyl | 287161.57 | 287962.67   | 0.01       | 0.3  | 15.0      |

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324  
 Instrument ID: ECD1A Calibration Date: 01/28/10 Time: 1144  
 Lab File ID: 015B1501 Init. Calib. Date(s): 01/28/10 01/28/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 1051 1134  
 GC Column: CLP2 ID: 0.25 (mm)

| COMPOUND           | RRF       | RRF<br>1000 | MIN<br>RRF | %D   | MAX<br>%D |
|--------------------|-----------|-------------|------------|------|-----------|
| Aroclor-1016       | 12194.849 | 11627.012   | 0.01       | -4.6 | 15.0      |
| (2)                | 8191.125  | 7750.692    | 0.01       | -5.4 | 15.0      |
| (3)                | 5077.048  | 4814.965    | 0.01       | -5.2 | 15.0      |
| (4)                | 6397.915  | 6066.099    | 0.01       | -5.2 | 15.0      |
| (5)                | 5918.363  | 5594.879    | 0.01       | -5.5 | 15.0      |
| Aroclor-1260       | 11926.917 | 11752.154   | 0.01       | -1.5 | 15.0      |
| (2)                | 14368.290 | 14264.405   | 0.01       | -0.7 | 15.0      |
| (3)                | 10908.621 | 10757.070   | 0.01       | -1.4 | 15.0      |
| (4)                | 11205.457 | 11094.832   | 0.01       | -1.0 | 15.0      |
| (5)                | 24262.909 | 24615.643   | 0.01       | 1.4  | 15.0      |
| 4cmx               | 279177.29 | 283491.33   | 0.01       | 1.5  | 15.0      |
| Decachlorobiphenyl | 174615.32 | 172597.55   | 0.01       | -1.2 | 15.0      |

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324  
 Instrument ID: ECD1A Calibration Date: 01/28/10 Time: 1456  
 Lab File ID: 032F3201 Init. Calib. Date(s): 01/28/10 01/28/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 1051 1134  
 GC Column: CLP1 ID: 0.25 (mm)

| COMPOUND           | RRF       | RRF<br>1000 | MIN<br>RRF | %D    | MAX<br>%D |
|--------------------|-----------|-------------|------------|-------|-----------|
| Aroclor-1016       | 13779.667 | 13010.923   | 0.01       | -5.6  | 15.0      |
| (2)                | 17505.109 | 16921.766   | 0.01       | -3.3  | 15.0      |
| (3)                | 11500.916 | 10983.417   | 0.01       | -4.5  | 15.0      |
| (4)                | 6845.610  | 6541.145    | 0.01       | -4.4  | 15.0      |
| (5)                | 8881.386  | 8470.741    | 0.01       | -4.6  | 15.0      |
| Aroclor-1260       | 16777.675 | 16357.926   | 0.01       | -2.5  | 15.0      |
| (2)                | 25334.129 | 25033.402   | 0.01       | -1.2  | 15.0      |
| (3)                | 14978.848 | 14649.411   | 0.01       | -2.2  | 15.0      |
| (4)                | 15561.673 | 15281.375   | 0.01       | -1.8  | 15.0      |
| (5)                | 34645.808 | 34496.244   | 0.01       | -0.4  | 15.0      |
| 4cmx               | 386956.77 | 393377.53   | 0.01       | 1.6   | 15.0      |
| Decachlorobiphenyl | 287161.57 | 256266.84   | 0.01       | -10.8 | 15.0      |

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324  
 Instrument ID: ECD1A Calibration Date: 01/28/10 Time: 1456  
 Lab File ID: 032B3201 Init. Calib. Date(s): 01/28/10 01/28/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 1051 1134  
 GC Column: CLP2 ID: 0.25 (mm)

| COMPOUND           | RRF       | RRF<br>1000 | MIN<br>RRF | %D   | MAX<br>%D |
|--------------------|-----------|-------------|------------|------|-----------|
| Aroclor-1016       | 12194.849 | 11633.899   | 0.01       | -4.6 | 15.0      |
| (2)                | 8191.125  | 7638.987    | 0.01       | -6.7 | 15.0      |
| (3)                | 5077.048  | 4697.437    | 0.01       | -7.5 | 15.0      |
| (4)                | 6397.915  | 5952.993    | 0.01       | -7.0 | 15.0      |
| (5)                | 5918.363  | 5500.663    | 0.01       | -7.0 | 15.0      |
| Aroclor-1260       | 11926.917 | 11411.400   | 0.01       | -4.3 | 15.0      |
| (2)                | 14368.290 | 13804.017   | 0.01       | -3.9 | 15.0      |
| (3)                | 10908.621 | 10442.327   | 0.01       | -4.3 | 15.0      |
| (4)                | 11205.457 | 10750.486   | 0.01       | -4.1 | 15.0      |
| (5)                | 24262.909 | 23833.089   | 0.01       | -1.8 | 15.0      |
| 4cmx               | 279177.29 | 278364.92   | 0.01       | -0.3 | 15.0      |
| Decachlorobiphenyl | 174615.32 | 185762.15   | 0.01       | 6.4  | 15.0      |

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324  
 Instrument ID: ECD1A Calibration Date: 01/28/10 Time: 1838  
 Lab File ID: 051F5101 Init. Calib. Date(s): 01/28/10 01/28/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 1051 1134  
 GC Column: CLP1 ID: 0.25 (mm)

| COMPOUND           | RRF       | RRF<br>1000 | MIN<br>RRF | %D   | MAX<br>%D |
|--------------------|-----------|-------------|------------|------|-----------|
| Aroclor-1016       | 13779.667 | 13468.292   | 0.01       | -2.2 | 15.0      |
| (2)                | 17505.109 | 17643.264   | 0.01       | 0.8  | 15.0      |
| (3)                | 11500.916 | 11072.496   | 0.01       | -3.7 | 15.0      |
| (4)                | 6845.610  | 6660.058    | 0.01       | -2.7 | 15.0      |
| (5)                | 8881.386  | 8624.865    | 0.01       | -2.9 | 15.0      |
| Aroclor-1260       | 16777.675 | 16445.980   | 0.01       | -2.0 | 15.0      |
| (2)                | 25334.129 | 24856.986   | 0.01       | -1.9 | 15.0      |
| (3)                | 14978.848 | 14515.485   | 0.01       | -3.1 | 15.0      |
| (4)                | 15561.673 | 14999.370   | 0.01       | -3.6 | 15.0      |
| (5)                | 34645.808 | 34281.505   | 0.01       | -1.0 | 15.0      |
| 4cmx               | 386956.77 | 396011.20   | 0.01       | 2.3  | 15.0      |
| Decachlorobiphenyl | 287161.57 | 261957.76   | 0.01       | -8.8 | 15.0      |

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324  
 Instrument ID: ECD1A Calibration Date: 01/28/10 Time: 1838  
 Lab File ID: 051B5101 Init. Calib. Date(s): 01/28/10 01/28/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 1051 1134  
 GC Column: CLP2 ID: 0.25 (mm)

| COMPOUND           | RRF       | RRF<br>1000 | MIN<br>RRF | %D   | MAX<br>%D |
|--------------------|-----------|-------------|------------|------|-----------|
| Aroclor-1016       | 12194.849 | 11844.806   | 0.01       | -2.9 | 15.0      |
| (2)                | 8191.125  | 7613.238    | 0.01       | -7.0 | 15.0      |
| (3)                | 5077.048  | 4737.947    | 0.01       | -6.7 | 15.0      |
| (4)                | 6397.915  | 5921.989    | 0.01       | -7.4 | 15.0      |
| (5)                | 5918.363  | 5493.730    | 0.01       | -7.2 | 15.0      |
| Aroclor-1260       | 11926.917 | 11077.109   | 0.01       | -7.1 | 15.0      |
| (2)                | 14368.290 | 13481.775   | 0.01       | -6.2 | 15.0      |
| (3)                | 10908.621 | 10117.432   | 0.01       | -7.2 | 15.0      |
| (4)                | 11205.457 | 10366.108   | 0.01       | -7.5 | 15.0      |
| (5)                | 24262.909 | 23064.767   | 0.01       | -4.9 | 15.0      |
| 4cmx               | 279177.29 | 278402.79   | 0.01       | -0.3 | 15.0      |
| Decachlorobiphenyl | 174615.32 | 175886.94   | 0.01       | 0.7  | 15.0      |

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324  
 Instrument ID: ECD1A Calibration Date: 01/28/10 Time: 1917  
 Lab File ID: 054F5401 Init. Calib. Date(s): 01/28/10 01/28/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 1051 1134  
 GC Column: CLP1 ID: 0.25 (mm)

| COMPOUND           | RRF       | RRF<br>1000 | MIN<br>RRF | %D   | MAX<br>%D |
|--------------------|-----------|-------------|------------|------|-----------|
| Aroclor-1016       | 13779.667 | 13894.723   | 0.01       | 0.8  | 15.0      |
| (2)                | 17505.109 | 18307.421   | 0.01       | 4.6  | 15.0      |
| (3)                | 11500.916 | 11462.810   | 0.01       | -0.3 | 15.0      |
| (4)                | 6845.610  | 6883.260    | 0.01       | 0.5  | 15.0      |
| (5)                | 8881.386  | 8939.691    | 0.01       | 0.6  | 15.0      |
| Aroclor-1260       | 16777.675 | 17156.094   | 0.01       | 2.2  | 15.0      |
| (2)                | 25334.129 | 25948.677   | 0.01       | 2.4  | 15.0      |
| (3)                | 14978.848 | 15192.163   | 0.01       | 1.4  | 15.0      |
| (4)                | 15561.673 | 15723.039   | 0.01       | 1.0  | 15.0      |
| (5)                | 34645.808 | 35874.496   | 0.01       | 3.5  | 15.0      |
| 4cmx               | 386956.77 | 411536.57   | 0.01       | 6.4  | 15.0      |
| Decachlorobiphenyl | 287161.57 | 265645.11   | 0.01       | -7.5 | 15.0      |

FORM VII PEST



FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324  
 Instrument ID: ECD1A Calibration Date: 01/28/10 Time: 1917  
 Lab File ID: 054B5401 Init. Calib. Date(s): 01/28/10 01/28/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 1051 1134  
 GC Column: CLP2 ID: 0.25 (mm)

| COMPOUND           | RRF       | RRF<br>1000 | MIN<br>RRF | %D   | MAX<br>%D |
|--------------------|-----------|-------------|------------|------|-----------|
| Aroclor-1016       | 12194.849 | 12074.753   | 0.01       | -1.0 | 15.0      |
| (2)                | 8191.125  | 7993.001    | 0.01       | -2.4 | 15.0      |
| (3)                | 5077.048  | 4972.829    | 0.01       | -2.0 | 15.0      |
| (4)                | 6397.915  | 6174.918    | 0.01       | -3.5 | 15.0      |
| (5)                | 5918.363  | 5764.870    | 0.01       | -2.6 | 15.0      |
| Aroclor-1260       | 11926.917 | 11709.739   | 0.01       | -1.8 | 15.0      |
| (2)                | 14368.290 | 14298.182   | 0.01       | -0.5 | 15.0      |
| (3)                | 10908.621 | 10676.849   | 0.01       | -2.1 | 15.0      |
| (4)                | 11205.457 | 10927.237   | 0.01       | -2.5 | 15.0      |
| (5)                | 24262.909 | 24310.655   | 0.01       | 0.2  | 15.0      |
| 4cmx               | 279177.29 | 291098.89   | 0.01       | 4.3  | 15.0      |
| Decachlorobiphenyl | 174615.32 | 186751.77   | 0.01       | 7.0  | 15.0      |

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/002f0201.d  
 Lab Smp Id: WAR100104-60 01 Client Smp ID: AR166001  
 Inj Date : 27-JAN-2010 06:38  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |WAR100104-60 01  
 Misc Info :  
 Comment :  
 Method : /chem/ecdl1a.i/012710.b/ECD1-F-8082-121409.m  
 Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
 Als bottle: 2 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: AR1660.sub  
 Target Version: 3.50 Sample Matrix: None

AMOUNTS

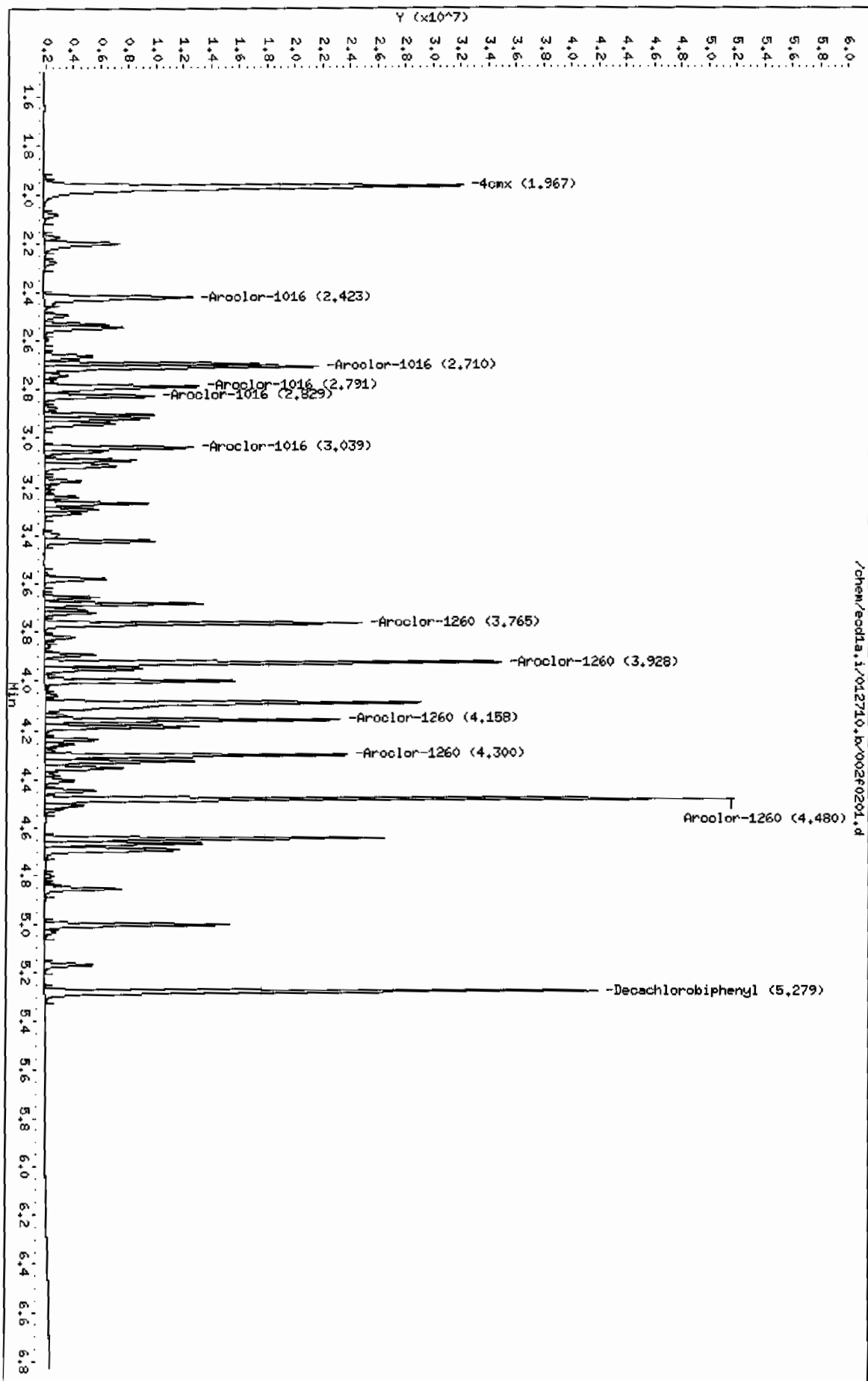
|                           |        |        | CAL-AMT  | ON-COL  |                   |                |        |
|---------------------------|--------|--------|----------|---------|-------------------|----------------|--------|
| RT                        | EXP RT | DLT RT | RESPONSE | ( ug/L) | ( ug/L)           | TARGET RANGE   | RATIO  |
| <hr/>                     |        |        |          |         |                   |                |        |
| \$ 11 4cmx                |        |        |          |         | CAS #: 877-09-8   |                |        |
| 1.967                     | 1.967  | 0.000  | 38649914 | 100.000 | 98.4              | 80.00- 120.00  | 100.00 |
| <hr/>                     |        |        |          |         |                   |                |        |
| \$ 12 Decachlorobiphenyl  |        |        |          |         | CAS #: 2051-24-3  |                |        |
| 5.279                     | 5.279  | 0.000  | 30977597 | 100.000 | 93.9              | 80.00- 120.00  | 100.00 |
| <hr/>                     |        |        |          |         |                   |                |        |
| 1 Aroclor-1016            |        |        |          |         | CAS #: 12674-11-2 |                |        |
| 2.423                     | 2.423  | 0.000  | 13180284 | 1000.00 | 912               | 80.00- 120.00  | 100.00 |
| 2.710                     | 2.710  | 0.000  | 17549437 | 1000.00 | 964               | 106.82- 146.82 | 133.15 |
| 2.791                     | 2.791  | 0.000  | 10929609 | 1000.00 | 912               | 65.47- 105.47  | 82.92  |
| 2.829                     | 2.829  | 0.000  | 6627786  | 1000.00 | 923               | 31.32- 71.32   | 50.29  |
| 3.039                     | 3.039  | 0.000  | 8396141  | 1000.00 | 907               | 44.60- 84.60   | 63.70  |
| Average of Peak Amounts = |        |        |          |         | 924               |                |        |
| <hr/>                     |        |        |          |         |                   |                |        |
| 7 Aroclor-1260            |        |        |          |         | CAS #: 11096-82-5 |                |        |
| 3.765                     | 3.765  | 0.000  | 17015251 | 1000.00 | 960               | 80.00- 120.00  | 100.00 |
| 3.928                     | 3.928  | 0.000  | 25808456 | 1000.00 | 958               | 131.61- 171.61 | 151.68 |
| 4.158                     | 4.158  | 0.000  | 15394593 | 1000.00 | 951               | 68.06- 108.06  | 90.48  |
| 4.300                     | 4.300  | 0.000  | 16117435 | 1000.00 | 953               | 71.84- 111.84  | 94.72  |
| 4.480                     | 4.480  | 0.000  | 36837730 | 1000.00 | 978               | 194.61- 234.61 | 216.50 |
| Average of Peak Amounts = |        |        |          |         | 960               |                |        |
| <hr/>                     |        |        |          |         |                   |                |        |

Data File: /chem/ecdda.i/012710.b/002f0201.d  
Date: 27-JAN-2010 06:38  
Client ID: AR166001  
Sample Info: IMP100104-60 01

Column phase: CLF1

Instrument: ecdda.i  
Operator: VSI  
Column diameter: 0.25

Page 1



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/002b0201.d

Lab Smp Id: WAR100104-60 01

Client Smp ID: AR166001

Inj Date : 27-JAN-2010 06:38

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 01

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012710.b/ECD1-B-8082-121409.m

Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 2

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

| AMOUNTS                   |        |        |                  |                   |              |        |            |
|---------------------------|--------|--------|------------------|-------------------|--------------|--------|------------|
|                           |        |        | CAL-AMT          | ON-COL            |              |        |            |
| RT                        | EXP RT | DLT RT | RESPONSE ( ug/L) | ( ug/L)           | TARGET RANGE | RATIO  |            |
| ---                       | -----  | -----  | -----            | -----             | -----        | -----  |            |
| -----                     |        |        |                  |                   |              |        |            |
| \$ 11 4cmx                |        |        |                  | CAS #: 877-09-8   |              |        |            |
| 2.299                     | 2.299  | 0.000  | 27675830 100.000 | 95.4              | 80.00-       | 120.00 | 100.00     |
| -----                     |        |        |                  |                   |              |        |            |
| \$ 12 Decachlorobiphenyl  |        |        |                  | CAS #: 2051-24-3  |              |        |            |
| 5.945                     | 5.945  | 0.000  | 21804572 100.000 | 89.4              | 80.00-       | 120.00 | 100.00     |
| -----                     |        |        |                  |                   |              |        |            |
| 1 Aroclor-1016            |        |        |                  | CAS #: 12674-11-2 |              |        |            |
| 3.195                     | 3.195  | 0.000  | 11678065 1000.00 | 920               | 80.00-       | 120.00 | 100.00 (M) |
| 3.279                     | 3.279  | 0.000  | 7752303 1000.00  | 881               | 44.37-       | 84.37  | 66.38      |
| 3.342                     | 3.342  | 0.000  | 4818670 1000.00  | 879               | 19.84-       | 59.84  | 41.26      |
| 3.569                     | 3.569  | 0.000  | 6102985 1000.00  | 872               | 31.13-       | 71.13  | 52.26      |
| 3.644                     | 3.644  | 0.000  | 5861011 1000.00  | 893               | 27.00-       | 67.00  | 58.88      |
| Average of Peak Amounts = |        |        |                  | 889               |              |        |            |
| -----                     |        |        |                  |                   |              |        |            |
| 7 Aroclor-1260            |        |        |                  | CAS #: 11096-82-5 |              |        |            |
| 4.335                     | 4.335  | 0.000  | 12036593 1000.00 | 907               | 80.00-       | 120.00 | 100.00     |
| 4.459                     | 4.459  | 0.000  | 14779154 1000.00 | 915               | 104.23-      | 144.23 | 122.79     |
| 4.725                     | 4.725  | 0.000  | 11279235 1000.00 | 902               | 72.03-       | 112.03 | 93.71      |
| 4.899                     | 4.899  | 0.000  | 11702807 1000.00 | 905               | 75.50-       | 115.50 | 97.23      |
| 5.046                     | 5.046  | 0.000  | 26365962 1000.00 | 927               | 197.36-      | 237.36 | 219.05     |
| Average of Peak Amounts = |        |        |                  | 911               |              |        |            |
| -----                     |        |        |                  |                   |              |        |            |

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/012710.b/002b0201.d

Date: 27-JAN-2010 06:38

Client ID: AR166001

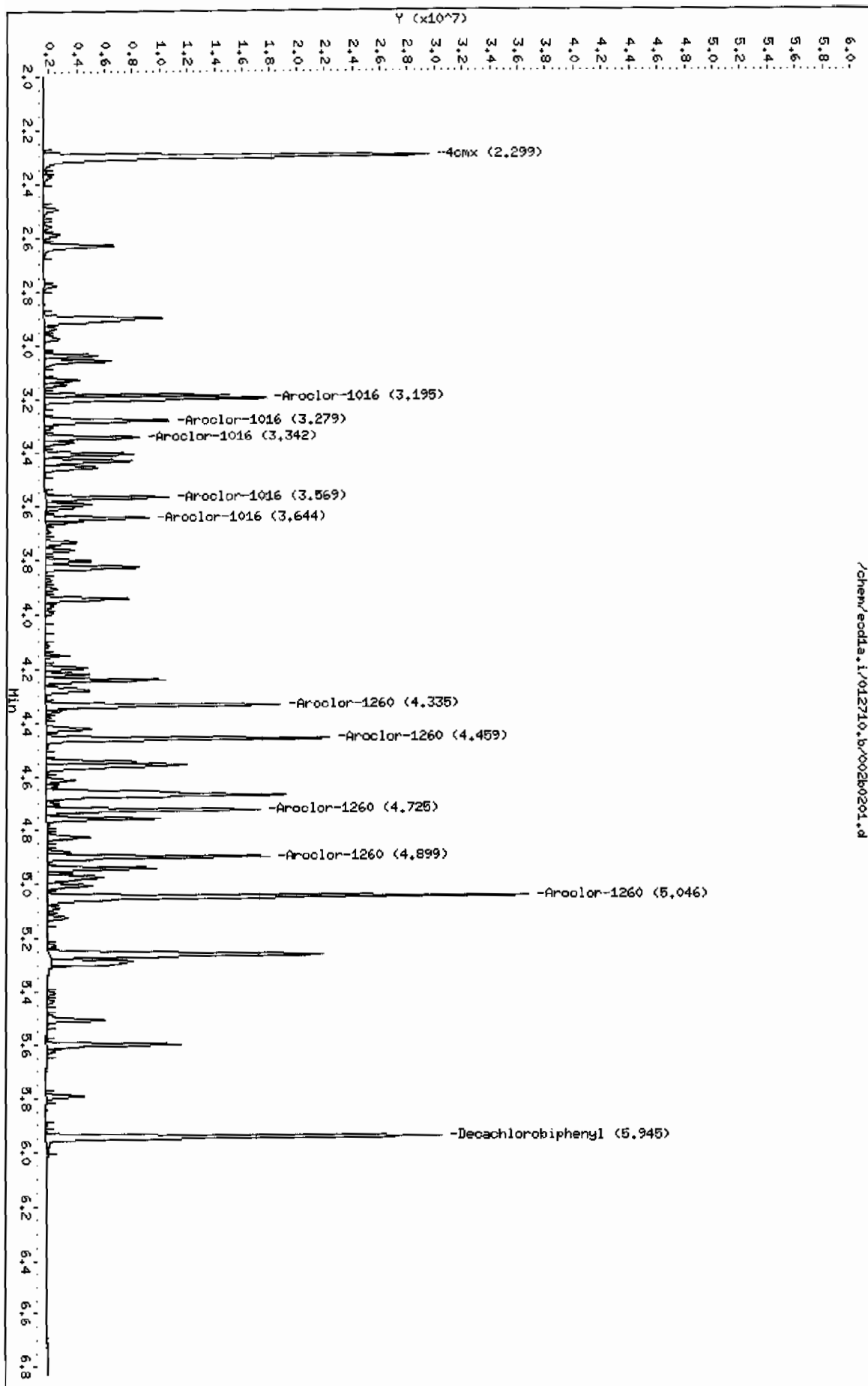
Sample Info: 14PR100104-60 01

Column phase: CLP2

Instrument: ecd1a.i

Operator: YSL

Column diameter: 0.25



Comment: Manually Integrated  
Data File: /chem/ecdl1a.i/012710.b/C02b0201.d  
Operator: YSl  
Injection Date: 27-JAN-2010 06:38  
Instrument: ecdl1a.i  
Client Sample ID: AR166001

Y (x10<sup>-7</sup>)

4cmx

Aroclor-1016

Aroclor-1016

Aroclor-1016

Aroclor-1016

Aroclor-1016

Aroclor-1260

Aroclor-1260

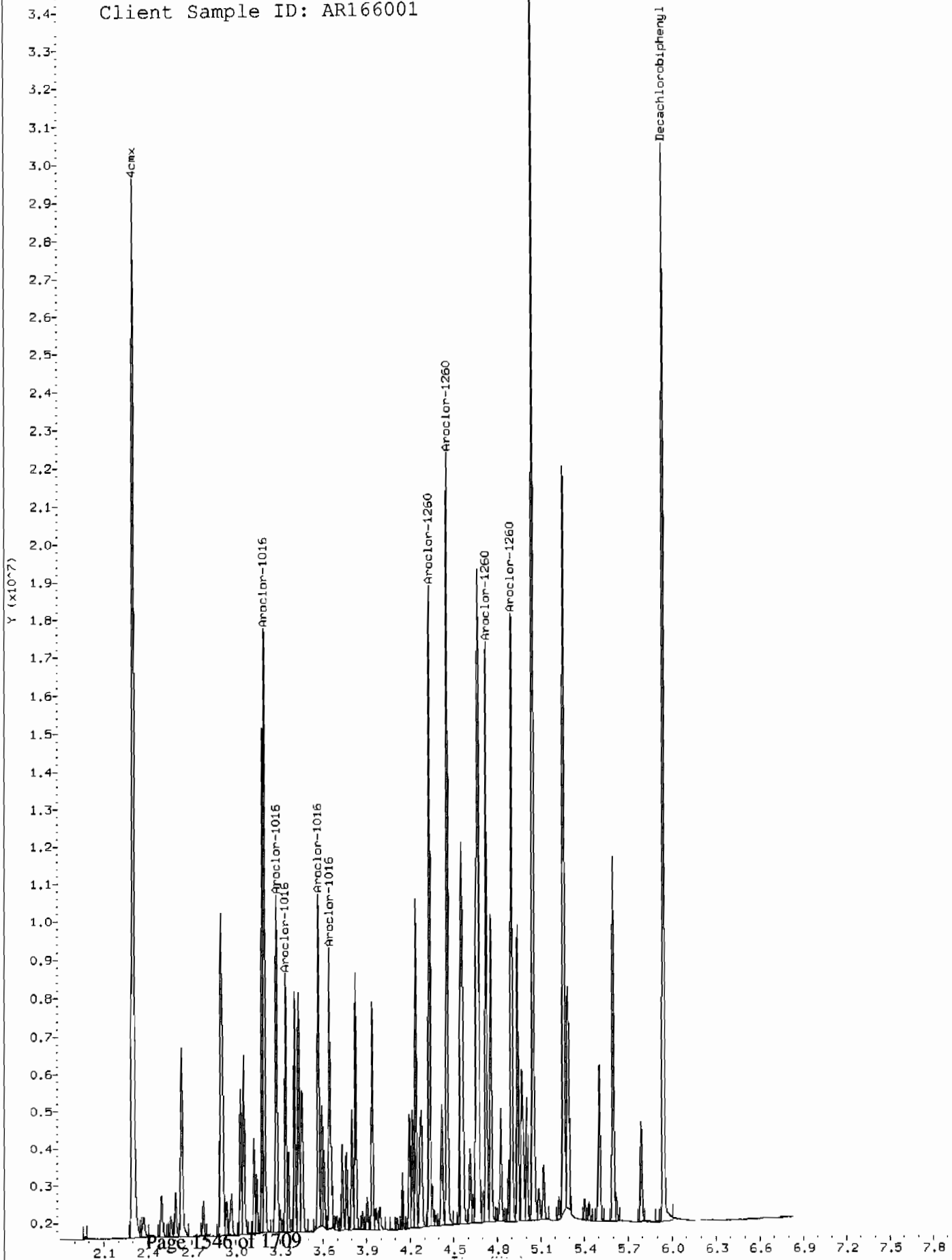
Aroclor-1260

Aroclor-1260

Aroclor-1260

Decachlorobiphenyl

Comment: Before manual integration  
Data File: /chem/ecdl1.i/012710.b/Orig-002b0201.d  
Operator: YS1  
Injection Date: 27-JAN-2010 06:38  
Instrument: ecd1a.i  
Client Sample ID: AR166001





GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/003f0301.d

Lab Smp Id: WAR091216-54

Client Smp ID: AR125401

Inj Date : 27-JAN-2010 06:49

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR091216-54

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012710.b/ECD1-F-8082-121409.m

Meth Date : 28-Jan-2010 10:52 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 3

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1254.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

CAL-AMT ON-COL

| RT | EXP RT | DLT RT | RESPONSE ( ug/L) | ( ug/L) | TARGET RANGE | RATIO |
|----|--------|--------|------------------|---------|--------------|-------|
|----|--------|--------|------------------|---------|--------------|-------|

6 Aroclor-1254

CAS #: 11097-69-1

|       |       |       |          |         |                     |        |
|-------|-------|-------|----------|---------|---------------------|--------|
| 3.268 | 3.268 | 0.000 | 13037940 | 1000.00 | 1040 80.00- 120.00  | 100.00 |
| 3.423 | 3.423 | 0.000 | 17824436 | 1000.00 | 1060 116.71- 156.71 | 136.71 |
| 3.658 | 3.658 | 0.000 | 23591553 | 1000.00 | 1140 160.95- 200.95 | 180.95 |
| 3.820 | 3.820 | 0.000 | 18043855 | 1000.00 | 1150 118.39- 158.39 | 138.39 |
| 3.929 | 3.929 | 0.000 | 17151813 | 1000.00 | 1130 111.55- 151.55 | 131.55 |

Average of Peak Amounts = 1.11e+03

Data File: /chem/ecdda.i/012710.b/003f0301.d

Date : 27-JUN-2010 06:49

Client ID: AR125401

Sample Info: IAP091216-54

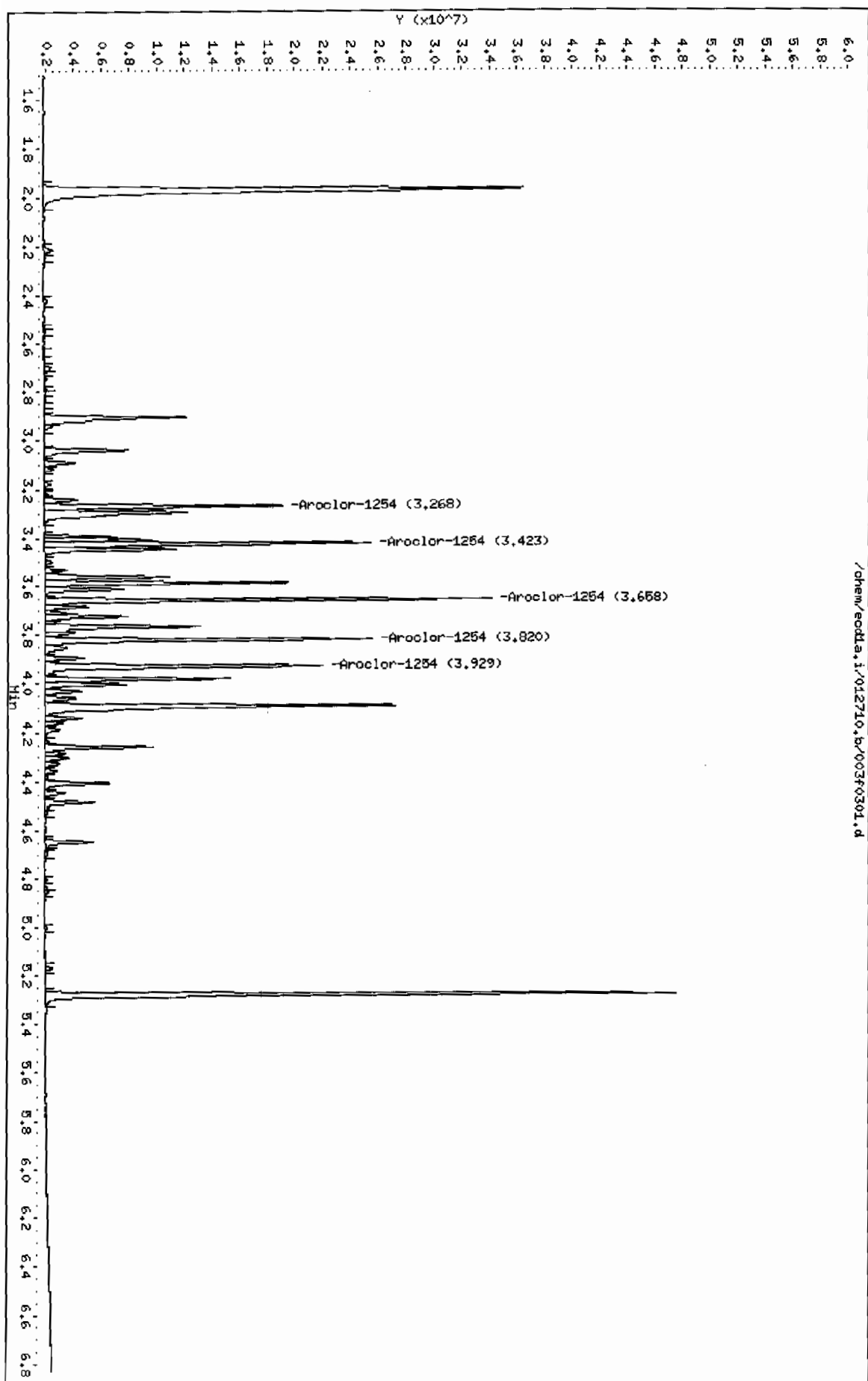
Column phase: CLP1

Page 1

Instrument: ecdda.i

Operator: YSL

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/003b0301.d

Lab Smp Id: WAR091216-54

Client Smp ID: AR125401

Inj Date : 27-JAN-2010 06:49

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR091216-54

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012710.b/ECD1-B-8082-121409.m

Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d

Als bottle: 3 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1254.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

CAL-AMT ON-COL

| RT | EXP RT | DLT RT | RESPONSE ( ug/L) | ( ug/L) | TARGET RANGE | RATIO |
|----|--------|--------|------------------|---------|--------------|-------|
|----|--------|--------|------------------|---------|--------------|-------|

6 Aroclor-1254

CAS #: 11097-69-1

|       |       |       |                  |                    |        |
|-------|-------|-------|------------------|--------------------|--------|
| 3.403 | 3.403 | 0.000 | 5975812 1000.00  | 929 80.00- 120.00  | 100.00 |
| 3.826 | 3.826 | 0.000 | 10635326 1000.00 | 920 157.97- 197.97 | 177.97 |
| 3.943 | 3.943 | 0.000 | 11946792 1000.00 | 961 179.92- 219.92 | 199.92 |
| 4.218 | 4.218 | 0.000 | 16753234 1000.00 | 992 260.35- 300.35 | 280.35 |
| 4.355 | 4.355 | 0.000 | 12298914 1000.00 | 989 185.81- 225.81 | 205.81 |

Average of Peak Amounts =

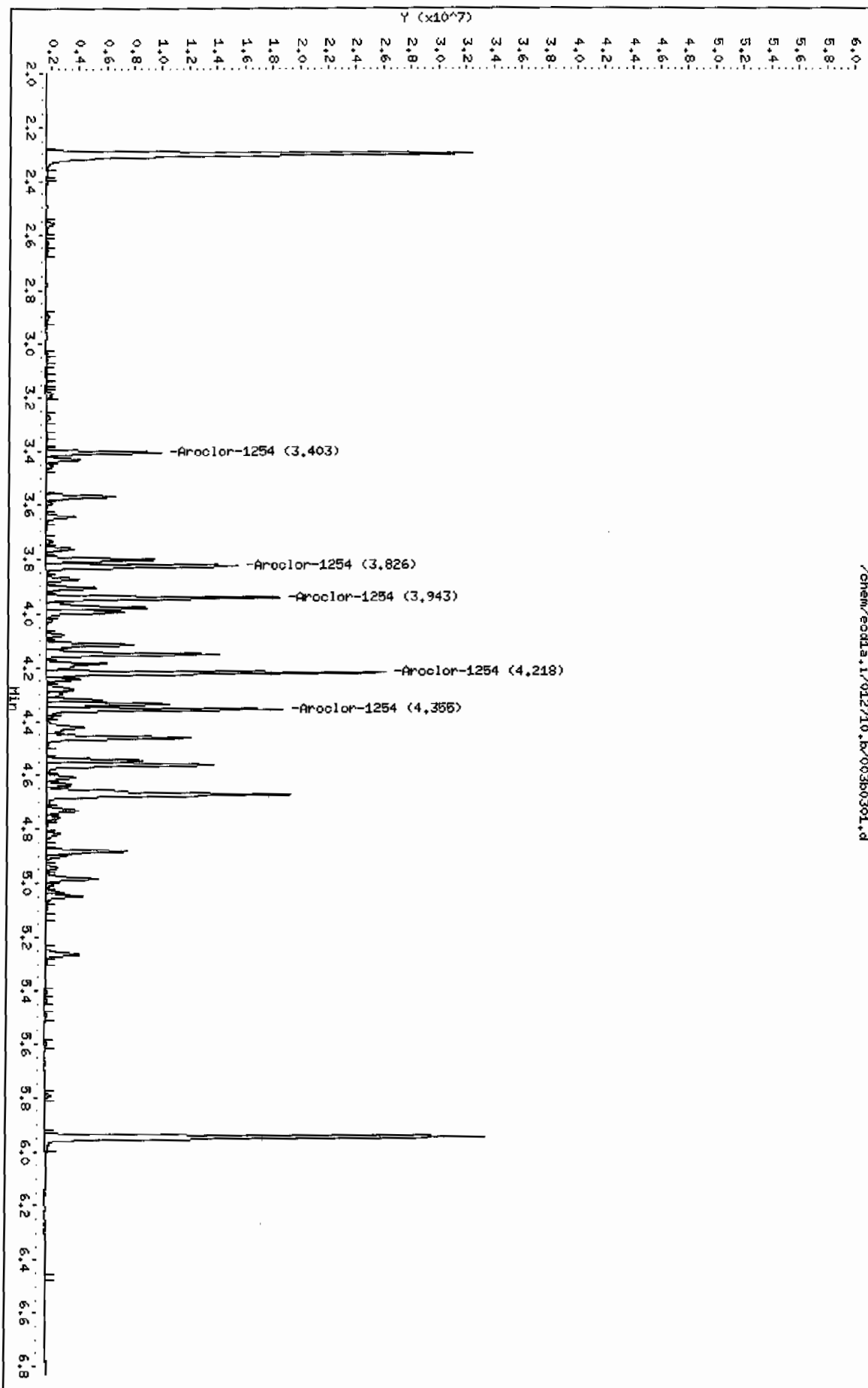
958

Data File: /chem/ecdda.i/012710.b/003b0301.d  
Date: 27-JAN-2010 06:49  
Client ID: AR125401  
Sample Info: 1MR091216-54

Page 1

Column phase: CLP2

Instrument: ecdda.i  
Operator: YSL  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/004f0401.d  
Lab Smp Id: WAR091217-42 Client Smp ID: AR124201  
Inj Date : 27-JAN-2010 06:59  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |WAR091217-42  
Misc Info :  
Comment :  
Method : /chem/ecdl1a.i/012710.b/ECD1-F-8082-121409.m  
Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 4 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1242.sub  
Target Version: 3.50 Sample Matrix: None

| AMOUNTS                   |        |        |                   |         |                |        |
|---------------------------|--------|--------|-------------------|---------|----------------|--------|
|                           |        |        | CAL-AMT           | ON-COL  |                |        |
| RT                        | EXP RT | DLT RT | RESPONSE ( ug/L)  | ( ug/L) | TARGET RANGE   | RATIO  |
| ---                       | -----  | -----  | -----             | -----   | -----          | -----  |
| 4 Aroclor-1242            |        |        | CAS #: 53469-21-9 |         |                |        |
| 2.422                     | 2.422  | 0.000  | 11591185 1000.00  | 994     | 80.00- 120.00  | 100.00 |
| 2.711                     | 2.711  | 0.000  | 14736599 1000.00  | 1100    | 107.14- 147.14 | 127.14 |
| 2.829                     | 2.829  | 0.000  | 5646703 1000.00   | 1020    | 28.72- 68.72   | 48.72  |
| 3.039                     | 3.039  | 0.000  | 7310017 1000.00   | 1010    | 43.07- 83.07   | 63.07  |
| 3.293                     | 3.293  | 0.000  | 7436684 1000.00   | 1090    | 44.16- 84.16   | 64.16  |
| Average of Peak Amounts = |        |        | 1.04e+03          |         |                |        |

Data File: /chem/ecdda.i/012710.b/004f0401.d

Date: 27-JAN-2010 06:59

Client ID: AR124201

Sample Info: IMR091217-42

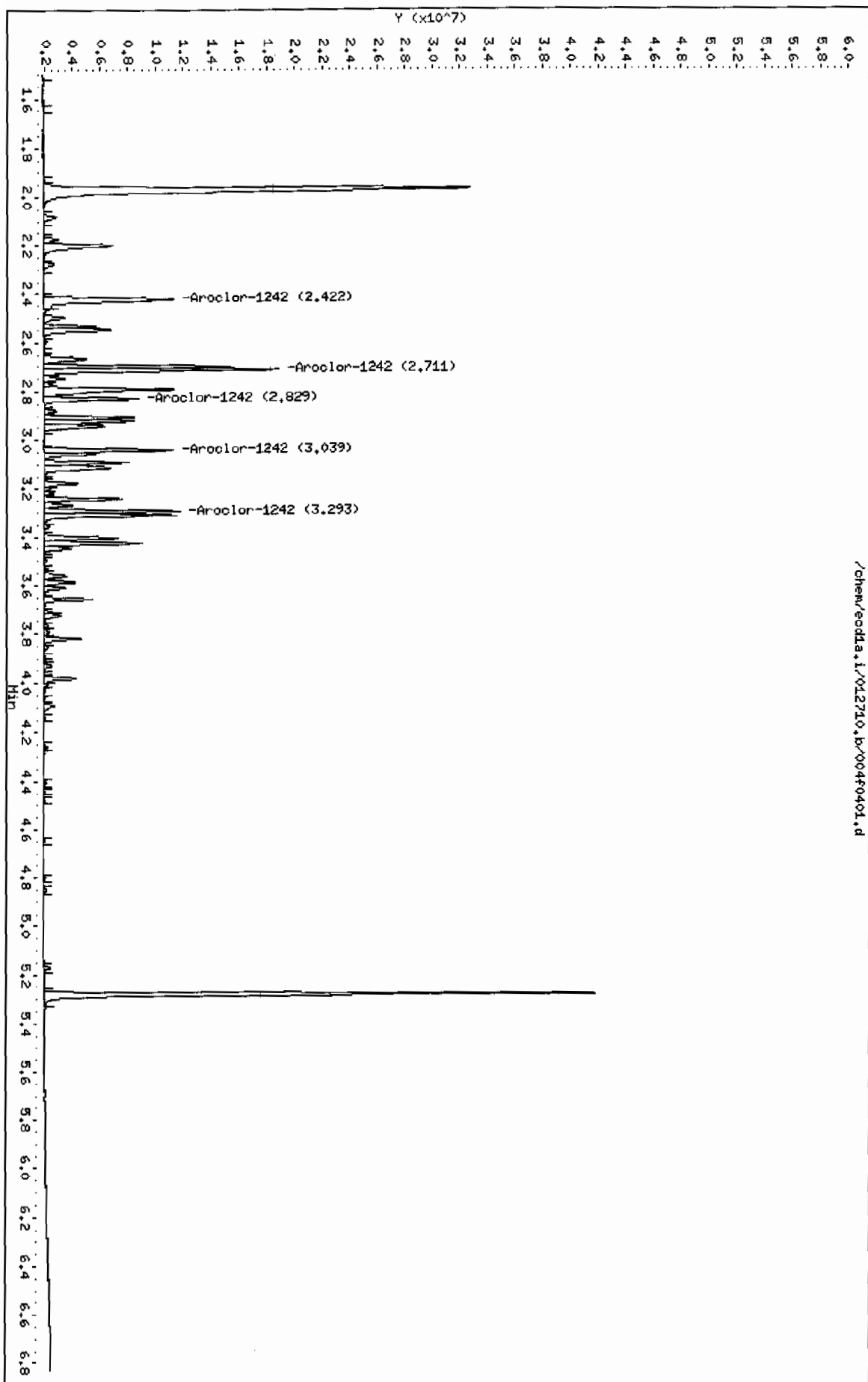
Page 1

Column Phase: CLP1

Instrument: ecdda.i

Operator: YSL

Column diameter: 0.25



Data File: /chem/ecdl1a.i/012710.b/004b0401.d  
Report Date: 28-Jan-2010 11:09

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/004b0401.d

Lab Smp Id: WAR091217-42

Client Smp ID: AR124201

Inj Date : 27-JAN-2010 06:59

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR091217-42

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012710.b/ECD1-B-8082-121409.m

Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d

Als bottle: 4 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1242.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

CAL-AMT ON-COL

| RT | EXP RT | DLT RT | RESPONSE ( ug/L) | ( ug/L) | TARGET RANGE | RATIO |
|----|--------|--------|------------------|---------|--------------|-------|
|----|--------|--------|------------------|---------|--------------|-------|

4 Aroclor-1242

CAS #: 53469-21-9

|       |       |       |          |         |                   |        |
|-------|-------|-------|----------|---------|-------------------|--------|
| 3.195 | 3.195 | 0.000 | 10304226 | 1000.00 | 973 80.00- 120.00 | 100.00 |
| 3.279 | 3.279 | 0.000 | 6676006  | 1000.00 | 829 44.79- 84.79  | 64.79  |
| 3.569 | 3.569 | 0.000 | 5312751  | 1000.00 | 891 31.56- 71.56  | 51.56  |
| 3.803 | 3.803 | 0.000 | 5532759  | 1000.00 | 913 33.69- 73.69  | 53.69  |
| 3.831 | 3.831 | 0.000 | 6140169  | 1000.00 | 916 39.59- 79.59  | 59.59  |

Average of Peak Amounts =

905

Data File: /chem/ecdda.i/012710.b/004b0401.d

Date: 27-JAN-2010 06:59

Client ID: AR124201

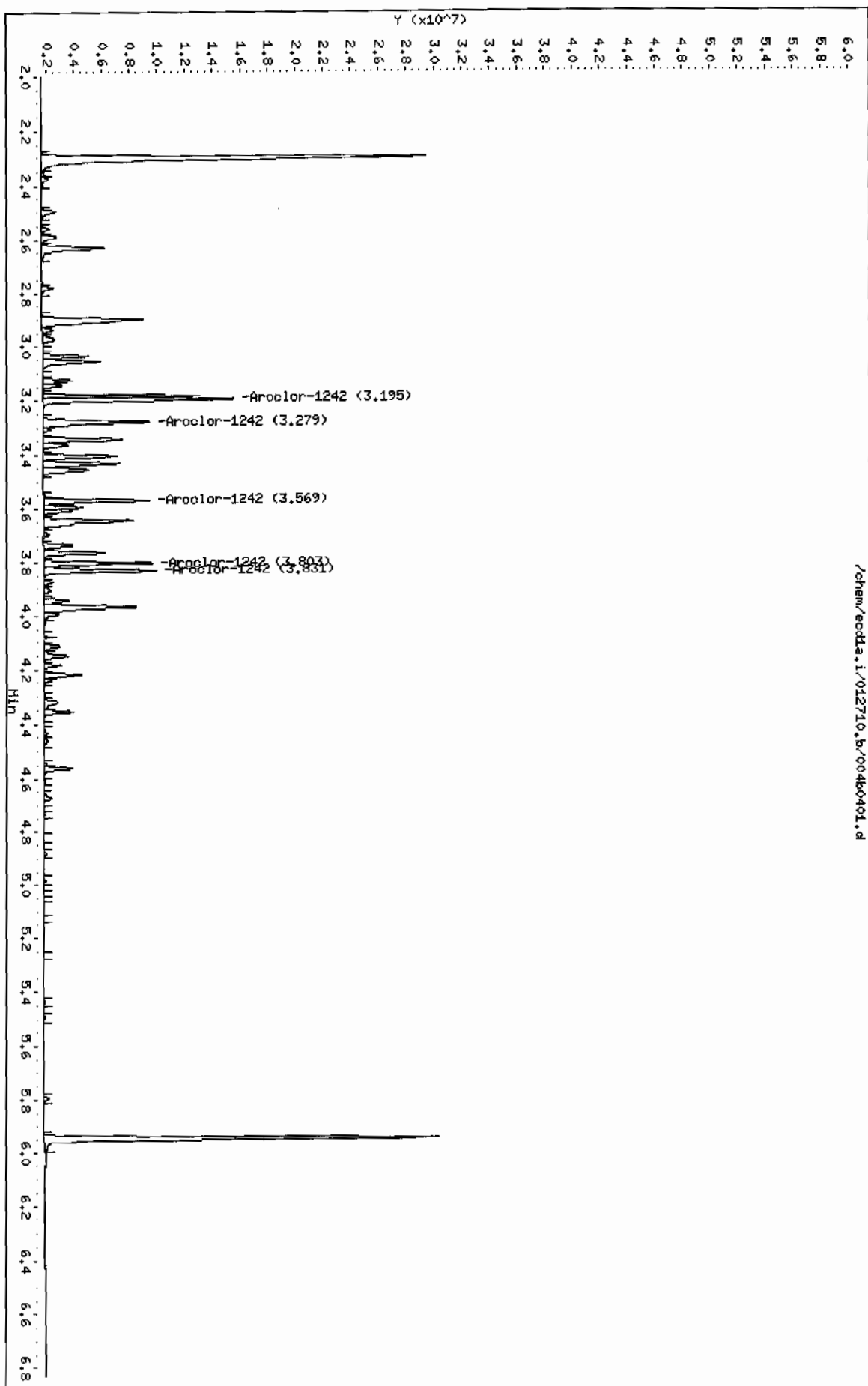
Sample Info: 146R031217-42

Column Phase: CLP2

Instrument: ecdda.i

Operator: YSL

Column diameter: 0.25





Data File: /chem/ecdla.i/012710.b/005f0501.d  
Report Date: 28-Jan-2010 11:09

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012710.b/005f0501.d  
Lab Smp Id: WAR091217-48 Client Smp ID: AR124801  
Inj Date : 27-JAN-2010 07:09  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |WAR091217-48  
Misc Info :  
Comment :  
Method : /chem/ecdla.i/012710.b/ECD1-F-8082-121409.m  
Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 5 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1248.sub  
Target Version: 3.50 Sample Matrix: None

| AMOUNTS                   |        |        |                  |                   |                |        |
|---------------------------|--------|--------|------------------|-------------------|----------------|--------|
|                           |        |        | CAL-AMT          | ON-COL            |                |        |
| RT                        | EXP RT | DLT RT | RESPONSE ( ug/L) | ( ug/L)           | TARGET RANGE   | RATIO  |
| ==                        | =====  | =====  | =====            | =====             | =====          | =====  |
| 5 Aroclor-1248            |        |        |                  | CAS #: 12672-29-6 |                |        |
| 3.091                     | 3.091  | 0.000  | 8131395 1000.00  | 1040              | 80.00- 120.00  | 100.00 |
| 3.242                     | 3.242  | 0.000  | 7103907 1000.00  | 1030              | 67.36- 107.36  | 87.36  |
| 3.293                     | 3.293  | 0.000  | 14022707 1000.00 | 1050              | 152.45- 192.45 | 172.45 |
| 3.426                     | 3.426  | 0.000  | 11106664 1000.00 | 1010              | 116.59- 156.59 | 136.59 |
| 3.658                     | 3.658  | 0.000  | 7099803 1000.00  | 952               | 67.31- 107.31  | 87.31  |
| Average of Peak Amounts = |        |        | 1.02e+03         |                   |                |        |

Data File: /chem/ecdda.i/012710.b/005f0501.d

Date: 27-JAN-2010 07:09

Client ID: BR124801

Sample Info: 1MRO91217-48

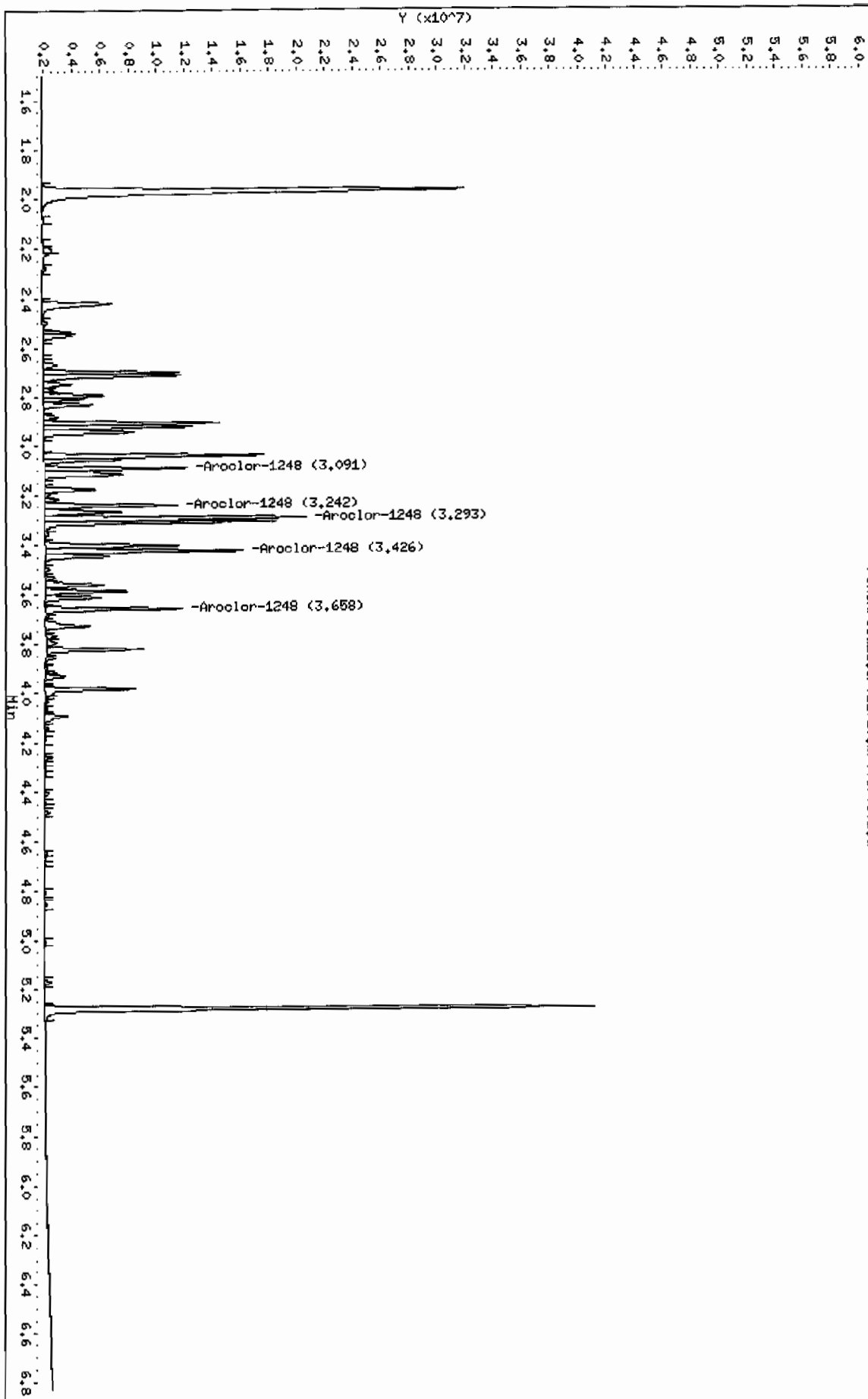
Column phase: CLP1

Instrument: ecdda.i

Operator: YSL

Column diameter: 0.25

/chem/ecdda.i/012710.b/005f0501.d



Data File: /chem/ecdl1a.i/012710.b/005b0501.d  
Report Date: 28-Jan-2010 11:09

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/005b0501.d  
Lab Smp Id: WAR091217-48 Client Smp ID: AR124801  
Inj Date : 27-JAN-2010 07:09  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |WAR091217-48  
Misc Info :  
Comment :  
Method : /chem/ecdl1a.i/012710.b/ECD1-B-8082-121409.m  
Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
Als bottle: 5 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1248.sub  
Target Version: 3.50 Sample Matrix: None

AMOUNTS

| RT | EXP RT | DLT RT | CAL-AMT<br>RESPONSE ( ug/L) | ON-COL<br>( ug/L) | TARGET RANGE | RATIO |
|----|--------|--------|-----------------------------|-------------------|--------------|-------|
|----|--------|--------|-----------------------------|-------------------|--------------|-------|

5 Aroclor-1248

CAS #: 12672-29-6

|       |       |       |                  |                    |        |
|-------|-------|-------|------------------|--------------------|--------|
| 3.404 | 3.404 | 0.000 | 7159053 1000.00  | 889 80.00- 120.00  | 100.00 |
| 3.570 | 3.570 | 0.000 | 8957102 1000.00  | 907 105.12- 145.12 | 125.12 |
| 3.803 | 3.803 | 0.000 | 10274340 1000.00 | 916 123.52- 163.52 | 143.52 |
| 3.832 | 3.832 | 0.000 | 11521178 1000.00 | 923 140.93- 180.93 | 160.93 |
| 3.968 | 3.968 | 0.000 | 11027978 1000.00 | 911 134.04- 174.04 | 154.04 |

Average of Peak Amounts =

909

Data File: /chem/ecdda.i/012710.b/005b0501.d

Date: 27-JUN-2010 07:09

Client ID: AR124801

Sample Info: 146R091217-48

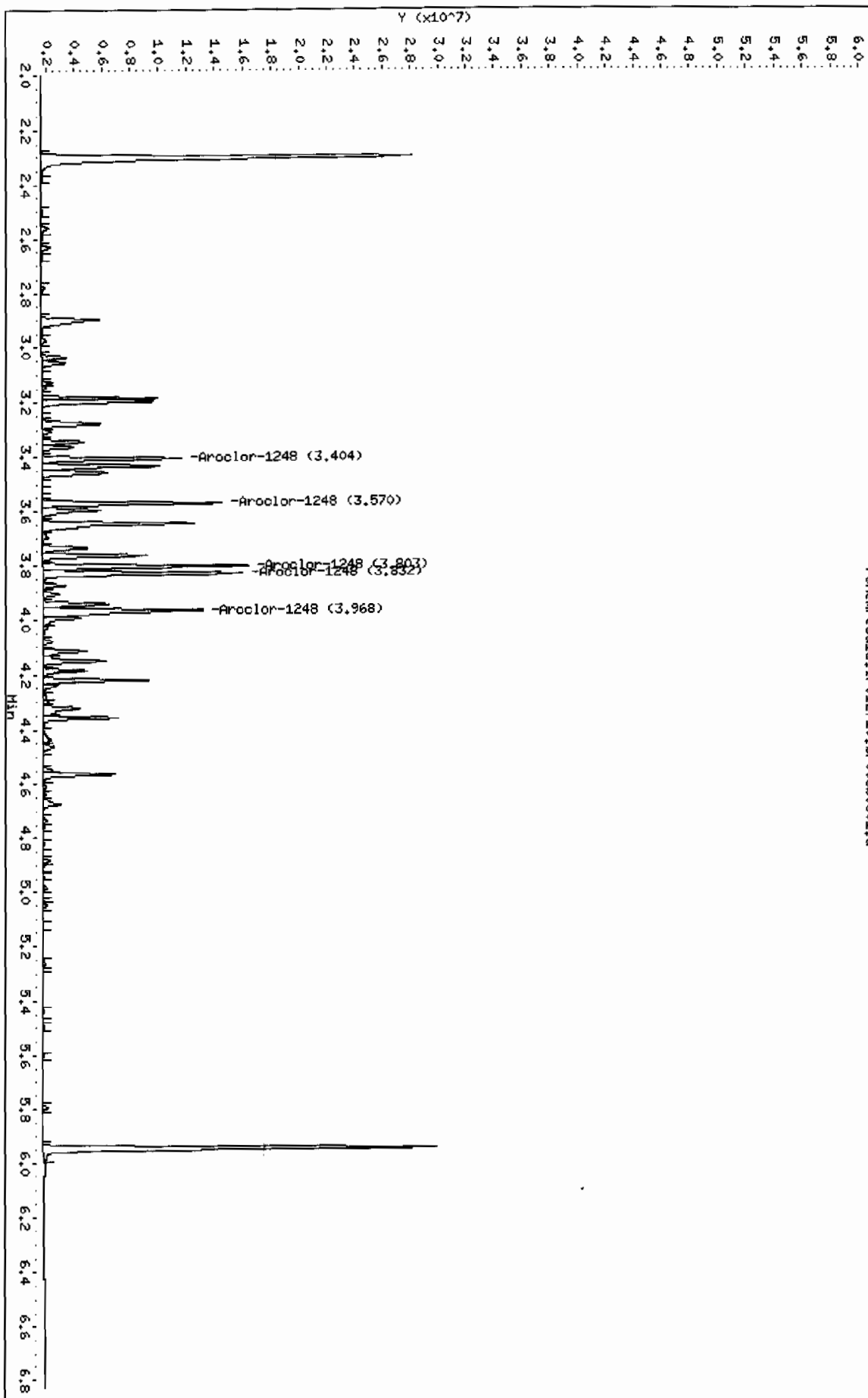
Column phase: CLP2

Instrument: ecdda.i

Operator: YSI

Column diameter: 0.25

/chem/ecdda.i/012710.b/005b0501.d



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/006f0601.d  
 Lab Smp Id: WAR100104-32 Client Smp ID: AR123201  
 Inj Date : 27-JAN-2010 07:20  
 Operator : YSl Inst ID: ecd1a.i  
 Smp Info : |WAR100104-32  
 Misc Info :  
 Comment :  
 Method : /chem/ecdl1a.i/012710.b/ECD1-F-8082-121409.m  
 Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
 Als bottle: 6 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: AR1232.sub  
 Target Version: 3.50 Sample Matrix: None

AMOUNTS

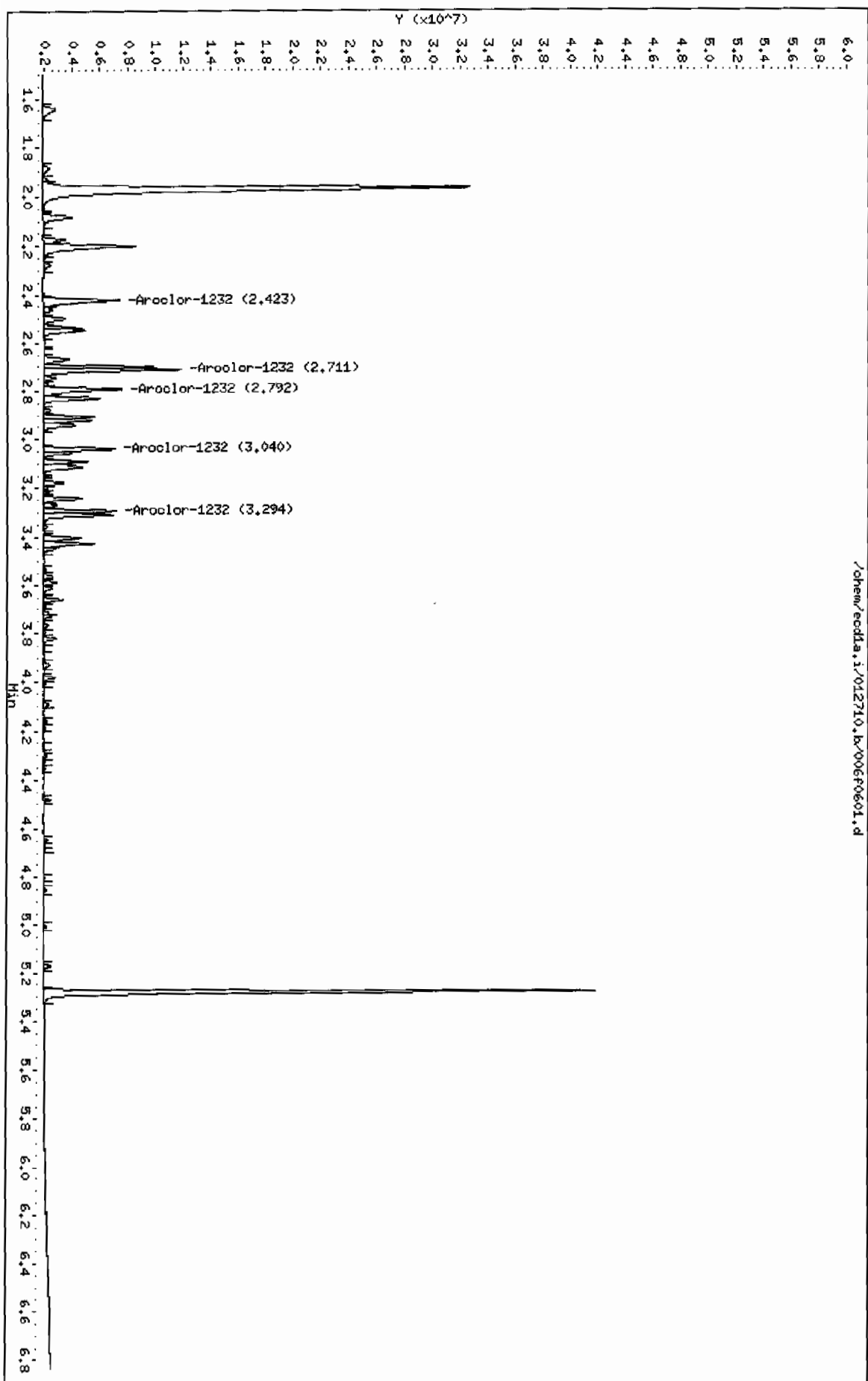
| RT                        | EXP RT | DLT RT | CAL-AMT<br>RESPONSE ( ug/L) | ON-COL<br>( ug/L) | TARGET RANGE   | RATIO  |
|---------------------------|--------|--------|-----------------------------|-------------------|----------------|--------|
| 3 Aroclor-1232            |        |        |                             | CAS #: 11141-16-5 |                |        |
| 2.423                     | 2.423  | 0.000  | 6635278 1000.00             | 969               | 80.00- 120.00  | 100.00 |
| 2.711                     | 2.711  | 0.000  | 8653894 1000.00             | 1030              | 110.42- 150.42 | 130.42 |
| 2.792                     | 2.792  | 0.000  | 5646580 1000.00             | 1000              | 65.10- 105.10  | 85.10  |
| 3.040                     | 3.040  | 0.000  | 4217924 1000.00             | 1060              | 43.57- 83.57   | 63.57  |
| 3.294                     | 3.294  | 0.000  | 3888682 1000.00             | 1010              | 38.61- 78.61   | 58.61  |
| Average of Peak Amounts = |        |        | 1.01e+03                    |                   |                |        |

Data File: /chem/ecda.i/012710.b/006f0601.d  
Date : 27-JAN-2010 07:20  
Client ID: AR123201  
Sample Info: IMP100104-32

Page 1

Column phase: CLP1

Instrument: ecda.i  
Operator: YS1  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/006b0601.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 27-JAN-2010 07:20

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-32

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012710.b/ECD1-B-8082-121409.m

Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 6

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1232.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

CAL-AMT ON-COL

| RT | EXP RT | DLT RT | RESPONSE ( ug/L) | ( ug/L) | TARGET RANGE | RATIO |
|----|--------|--------|------------------|---------|--------------|-------|
|----|--------|--------|------------------|---------|--------------|-------|

3 Aroclor-1232

CAS #: 11141-16-5

|       |       |       |         |         |                   |        |
|-------|-------|-------|---------|---------|-------------------|--------|
| 2.898 | 2.898 | 0.000 | 5367921 | 1000.00 | 911 80.00- 120.00 | 100.00 |
| 3.196 | 3.196 | 0.000 | 5876629 | 1000.00 | 944 89.48- 129.48 | 109.48 |
| 3.279 | 3.279 | 0.000 | 4095318 | 1000.00 | 943 56.29- 96.29  | 76.29  |
| 3.570 | 3.570 | 0.000 | 3046069 | 1000.00 | 979 36.75- 76.75  | 56.75  |
| 3.803 | 3.803 | 0.000 | 3033413 | 1000.00 | 950 36.51- 76.51  | 56.51  |

Average of Peak Amounts =

945

Data File: /chem/ecdda.i/012710.b/0060601.d

Date: 27-JAN-2010 07:20

Client ID: AR423201

Sample Info: 144R100104-32

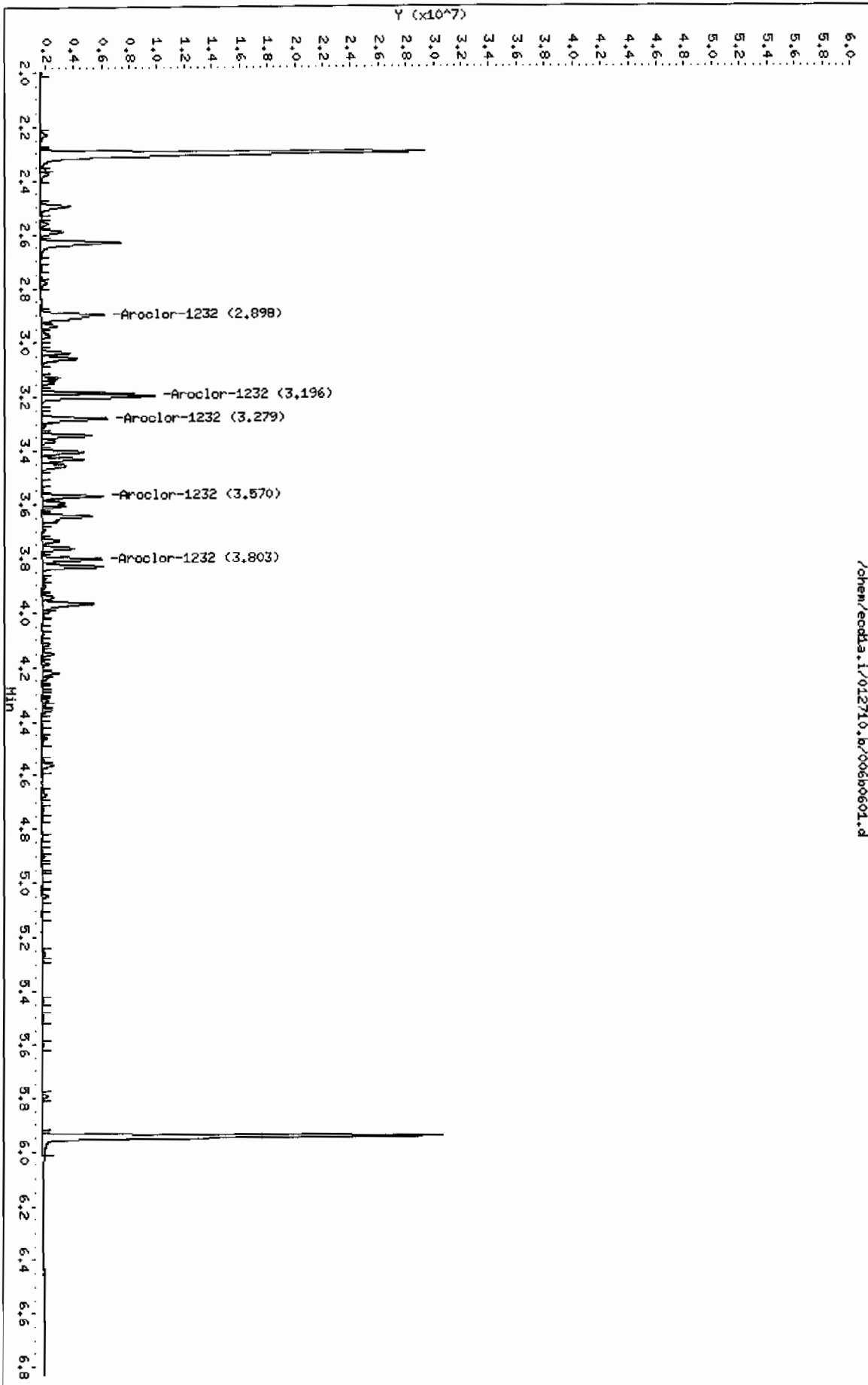
Column phase: CLP2

Instrument: ecdda.i

Operator: YSL

Column diameter: 0.25

Page 1





Data File: /chem/ecdla.i/012710.b/007f0701.d  
Report Date: 28-Jan-2010 11:10

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012710.b/007f0701.d  
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101  
Inj Date : 27-JAN-2010 07:30  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |WAR100104-21  
Misc Info :  
Comment :  
Method : /chem/ecdla.i/012710.b/ECD1-F-8082-121409.m  
Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 7 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1221.sub  
Target Version: 3.50 Sample Matrix: None

AMOUNTS

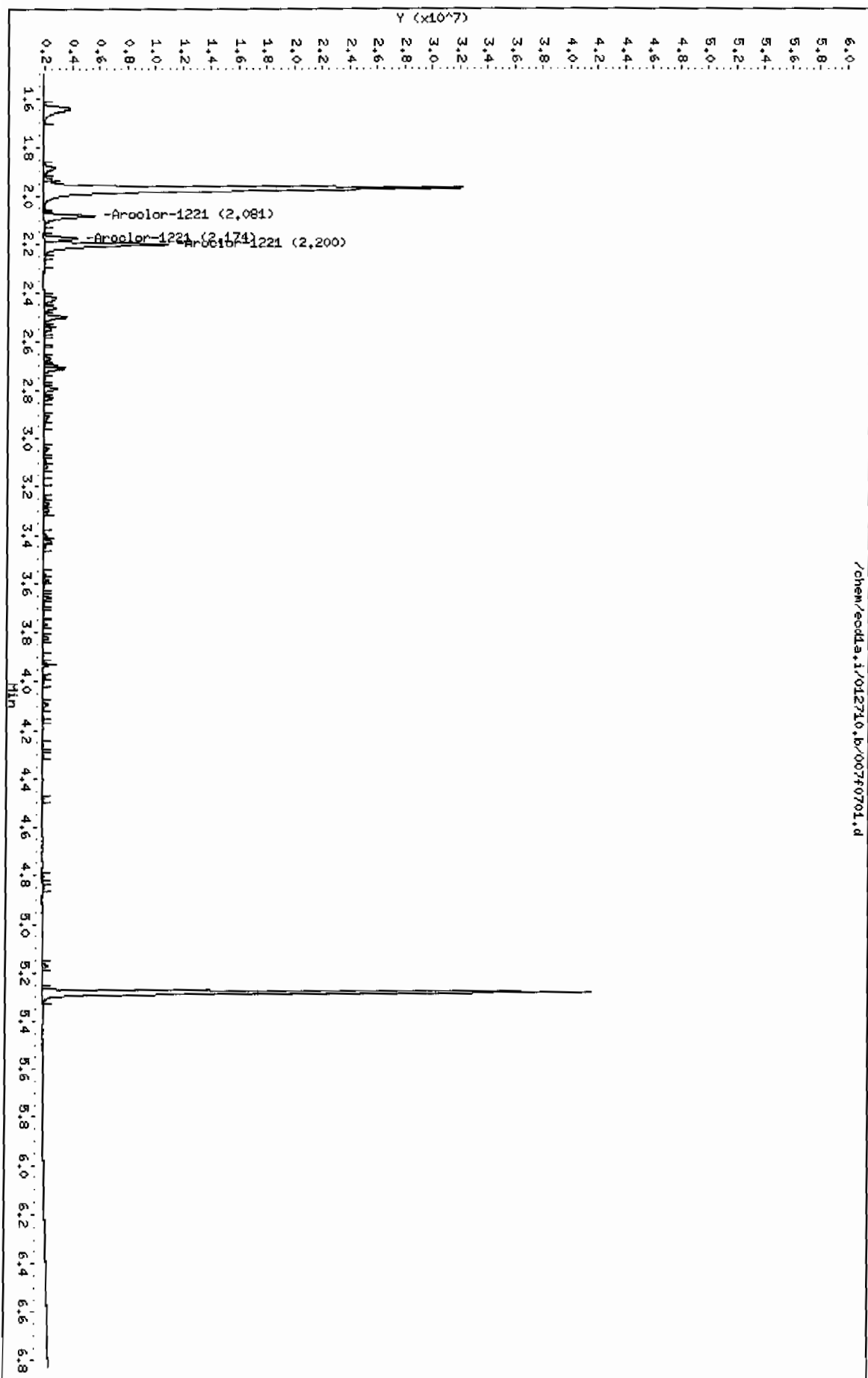
| RT                        | EXP RT | DLT RT | CAL-AMT<br>RESPONSE ( ug/L) | ON-COL<br>( ug/L) | TARGET RANGE | RATIO  |
|---------------------------|--------|--------|-----------------------------|-------------------|--------------|--------|
| 2 Aroclor-1221            |        |        | CAS #: 11104-28-2           |                   |              |        |
| 2.081                     | 2.081  | 0.000  | 4220283 1000.00             | 981 80.00-        | 120.00       | 100.00 |
| 2.174                     | 2.174  | 0.000  | 2323622 1000.00             | 952 35.06-        | 75.06        | 55.06  |
| 2.200                     | 2.200  | 0.000  | 10119206 1000.00            | 985 219.78-       | 259.78       | 239.78 |
| Average of Peak Amounts = |        |        |                             | 973               |              |        |

Data File: /chem/ecdd.a.i/012710.b/00740701.d  
Date: 27-JAN-2010 07:30  
Client ID: AR122101  
Sample Info: 1MAR100104-21

Column Phase: CLP1

Instrument: ecdd.a.i  
Operator: YSL  
Column diameter: 0.25

Page 1



Data File: /chem/ecdla.i/012710.b/007b0701.d  
Report Date: 28-Jan-2010 11:10

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012710.b/007b0701.d

Lab Smp Id: WAR100104-21

Client Smp ID: AR122101

Inj Date : 27-JAN-2010 07:30

Operator : YS1

Inst ID: ecdla.i

Smp Info : |WAR100104-21

Misc Info :

Comment :

Method : /chem/ecdla.i/012710.b/ECD1-B-8082-121409.m

Meth Date : 28-Jan-2010 10:52 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 7

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1221.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

| RT                        | EXP RT | DLT RT | CAL-AMT<br>RESPONSE ( ug/L) | ON-COL<br>( ug/L) | TARGET RANGE   | RATIO  |
|---------------------------|--------|--------|-----------------------------|-------------------|----------------|--------|
| 2.497                     | 2.497  | 0.000  | 3218709 1000.00             | 884               | 80.00- 120.00  | 100.00 |
| 2.591                     | 2.591  | 0.000  | 2087410 1000.00             | 896               | 44.85- 84.85   | 64.85  |
| 2.632                     | 2.632  | 0.000  | 7171188 1000.00             | 883               | 202.80- 242.80 | 222.80 |
| Average of Peak Amounts = |        |        |                             | 888               |                |        |

Data File: /chem/ecdda.i/012710.k/00760701.d

Date: 27-JAN-2010 07:30

Client ID: 6R122101

Sample Info: 16R100104-21

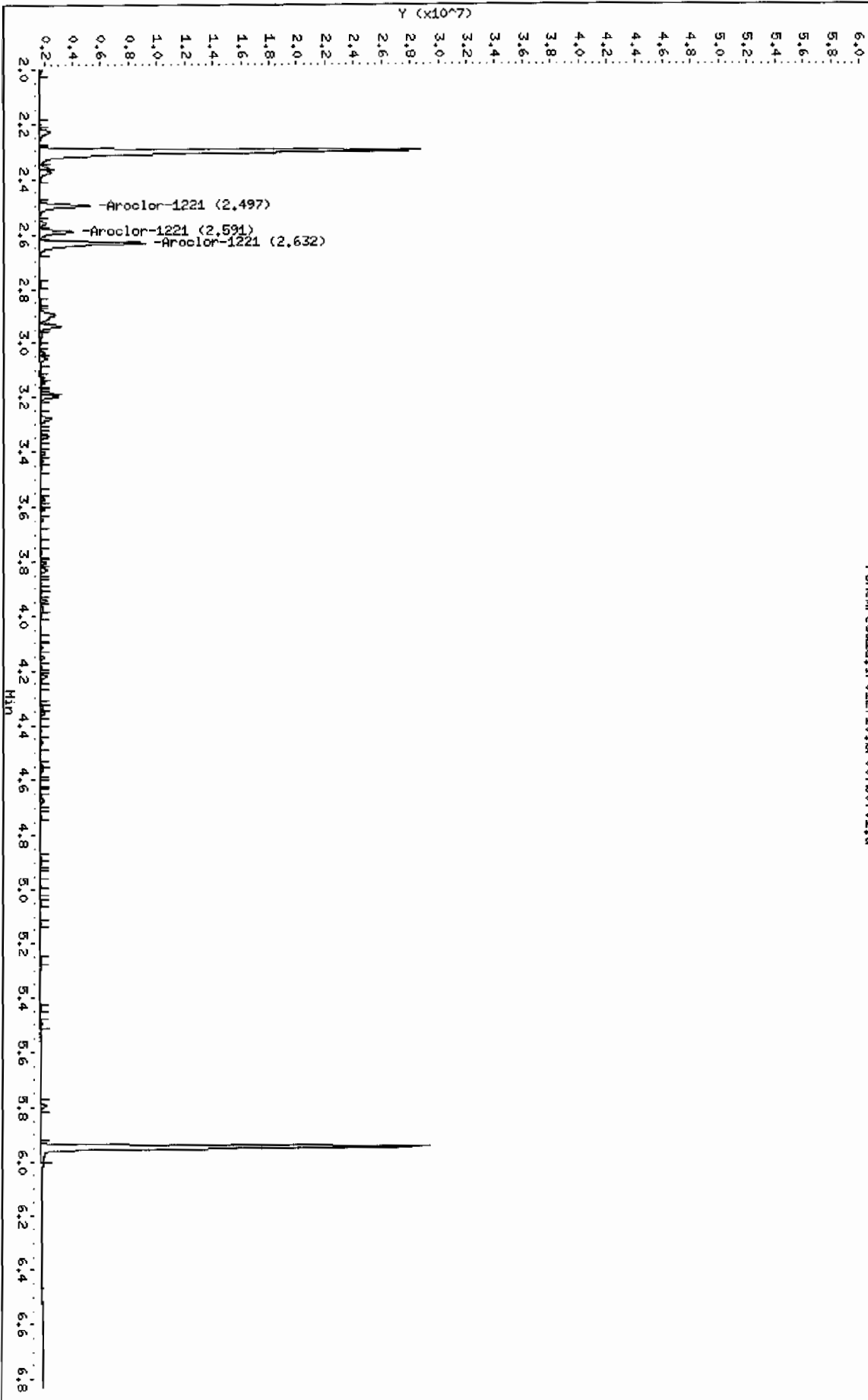
Column phase: CLP2

Instrument: ecdda.i

Operator: YSL

Column diameter: 0.25

/chem/ecdda.i/012710.k/00760701.d



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/032f3201.d

Lab Smp Id: WAR100104-60 03

Client Smp ID: AR166003

Inj Date : 27-JAN-2010 12:19

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 03

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012710.b/ECD1-F-8082-121409.m

Meth Date : 27-Jan-2010 14:19 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 32

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpclp1

AMOUNTS

|                           |        |        | CAL-AMT  |         | ON-COL            |                |        |  |
|---------------------------|--------|--------|----------|---------|-------------------|----------------|--------|--|
| RT                        | EXP RT | DLT RT | RESPONSE | ( ug/L) | ( ug/L)           | TARGET RANGE   | RATIO  |  |
| ---                       | -----  | -----  | -----    | -----   | -----             | -----          | -----  |  |
| \$ 11 4cmx                |        |        |          |         | CAS #: 877-09-8   |                |        |  |
| 1.966                     | 1.967  | -0.001 | 40024828 | 100.000 | 102               | 80.00- 120.00  | 100.00 |  |
| -----                     |        |        |          |         |                   |                |        |  |
| \$ 12 Decachlorobiphenyl  |        |        |          |         | CAS #: 2051-24-3  |                |        |  |
| 5.276                     | 5.279  | -0.003 | 31723932 | 100.000 | 96.2              | 80.00- 120.00  | 100.00 |  |
| -----                     |        |        |          |         |                   |                |        |  |
| 1 Aroclor-1016            |        |        |          |         | CAS #: 12674-11-2 |                |        |  |
| 2.421                     | 2.423  | -0.002 | 13577456 | 1000.00 | 940               | 80.00- 120.00  | 100.00 |  |
| 2.710                     | 2.710  | 0.000  | 17423956 | 1000.00 | 957               | 108.33- 148.33 | 128.33 |  |
| 2.790                     | 2.791  | -0.001 | 11289690 | 1000.00 | 942               | 63.15- 103.15  | 83.15  |  |
| 2.828                     | 2.829  | -0.001 | 6778474  | 1000.00 | 944               | 29.92- 69.92   | 49.92  |  |
| 3.038                     | 3.039  | -0.001 | 8727797  | 1000.00 | 942               | 44.28- 84.28   | 64.28  |  |
| Average of Peak Amounts = |        |        |          |         | 945               |                |        |  |
| -----                     |        |        |          |         |                   |                |        |  |
| 7 Aroclor-1260            |        |        |          |         | CAS #: 11096-82-5 |                |        |  |
| 3.764                     | 3.765  | -0.001 | 17375942 | 1000.00 | 981               | 80.00- 120.00  | 100.00 |  |
| 3.926                     | 3.928  | -0.002 | 26471010 | 1000.00 | 983               | 132.34- 172.34 | 152.34 |  |
| 4.156                     | 4.158  | -0.002 | 15743525 | 1000.00 | 973               | 70.61- 110.61  | 90.61  |  |
| 4.299                     | 4.300  | -0.001 | 16500621 | 1000.00 | 976               | 74.96- 114.96  | 94.96  |  |
| 4.478                     | 4.480  | -0.002 | 37661267 | 1000.00 | 1000              | 196.74- 236.74 | 216.74 |  |
| Average of Peak Amounts = |        |        |          |         | 982               |                |        |  |

Data File: /chem/ecdda.i/012710.b/032f3201.d

Date: 27-JAN-2010 12:19

Client ID: AR166003

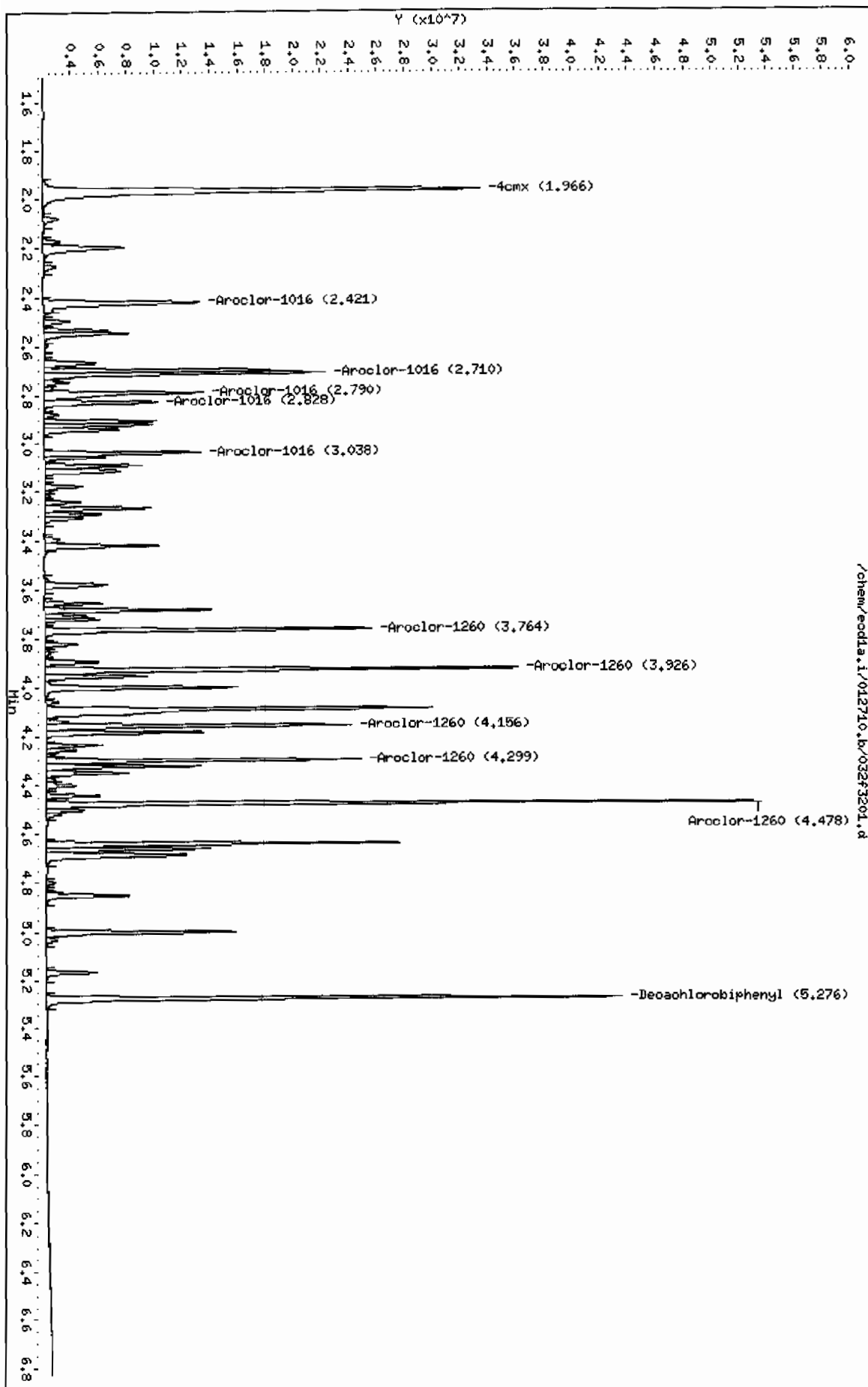
Sample Info: IMR100104-60 03

Column phase: CLP1

Instrument: ecdda.i

Operator: YSL

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012710.b/032b3201.d

Lab Smp Id: WAR100104-60 03

Client Smp ID: AR166003

Inj Date : 27-JAN-2010 12:19

Operator : YS1

Inst ID: ecdla.i

Smp Info : |WAR100104-60 03

Misc Info :

Comment :

Method : /chem/ecdla.i/012710.b/ECD1-B-8082-121409.m

Meth Date : 27-Jan-2010 14:18 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:12

Cal File: 014b1401.d

Als bottle: 32

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

|                           |        |        |                  | CAL-AMT |                   | ON-COL       |        |            |       |
|---------------------------|--------|--------|------------------|---------|-------------------|--------------|--------|------------|-------|
| RT                        | EXP RT | DLT RT | RESPONSE ( ug/L) |         | ( ug/L)           | TARGET RANGE |        | RATIO      |       |
| ==                        | =====  | =====  | =====            | =====   | =====             | =====        | =====  | =====      | ===== |
| <hr/>                     |        |        |                  |         |                   |              |        |            |       |
| \$ 11 4cmx                |        |        |                  |         | CAS #: 877-09-8   |              |        |            |       |
| 2.298                     | 2.299  | -0.001 | 27966003         | 100.000 | 96.4              | 80.00-       | 120.00 | 100.00     |       |
| <hr/>                     |        |        |                  |         |                   |              |        |            |       |
| \$ 12 Decachlorobiphenyl  |        |        |                  |         | CAS #: 2051-24-3  |              |        |            |       |
| 5.944                     | 5.945  | -0.001 | 22134769         | 100.000 | 90.7              | 80.00-       | 120.00 | 100.00     |       |
| <hr/>                     |        |        |                  |         |                   |              |        |            |       |
| 1 Aroclor-1016            |        |        |                  |         | CAS #: 12674-11-2 |              |        |            |       |
| 3.195                     | 3.195  | 0.000  | 11724689         | 1000.00 | 924               | 80.00-       | 120.00 | 100.00 (M) |       |
| 3.278                     | 3.279  | -0.001 | 7830339          | 1000.00 | 890               | 46.79-       | 86.79  | 66.79      |       |
| 3.341                     | 3.342  | -0.001 | 4863804          | 1000.00 | 888               | 21.48-       | 61.48  | 41.48      |       |
| 3.568                     | 3.569  | -0.001 | 6166973          | 1000.00 | 881               | 32.60-       | 72.60  | 52.60      |       |
| 3.644                     | 3.644  | 0.000  | 5742668          | 1000.00 | 875               | 28.98-       | 68.98  | 48.98      |       |
| Average of Peak Amounts = |        |        |                  |         | 892               |              |        |            |       |
| <hr/>                     |        |        |                  |         |                   |              |        |            |       |
| 7 Aroclor-1260            |        |        |                  |         | CAS #: 11096-82-5 |              |        |            |       |
| 4.334                     | 4.335  | -0.001 | 12161017         | 1000.00 | 916               | 80.00-       | 120.00 | 100.00     |       |
| 4.459                     | 4.459  | 0.000  | 14980969         | 1000.00 | 927               | 103.19-      | 143.19 | 123.19     |       |
| 4.724                     | 4.725  | -0.001 | 11415201         | 1000.00 | 913               | 73.87-       | 113.87 | 93.87      |       |
| 4.898                     | 4.899  | -0.001 | 11845521         | 1000.00 | 916               | 77.41-       | 117.41 | 97.41      |       |
| 5.045                     | 5.046  | -0.001 | 26537228         | 1000.00 | 933               | 198.22-      | 238.22 | 218.22     |       |
| Average of Peak Amounts = |        |        |                  |         | 921               |              |        |            |       |

QC Flag Legend

M - Compound response manually integrated.



Data File: /chem/ecdda.i/012710.b/032b3201.d

Date : 27-JUN-2010 12:19

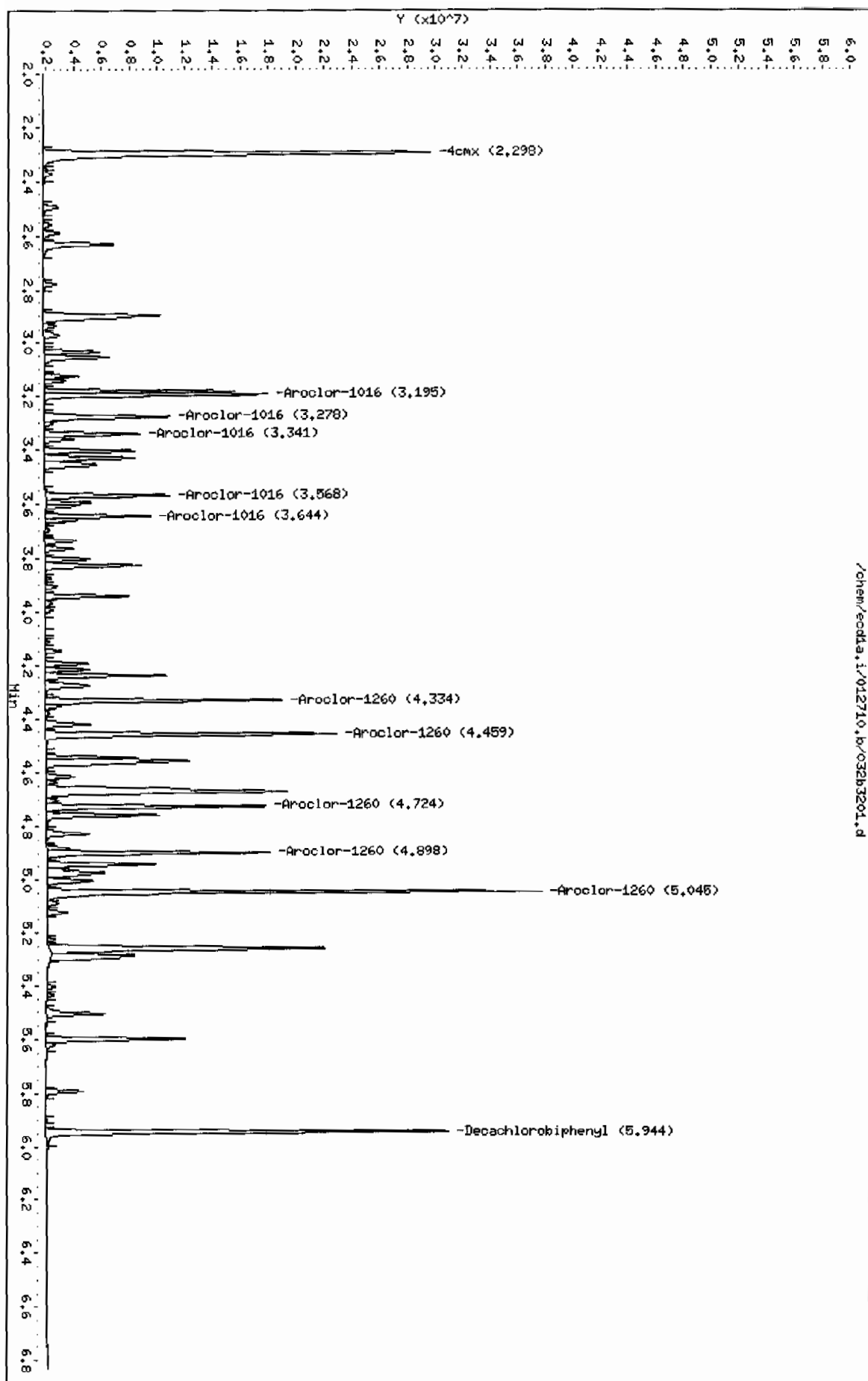
Client ID: AR166003

Sample Info: 1WPR100104-60 03

Page 1

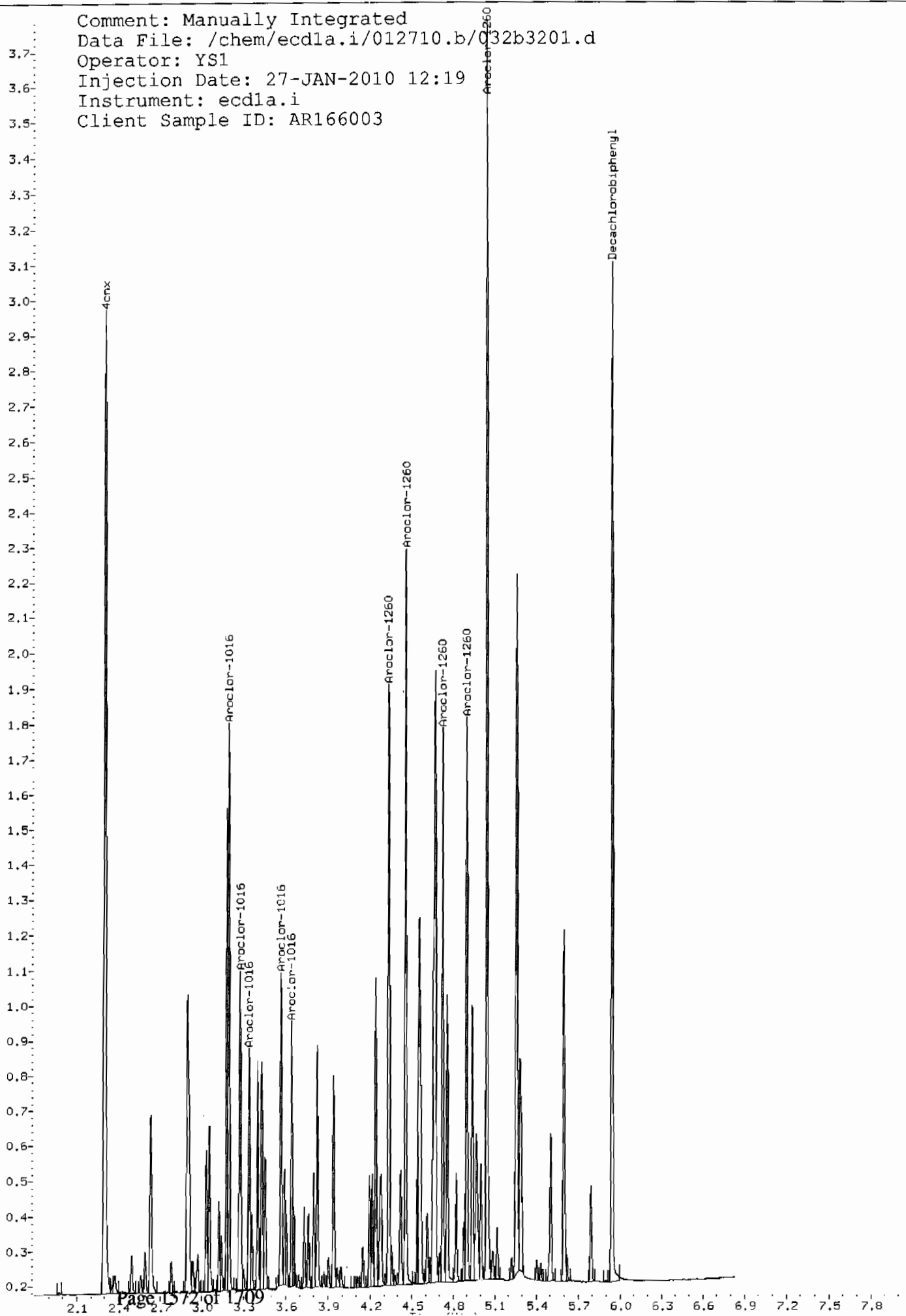
Column phase: CLP2

Instrument: ecdda.i  
Operator: YSL  
Column diameter: 0.25

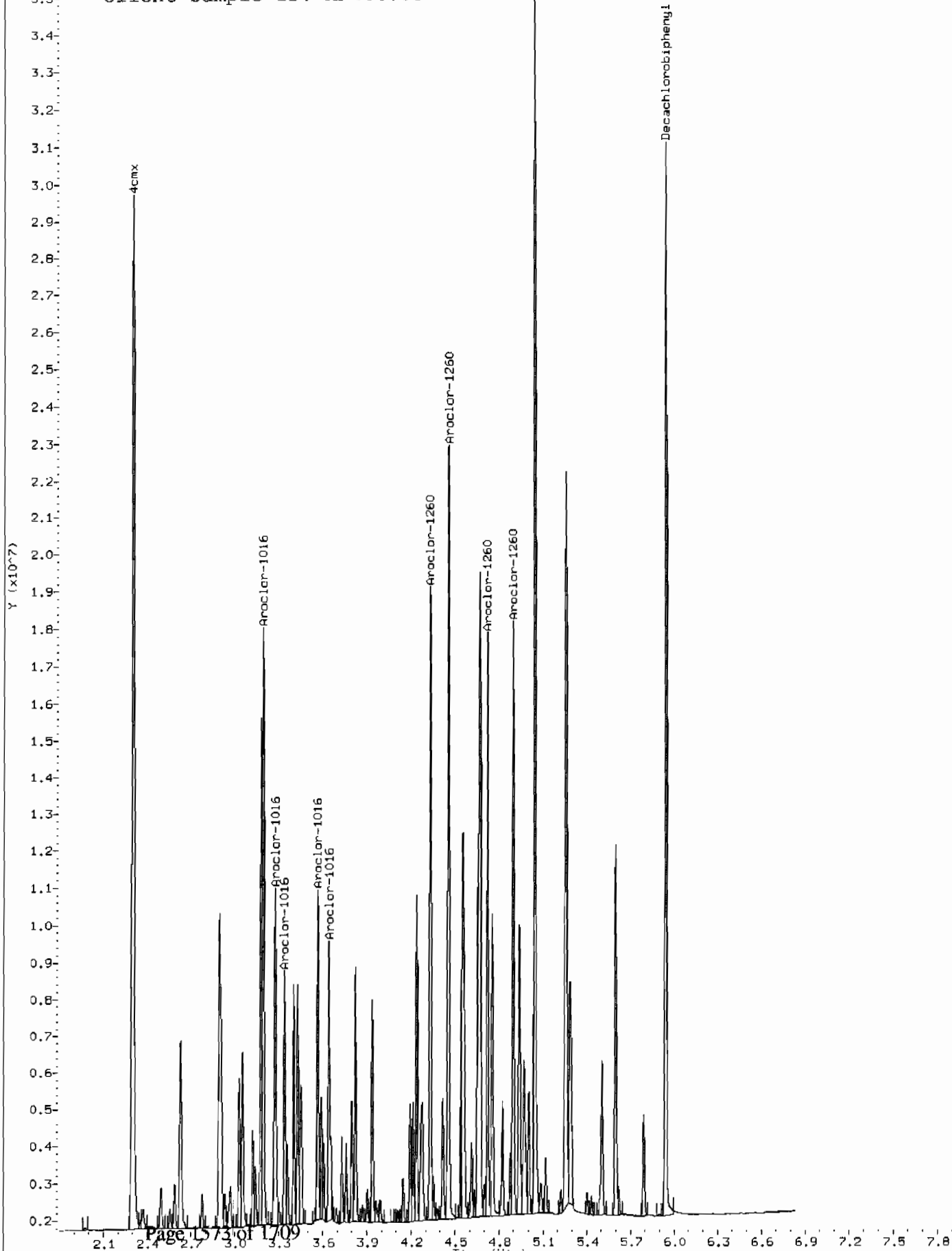


Comment: Manually Integrated  
Data File: /chem/ecdl1.i/012710.b/032b3201.d  
Operator: YS1  
Injection Date: 27-JAN-2010 12:19  
Instrument: ecd1a.i  
Client Sample ID: AR166003

Y (x10<sup>-7</sup>)



Comment: Before manual integration  
Data File: /chem/ecdl1.i/012710.b/Orig-032b3201.d  
Operator: YS1  
Injection Date: 27-JAN-2010 12:19  
Instrument: ecd1a.i  
Client Sample ID: AR166003



Data File: /chem/ecdl1a.i/012710.b/044f4401.d  
Report Date: 28-Jan-2010 08:45

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/044f4401.d  
Lab Smp Id: WAR100104-60 04 Client Smp ID: AR166004  
Inj Date : 27-JAN-2010 14:42  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |WAR100104-60 04  
Misc Info :  
Comment :  
Method : /chem/ecdl1a.i/012710.b/ECD1-F-8082-121409.m  
Meth Date : 28-Jan-2010 08:45 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 44 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1660.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpclpl

AMOUNTS

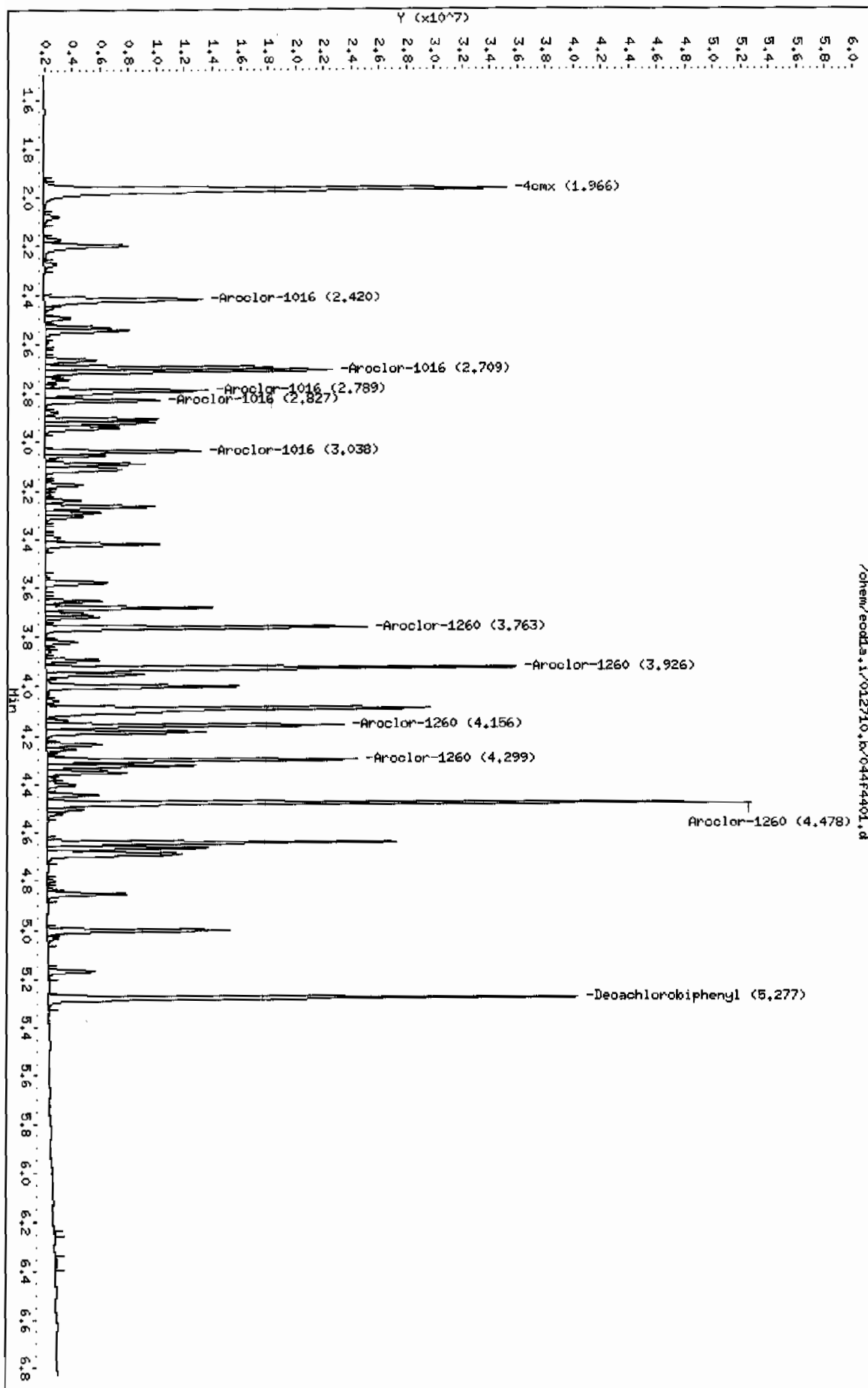
| RT                        | EXP RT | DLT RT | CAL-AMT<br>RESPONSE ( ug/L) | ON-COL<br>( ug/L) | TARGET RANGE   | RATIO  |
|---------------------------|--------|--------|-----------------------------|-------------------|----------------|--------|
| <hr/>                     |        |        |                             |                   |                |        |
| \$ 11 4cmx                |        |        |                             | CAS #: 877-09-8   |                |        |
| 1.966                     | 1.967  | -0.001 | 39598578 100.000            | 101               | 80.00- 120.00  | 100.00 |
| <hr/>                     |        |        |                             |                   |                |        |
| \$ 12 Decachlorobiphenyl  |        |        |                             | CAS #: 2051-24-3  |                |        |
| 5.277                     | 5.279  | -0.002 | 29993929 100.000            | 90.9              | 80.00- 120.00  | 100.00 |
| <hr/>                     |        |        |                             |                   |                |        |
| 1 Aroclor-1016            |        |        |                             | CAS #: 12674-11-2 |                |        |
| 2.420                     | 2.423  | -0.003 | 13134245 1000.00            | 909               | 80.00- 120.00  | 100.00 |
| 2.709                     | 2.710  | -0.001 | 17203526 1000.00            | 945               | 110.98- 150.98 | 130.98 |
| 2.789                     | 2.791  | -0.002 | 11178907 1000.00            | 933               | 65.11- 105.11  | 85.11  |
| 2.827                     | 2.829  | -0.002 | 6787876 1000.00             | 946               | 31.68- 71.68   | 51.68  |
| 3.038                     | 3.039  | -0.001 | 8697748 1000.00             | 939               | 46.22- 86.22   | 66.22  |
| Average of Peak Amounts = |        |        |                             | 934               |                |        |
| <hr/>                     |        |        |                             |                   |                |        |
| 7 Aroclor-1260            |        |        |                             | CAS #: 11096-82-5 |                |        |
| 3.763                     | 3.765  | -0.002 | 17186939 1000.00            | 970               | 80.00- 120.00  | 100.00 |
| 3.926                     | 3.928  | -0.002 | 26162709 1000.00            | 972               | 132.22- 172.22 | 152.22 |
| 4.156                     | 4.158  | -0.002 | 15516005 1000.00            | 958               | 70.28- 110.28  | 90.28  |
| 4.299                     | 4.300  | -0.001 | 16254802 1000.00            | 961               | 74.58- 114.58  | 94.58  |
| 4.478                     | 4.480  | -0.002 | 36996472 1000.00            | 982               | 195.26- 235.26 | 215.26 |
| Average of Peak Amounts = |        |        |                             | 969               |                |        |

Data File: /chem/ecdda.i/012710.b/0444401.d  
Date: 27-JAN-2010 14:42  
Client ID: AR166004  
Sample Info: HMR100104-60 04

Column Phase: CLP1

Instrument: ecdda.i  
Operator: YSL  
Column diameter: 0.25

Page 1



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/044b4401.d

Lab Smp Id: WAR100104-60 04

Client Smp ID: AR166004

Inj Date : 27-JAN-2010 14:42

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 04

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012710.b/ECD1-B-8082-121409.m

Meth Date : 28-Jan-2010 09:41 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:12

Cal File: 014b1401.d

Als bottle: 44

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

|                           |        |        | CAL-AMT          |         | ON-COL            |                |            |  |
|---------------------------|--------|--------|------------------|---------|-------------------|----------------|------------|--|
| RT                        | EXP RT | DLT RT | RESPONSE ( ug/L) |         | ( ug/L)           | TARGET RANGE   | RATIO      |  |
| <hr/>                     |        |        |                  |         |                   |                |            |  |
| \$ 11 4cmx                |        |        |                  |         | CAS #: 877-09-8   |                |            |  |
| 2.298                     | 2.299  | -0.001 | 28044774         | 100.000 | 96.6              | 80.00- 120.00  | 100.00     |  |
| <hr/>                     |        |        |                  |         |                   |                |            |  |
| \$ 12 Decachlorobiphenyl  |        |        |                  |         | CAS #: 2051-24-3  |                |            |  |
| 5.943                     | 5.945  | -0.002 | 21016956         | 100.000 | 86.1              | 80.00- 120.00  | 100.00     |  |
| <hr/>                     |        |        |                  |         |                   |                |            |  |
| 1 Aroclor-1016            |        |        |                  |         | CAS #: 12674-11-2 |                |            |  |
| 3.194                     | 3.195  | -0.001 | 11792540         | 1000.00 | 930               | 80.00- 120.00  | 100.00 (M) |  |
| 3.277                     | 3.279  | -0.002 | 7865146          | 1000.00 | 894               | 46.70- 86.70   | 66.70      |  |
| 3.341                     | 3.342  | -0.001 | 4903057          | 1000.00 | 895               | 21.58- 61.58   | 41.58      |  |
| 3.568                     | 3.569  | -0.001 | 6139887          | 1000.00 | 877               | 32.07- 72.07   | 52.07      |  |
| 3.643                     | 3.644  | -0.001 | 5825962          | 1000.00 | 888               | 29.40- 69.40   | 49.40      |  |
| Average of Peak Amounts = |        |        |                  |         | 897               |                |            |  |
| <hr/>                     |        |        |                  |         |                   |                |            |  |
| 7 Aroclor-1260            |        |        |                  |         | CAS #: 11096-82-5 |                |            |  |
| 4.333                     | 4.335  | -0.002 | 12126061         | 1000.00 | 913               | 80.00- 120.00  | 100.00     |  |
| 4.458                     | 4.459  | -0.001 | 14847749         | 1000.00 | 919               | 102.44- 142.44 | 122.44     |  |
| 4.724                     | 4.725  | -0.001 | 11209196         | 1000.00 | 897               | 72.44- 112.44  | 92.44      |  |
| 4.898                     | 4.899  | -0.001 | 11540243         | 1000.00 | 893               | 75.17- 115.17  | 95.17      |  |
| 5.045                     | 5.046  | -0.001 | 26215322         | 1000.00 | 922               | 196.19- 236.19 | 216.19     |  |
| Average of Peak Amounts = |        |        |                  |         | 909               |                |            |  |

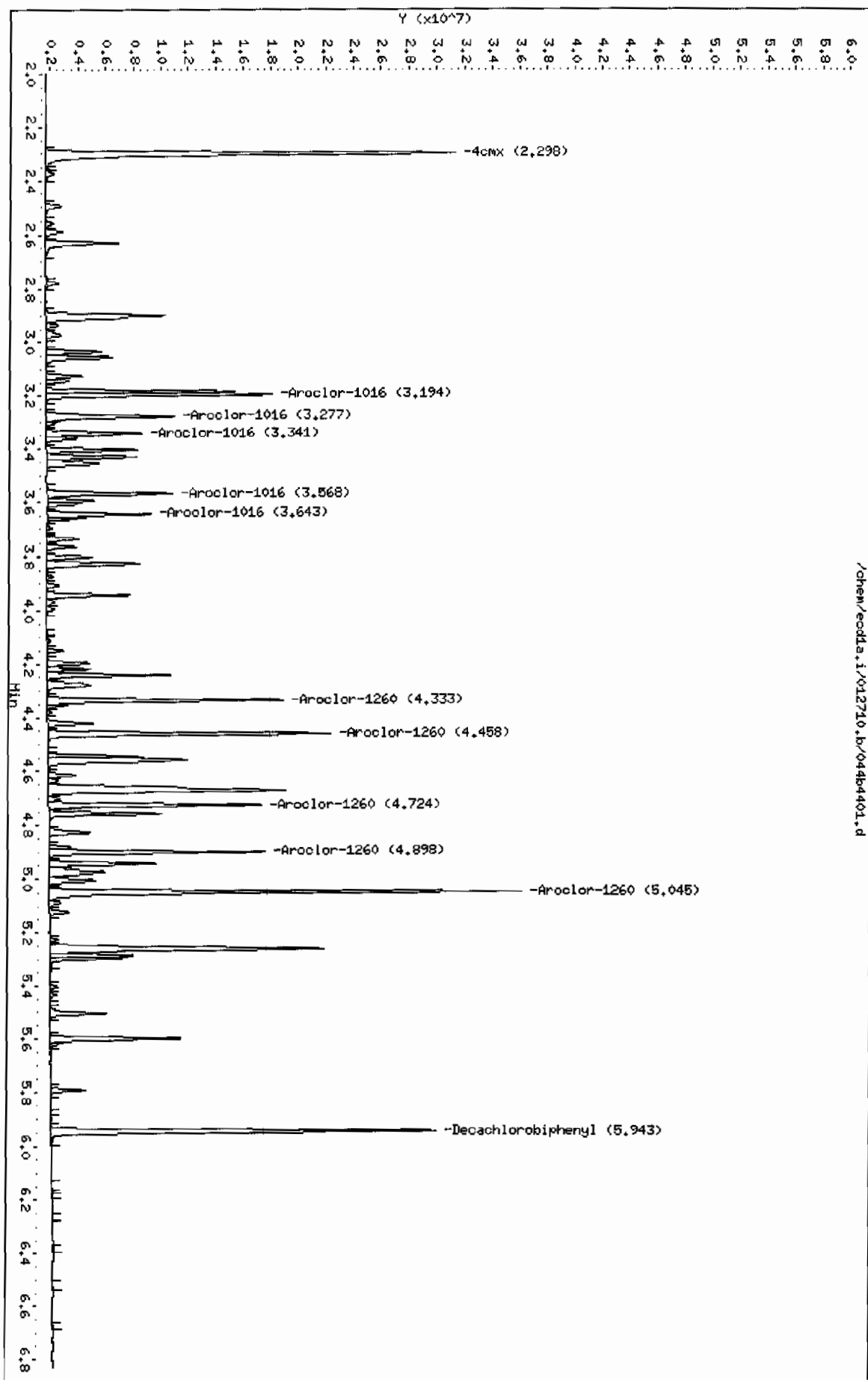
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecda.i/012710.b/044b4401.d  
Date: 27-JAN-2010 14:42  
Client ID: 4R166004  
Sample Info: 14R100104-60 04

Column Phase: CLP2

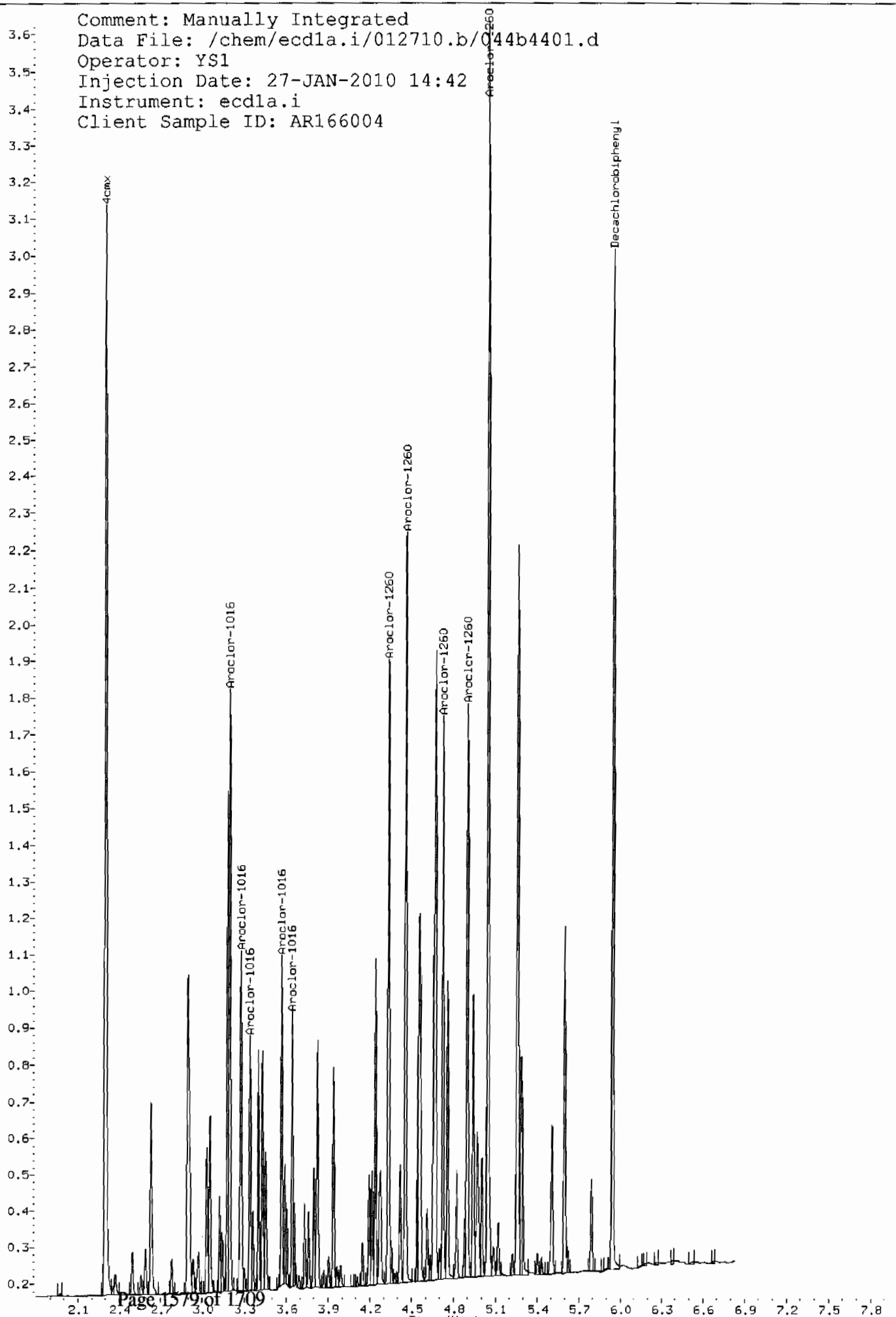
Instrument: ecda.i  
Operator: YS1  
Column diameter: 0.25





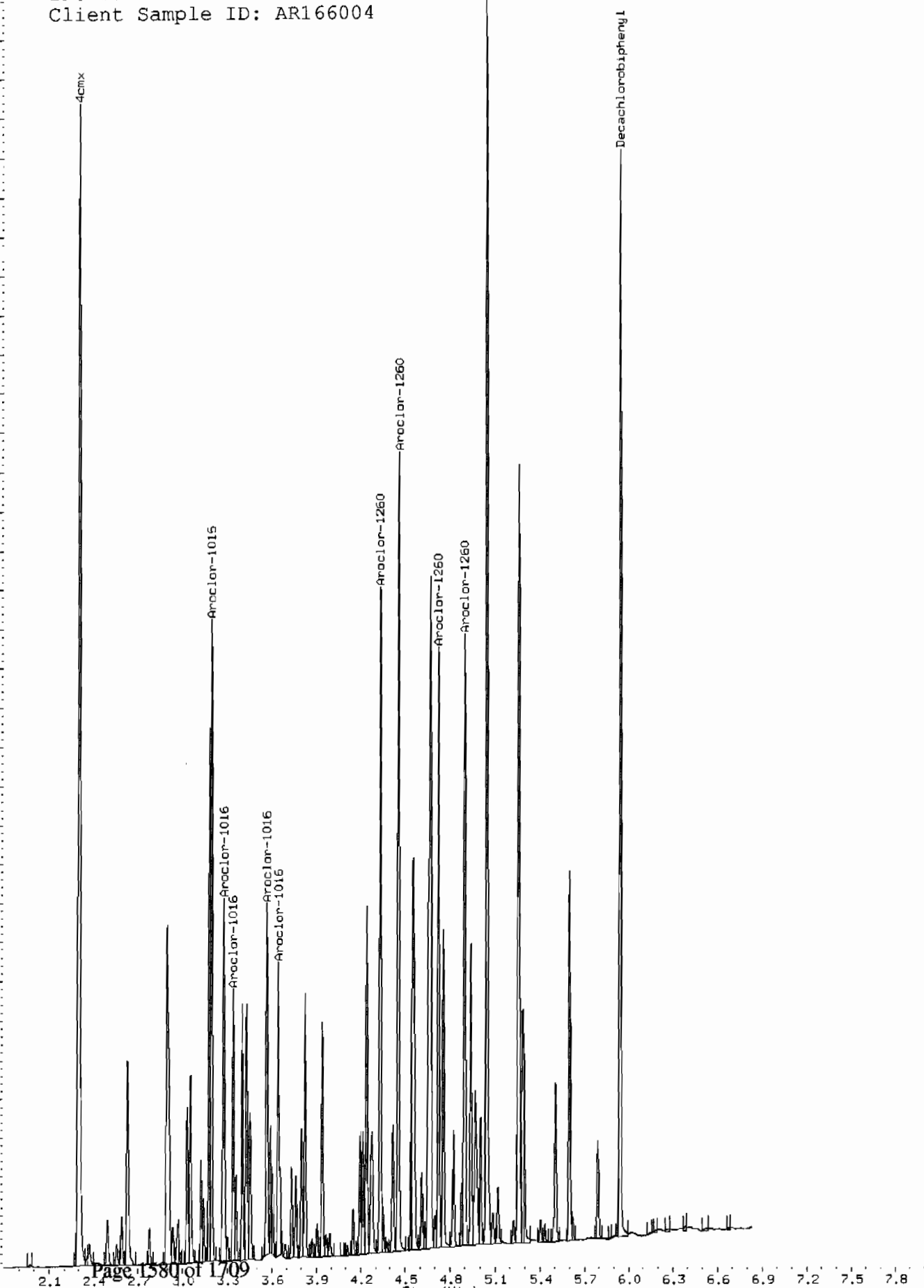
Comment: Manually Integrated  
Data File: /chem/ecdl.i/012710.b/044b4401.d  
Operator: YS1  
Injection Date: 27-JAN-2010 14:42  
Instrument: ecdl.i  
Client Sample ID: AR166004

Y (x10<sup>-7</sup>)



Comment: Before manual integration  
Data File: /chem/ecdl1a.i/012710.b/orig-044b4401.d  
Operator: YSl  
Injection Date: 27-JAN-2010 14:42  
Instrument: ecd1a.i  
Client Sample ID: AR166004

Y (x10<sup>-7</sup>)



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/052f5201.d  
 Lab Smp Id: WAR100104-60 05 Client Smp ID: AR166006  
 Inj Date : 27-JAN-2010 16:18  
 Operator : YSl Inst ID: ecd1a.i  
 Smp Info : |WAR100104-60 05  
 Misc Info : |ECD82P\_1S|944883|SVA|LANL|SOIL|  
 Comment :  
 Method : /chem/ecdl1a.i/012710.b/ECD1-F-8082-121409.m  
 Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
 Als bottle: 52 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: AR1660.sub  
 Target Version: 3.50 Sample Matrix: None  
 Processing Host: kilroy

AMOUNTS

| RT                        | EXP RT | DLT RT | CAL-AMT<br>RESPONSE ( ug/L) | ON-COL<br>( ug/L) | TARGET RANGE   | RATIO  |
|---------------------------|--------|--------|-----------------------------|-------------------|----------------|--------|
| \$ 11 4cmx                |        |        |                             | CAS #: 877-09-8   |                |        |
| 1.966                     | 1.967  | -0.001 | 39946878 100.000            | 102               | 80.00- 120.00  | 100.00 |
| -----                     |        |        |                             |                   |                |        |
| \$ 12 Decachlorobiphenyl  |        |        |                             | CAS #: 2051-24-3  |                |        |
| 5.278                     | 5.279  | -0.001 | 30900864 100.000            | 93.7              | 80.00- 120.00  | 100.00 |
| -----                     |        |        |                             |                   |                |        |
| 1 Aroclor-1016            |        |        |                             | CAS #: 12674-11-2 |                |        |
| 2.421                     | 2.423  | -0.002 | 13184340 1000.00            | 912               | 80.00- 120.00  | 100.00 |
| 2.710                     | 2.710  | 0.000  | 17851368 1000.00            | 981               | 106.82- 146.82 | 135.40 |
| 2.790                     | 2.791  | -0.001 | 11300173 1000.00            | 943               | 65.47- 105.47  | 85.71  |
| 2.828                     | 2.829  | -0.001 | 6816586 1000.00             | 950               | 31.32- 71.32   | 51.70  |
| 3.039                     | 3.039  | 0.000  | 8640188 1000.00             | 933               | 44.60- 84.60   | 65.53  |
| Average of Peak Amounts = |        |        |                             | 944               |                |        |
| -----                     |        |        |                             |                   |                |        |
| 7 Aroclor-1260            |        |        |                             | CAS #: 11096-82-5 |                |        |
| 3.764                     | 3.765  | -0.001 | 17380315 1000.00            | 981               | 80.00- 120.00  | 100.00 |
| 3.927                     | 3.928  | -0.001 | 26468437 1000.00            | 983               | 131.61- 171.61 | 152.29 |
| 4.157                     | 4.158  | -0.001 | 15722160 1000.00            | 971               | 68.06- 108.06  | 90.46  |
| 4.300                     | 4.300  | 0.000  | 16493869 1000.00            | 976               | 71.84- 111.84  | 94.90  |
| 4.479                     | 4.480  | -0.001 | 37612921 1000.00            | 999               | 194.61- 234.61 | 216.41 |
| Average of Peak Amounts = |        |        |                             | 982               |                |        |
| -----                     |        |        |                             |                   |                |        |

Data File: /chem/ecdl1a.i/012710.b/052F5201.d

Date: 27-JAN-2010 16:18

Client ID: APL66006

Sample Info: IMP100104-60 05

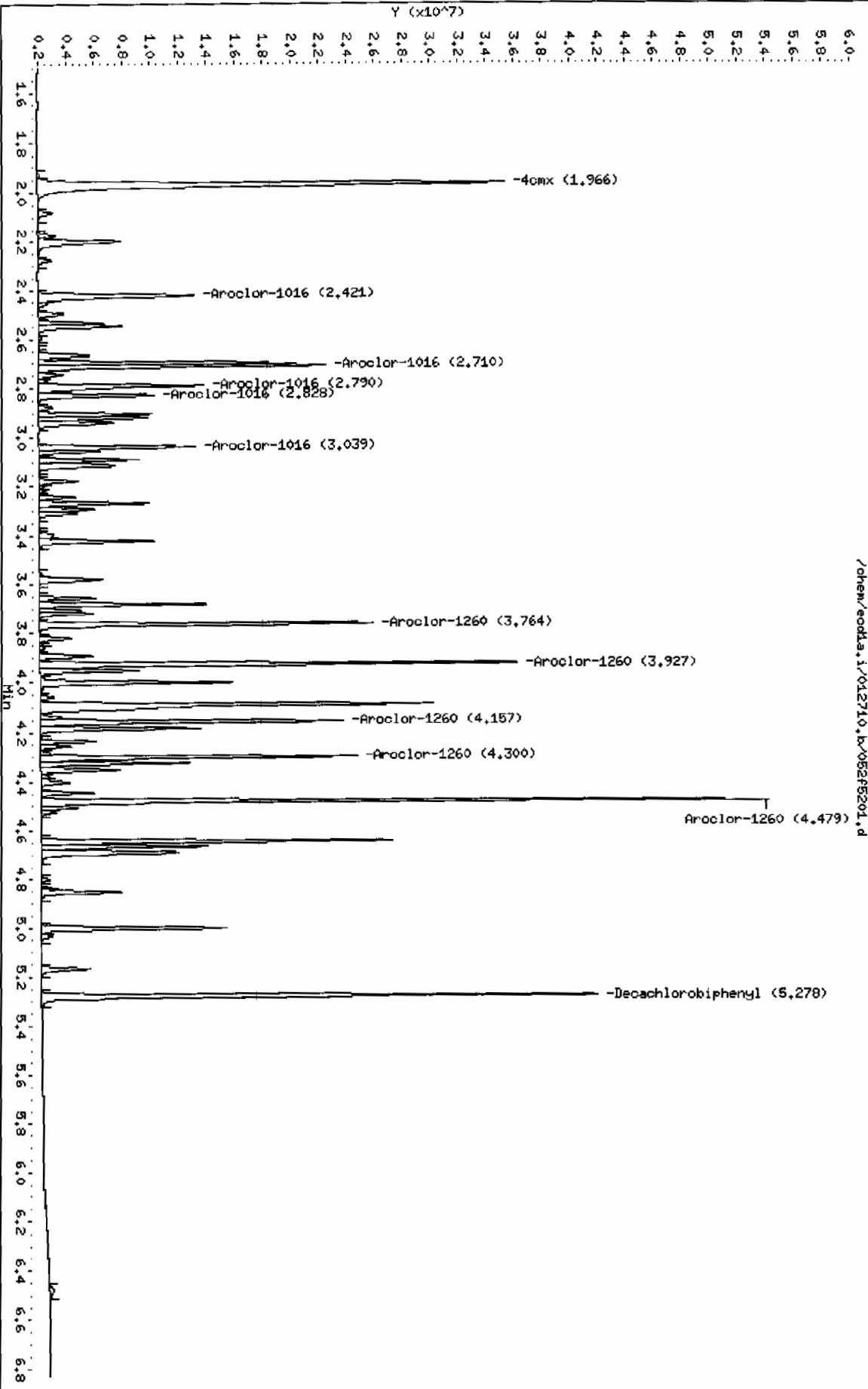
Column Phase: CLP1

Instrument: ecdl1a.i

Operator: YS1

Column diameter: 0.25

Page 1



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/052b5201.d

Lab Smp Id: WAR100104-60 05

Client Smp ID: AR166006

Inj Date : 27-JAN-2010 16:18

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 05

Misc Info : |ECD82P\_1S|944883|SVA|LANL|SOIL|

Comment :

Method : /chem/ecdl1a.i/012710.b/ECD1-B-8082-121409.m

Meth Date : 28-Jan-2010 09:43 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:12

Cal File: 014b1401.d

Als bottle: 52

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

| AMOUNTS                   |        |        |                  |         |                   |         |              |            |       |
|---------------------------|--------|--------|------------------|---------|-------------------|---------|--------------|------------|-------|
|                           |        |        | CAL-AMT          |         | ON-COL            |         |              |            |       |
| RT                        | EXP RT | DLT RT | RESPONSE ( ug/L) |         | ( ug/L)           |         | TARGET RANGE | RATIO      |       |
| ==                        | =====  | =====  | =====            | =====   | =====             | =====   | =====        | =====      | ===== |
| -----                     |        |        |                  |         |                   |         |              |            |       |
| \$ 11 4cmx                |        |        |                  |         | CAS #: 877-09-8   |         |              |            |       |
| 2.298                     | 2.299  | -0.001 | 28584637         | 100.000 | 98.5              | 80.00-  | 120.00       | 100.00     |       |
| -----                     |        |        |                  |         |                   |         |              |            |       |
| \$ 12 Decachlorobiphenyl  |        |        |                  |         | CAS #: 2051-24-3  |         |              |            |       |
| 5.945                     | 5.945  | 0.000  | 21805995         | 100.000 | 89.4              | 80.00-  | 120.00       | 100.00     |       |
| -----                     |        |        |                  |         |                   |         |              |            |       |
| 1 Aroclor-1016            |        |        |                  |         | CAS #: 12674-11-2 |         |              |            |       |
| 3.195                     | 3.195  | 0.000  | 12337813         | 1000.00 | 972               | 80.00-  | 120.00       | 100.00 (M) |       |
| 3.278                     | 3.279  | -0.001 | 8016760          | 1000.00 | 911               | 44.98-  | 84.98        | 64.98      |       |
| 3.341                     | 3.342  | -0.001 | 4976926          | 1000.00 | 908               | 20.34-  | 60.34        | 40.34      |       |
| 3.569                     | 3.569  | 0.000  | 6334988          | 1000.00 | 905               | 31.35-  | 71.35        | 51.35      |       |
| 3.644                     | 3.644  | 0.000  | 5933357          | 1000.00 | 904               | 37.93-  | 77.93        | 57.93      |       |
| Average of Peak Amounts = |        |        |                  |         | 920               |         |              |            |       |
| -----                     |        |        |                  |         |                   |         |              |            |       |
| 7 Aroclor-1260            |        |        |                  |         | CAS #: 11096-82-5 |         |              |            |       |
| 4.335                     | 4.335  | 0.000  | 12448427         | 1000.00 | 938               | 80.00-  | 120.00       | 100.00     |       |
| 4.460                     | 4.459  | 0.001  | 15252907         | 1000.00 | 944               | 102.53- | 142.53       | 122.53     |       |
| 4.725                     | 4.725  | 0.000  | 11582130         | 1000.00 | 927               | 73.04-  | 113.04       | 93.04      |       |
| 4.900                     | 4.899  | 0.001  | 11892265         | 1000.00 | 920               | 75.53-  | 115.53       | 95.53      |       |
| 5.046                     | 5.046  | 0.000  | 26770288         | 1000.00 | 941               | 195.05- | 235.05       | 215.05     |       |
| Average of Peak Amounts = |        |        |                  |         | 934               |         |              |            |       |

QC Flag Legend

M - Compound response manually integrated.

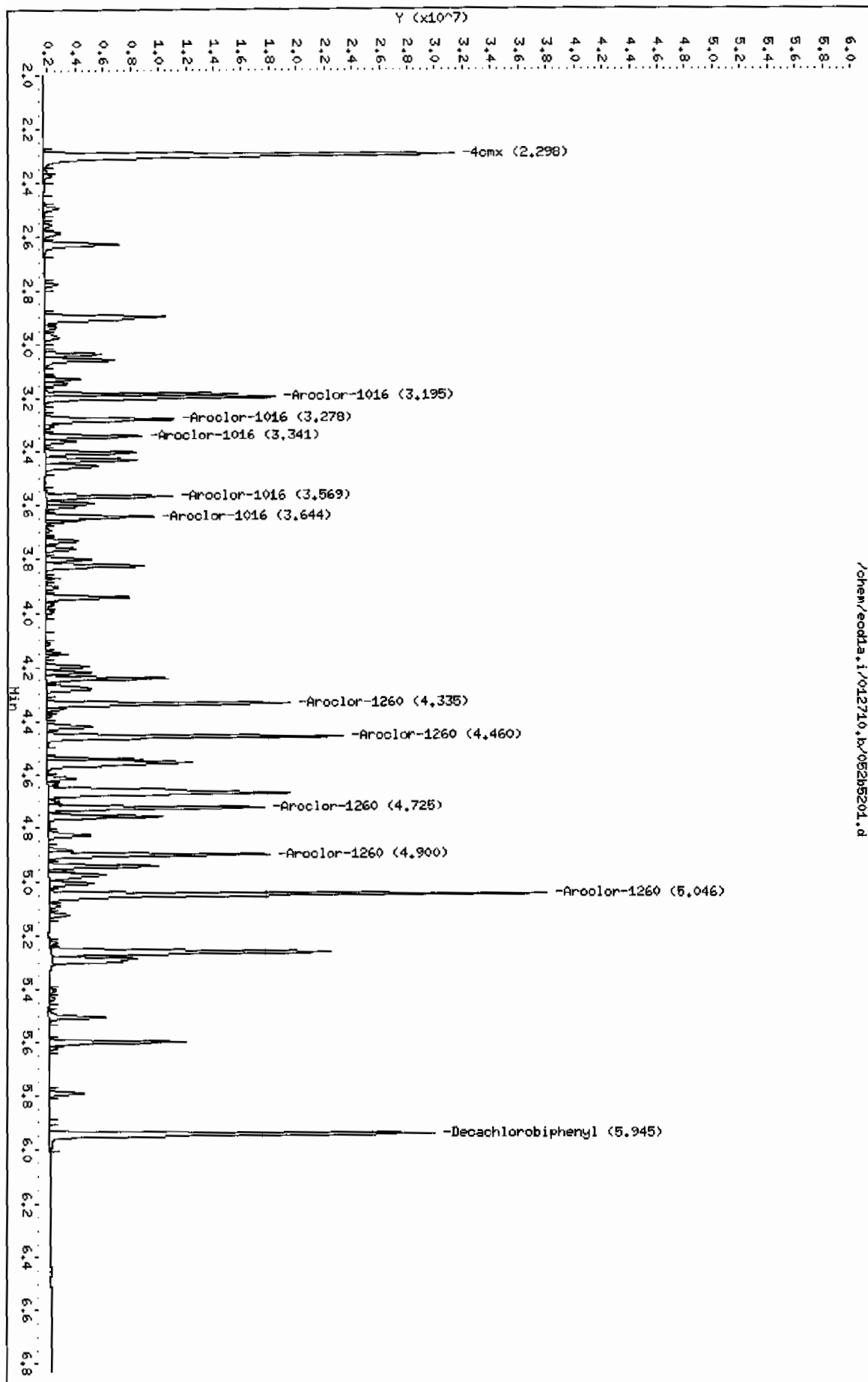
Data File: /chem/eodla.i/012710.b/052b5201.d  
Date: 27-JUN-2010 16:18  
Client ID: AR166006  
Sample Info: 14AR100104-60 05

Instrument: eodla.i

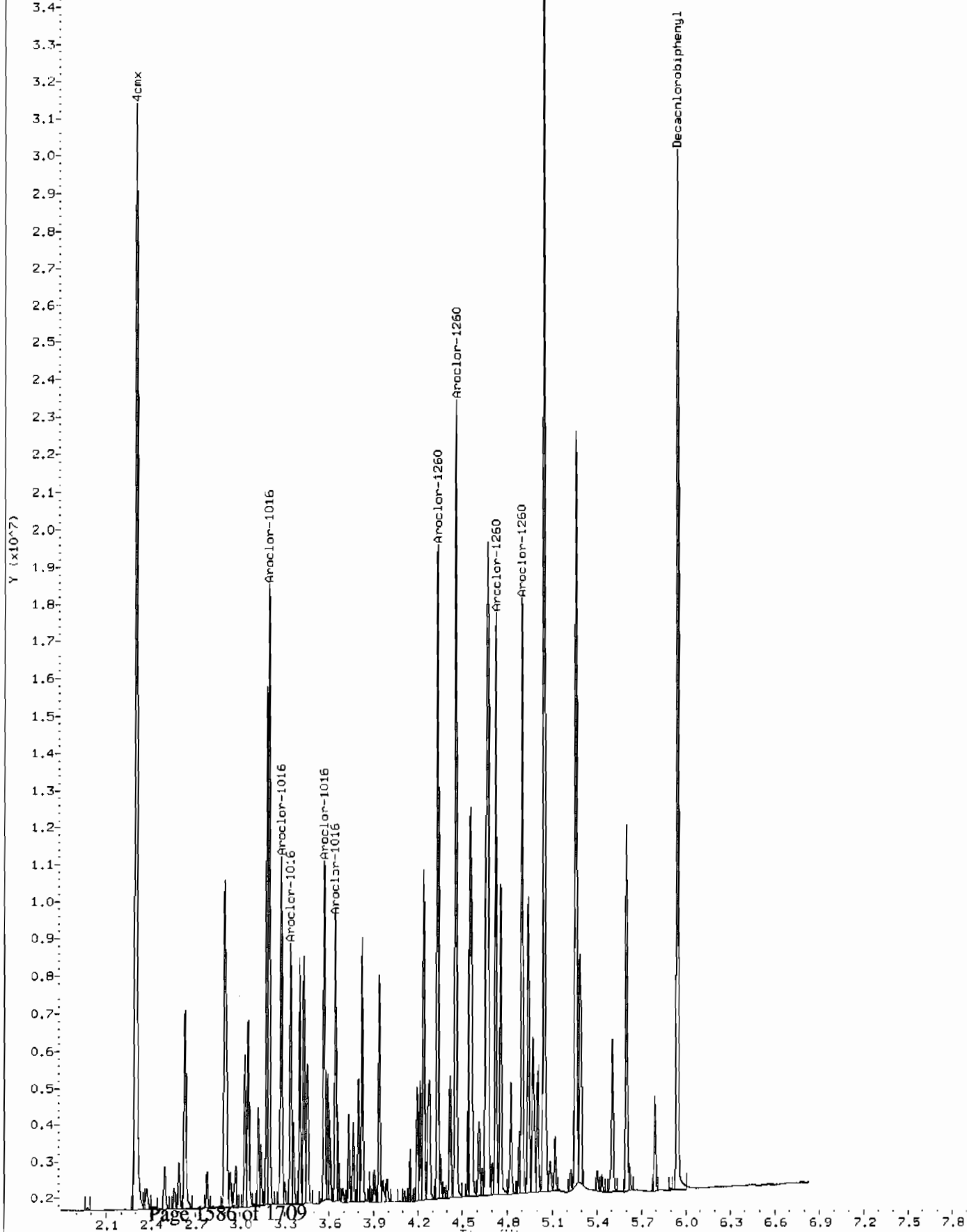
Page 1

Column phase: CLP2

Operator: YSL  
Column diameter: 0.25

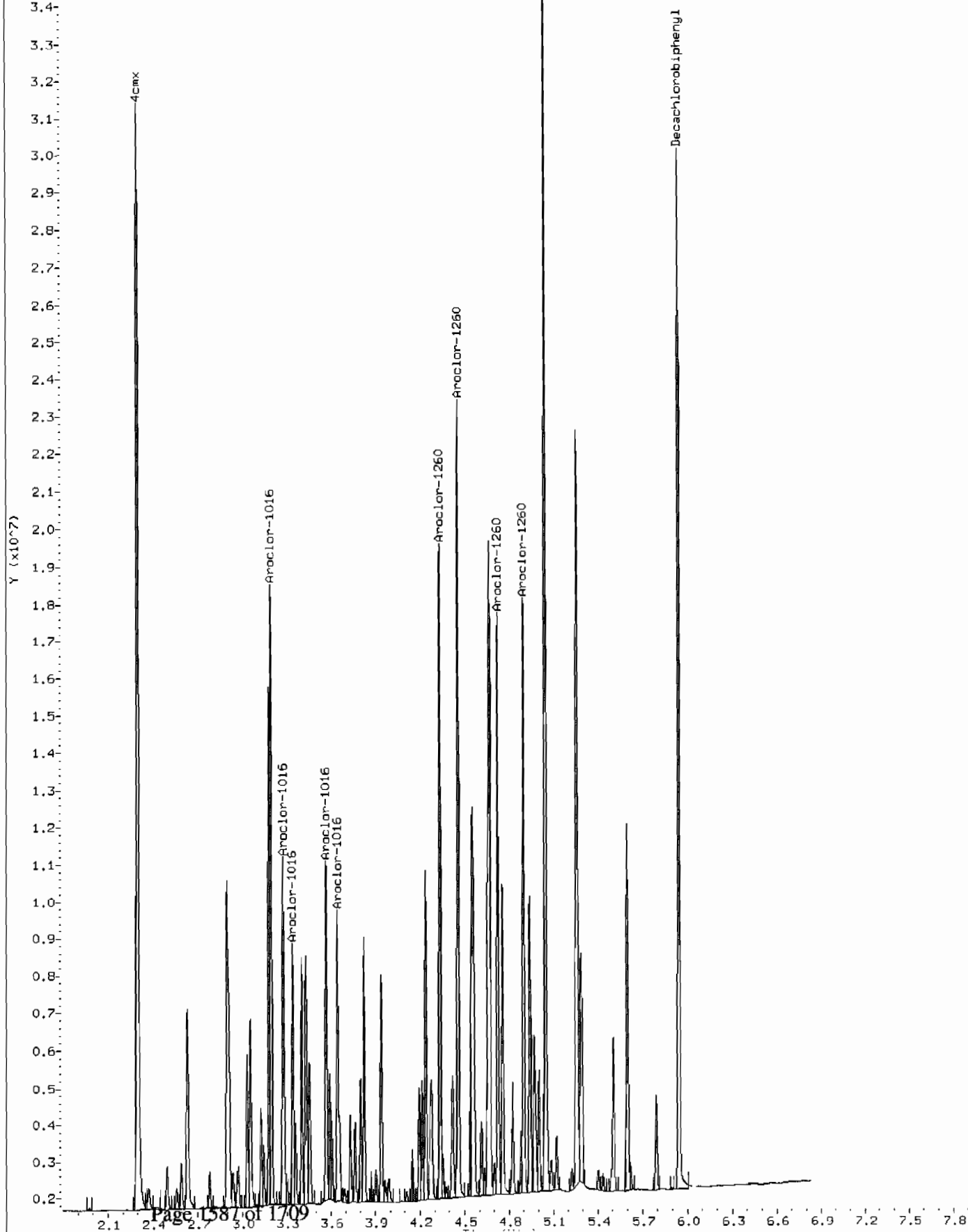


Comment: Manually Integrated  
Data File: /chem/ecdl1a.i/012710.b/052b5201.d  
Operator: YS1  
Injection Date: 27-JAN-2010 16:18  
Instrument: ecd1a.i  
Client Sample ID: AR166006





Comment: Before manual integration  
Data File: /chem/ecdl1.i/012710.b/orig-052b5201.d  
Operator: YS1  
Injection Date: 27-JAN-2010 16:18  
Instrument: ecd1a.i  
Client Sample ID: AR166006



Data File: /chem/ecdl1a.i/012810a.b/003f0301.d  
Report Date: 29-Jan-2010 06:35

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/003f0301.d  
Lab Smp Id: WAR091216-54 Client Smp ID: AR125401  
Inj Date : 28-JAN-2010 09:37  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |WAR091216-54  
Misc Info :  
Comment :  
Method : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m  
Meth Date : 29-Jan-2010 06:35 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 3 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1254.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpc1p1

AMOUNTS

| RT | EXP RT | DLT RT | CAL-AMT<br>RESPONSE ( ug/L) | ON-COL<br>( ug/L) | TARGET RANGE | RATIO |
|----|--------|--------|-----------------------------|-------------------|--------------|-------|
|----|--------|--------|-----------------------------|-------------------|--------------|-------|

6 Aroclor-1254

CAS #: 11097-69-1

|       |       |       |                  |                     |        |
|-------|-------|-------|------------------|---------------------|--------|
| 3.267 | 3.267 | 0.000 | 12761173 1000.00 | 1020 80.00- 120.00  | 100.00 |
| 3.422 | 3.422 | 0.000 | 17529670 1000.00 | 1050 117.37- 157.37 | 137.37 |
| 3.656 | 3.656 | 0.000 | 22662913 1000.00 | 1090 157.59- 197.59 | 177.59 |
| 3.820 | 3.820 | 0.000 | 17089279 1000.00 | 1090 113.92- 153.92 | 133.92 |
| 3.928 | 3.928 | 0.000 | 16050089 1000.00 | 1060 105.77- 145.77 | 125.77 |

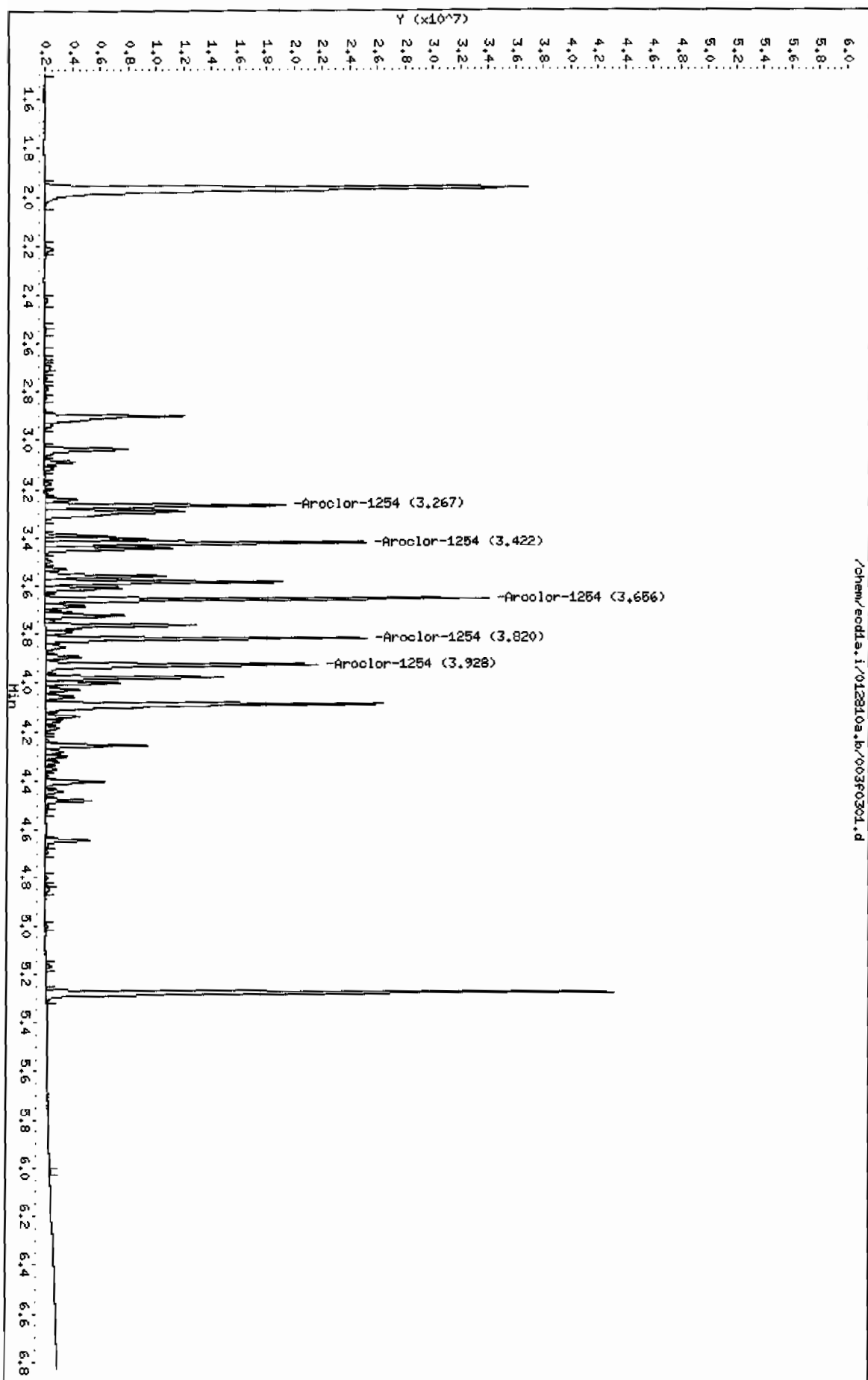
Average of Peak Amounts = 1.06e+03

Data File: /chem/eccl1a.i/012810a.b/003f0301.d  
Date: 28-JAN-2010 09:37  
Client ID: AR125401  
Sample Info: 14AR091216-54

Column phase: CLP1

Instrument: eccl1a.i  
Operator: YSL  
Column diameter: 0.25

Page 1



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/003b0301.d  
Lab Smp Id: WAR091216-54 Client Smp ID: AR125401  
Inj Date : 28-JAN-2010 09:37  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |WAR091216-54  
Misc Info :  
Comment :  
Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m  
Meth Date : 29-Jan-2010 06:35 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:01 Cal File: 013b1301.d  
Als bottle: 3 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1254.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpc1p1

AMOUNTS

| RT                        | EXP RT | DLT RT | CAL-AMT<br>RESPONSE ( ug/L) | ON-COL<br>( ug/L)  | TARGET RANGE | RATIO |
|---------------------------|--------|--------|-----------------------------|--------------------|--------------|-------|
| 6 Aroclor-1254            |        |        |                             | CAS #: 11097-69-1  |              |       |
| 3.403                     | 3.403  | 0.000  | 5761305 1000.00             | 895 80.00- 120.00  | 100.00       |       |
| 3.825                     | 3.825  | 0.000  | 10125587 1000.00            | 876 155.75- 195.75 | 175.75       |       |
| 3.942                     | 3.942  | 0.000  | 11368908 1000.00            | 914 177.33- 217.33 | 197.33       |       |
| 4.218                     | 4.218  | 0.000  | 15759096 1000.00            | 934 253.53- 293.53 | 273.53       |       |
| 4.355                     | 4.355  | 0.000  | 11362020 1000.00            | 914 177.21- 217.21 | 197.21       |       |
| Average of Peak Amounts = |        |        |                             | 907                |              |       |

Data File: /chem/ecdl.a.i/012810a.b/00300301.d

Date: 28-JAN-2010 09:37

Client ID: AR125401

Sample Info: 14PR091216-54

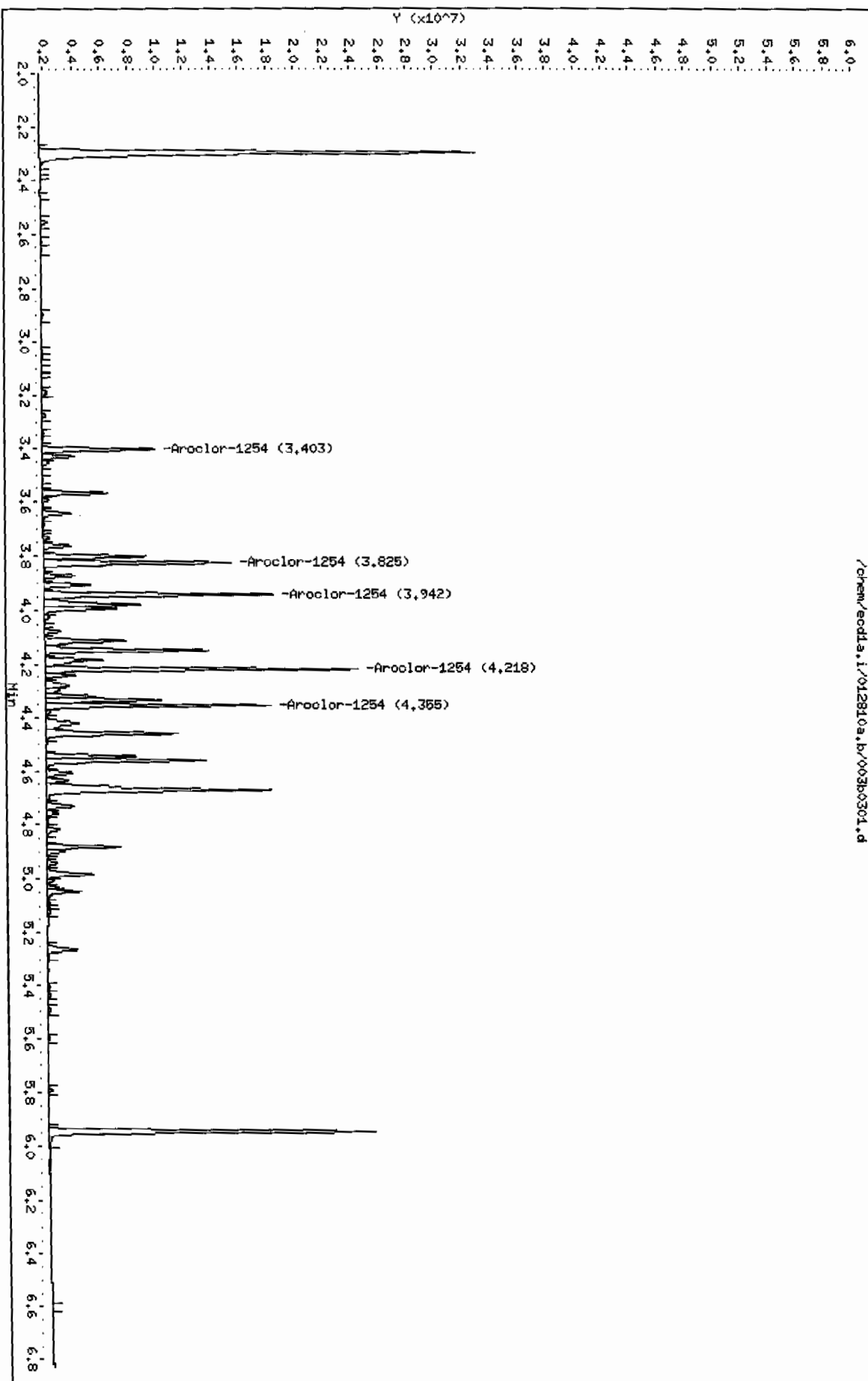
Column phase: CLP2

Instrument: ecdl.a.i

Operator: YSL

Column diameter: 0.25

/chem/ecdl.a.i/012810a.b/00300301.d



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/004f0401.d

Lab Smp Id: WAR091217-42 Client Smp ID: AR124201

Inj Date : 28-JAN-2010 09:48

Operator : YS1 Inst ID: ecd1a.i

Smp Info : |WAR091217-42

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m

Meth Date : 29-Jan-2010 06:35 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d

Als bottle: 4 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon Compound Sublist: AR1242.sub

Target Version: 3.50 Sample Matrix: None

Processing Host: hpclp1

AMOUNTS

CAL-AMT ON-COL

| RT | EXP RT | DLT RT | RESPONSE ( ug/L) | ( ug/L) | TARGET RANGE | RATIO |
|----|--------|--------|------------------|---------|--------------|-------|
|----|--------|--------|------------------|---------|--------------|-------|

4 Aroclor-1242

CAS #: 53469-21-9

|       |       |       |          |         |                     |        |
|-------|-------|-------|----------|---------|---------------------|--------|
| 2.421 | 2.421 | 0.000 | 11700726 | 1000.00 | 1000 80.00- 120.00  | 100.00 |
| 2.710 | 2.710 | 0.000 | 14682042 | 1000.00 | 1090 105.48- 145.48 | 125.48 |
| 2.828 | 2.828 | 0.000 | 5594368  | 1000.00 | 1020 27.81- 67.81   | 47.81  |
| 3.038 | 3.038 | 0.000 | 7341144  | 1000.00 | 1010 42.74- 82.74   | 62.74  |
| 3.292 | 3.292 | 0.000 | 7422864  | 1000.00 | 1090 43.44- 83.44   | 63.44  |

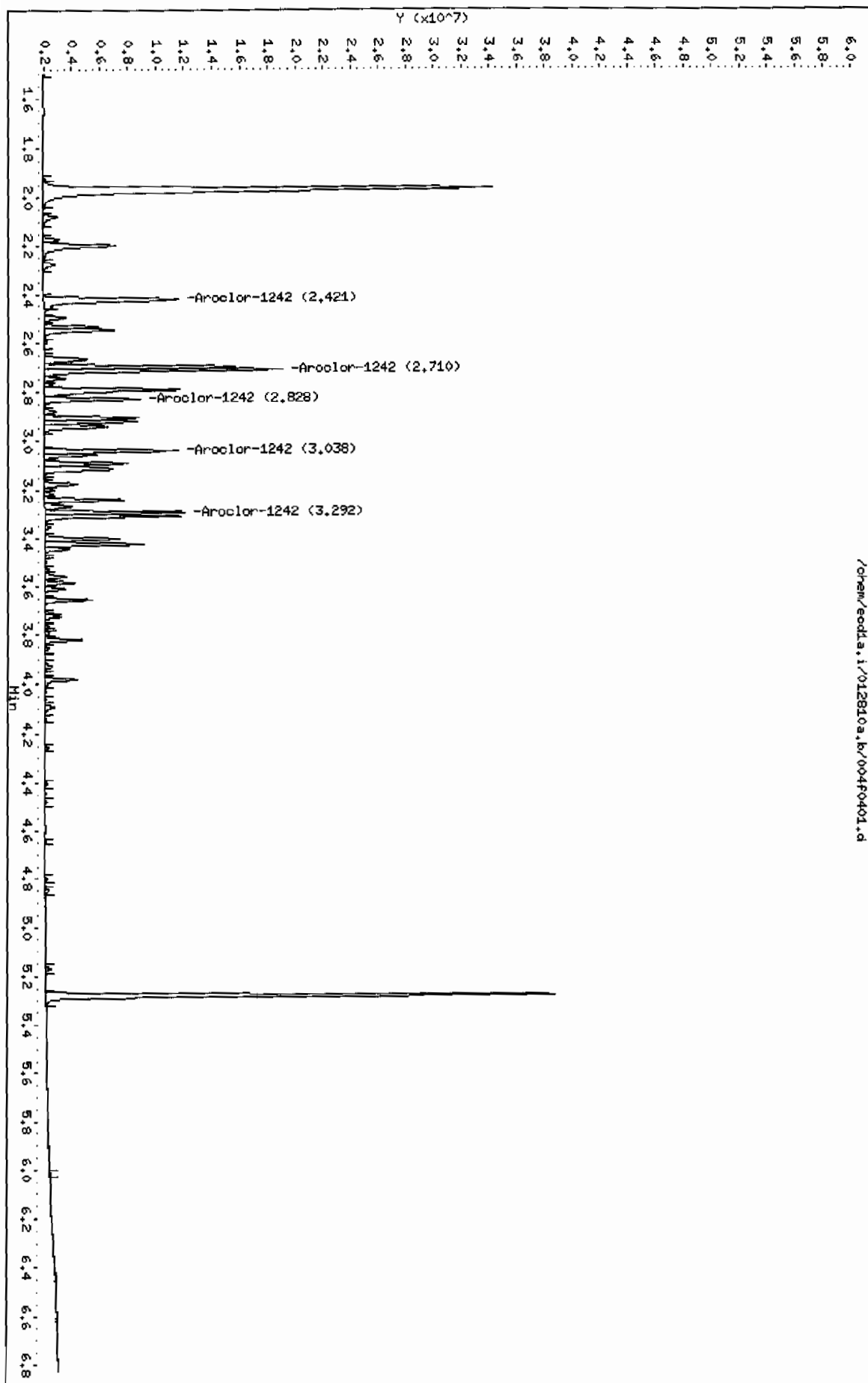
Average of Peak Amounts = 1.04e+03

Data File: /chem/ecda.i/012810a.b/004f0401.d  
Date: 28-JAN-2010 09:48  
Client ID: AR124201  
Sample Info: 1MAR091217-42

Column phase: CLP1

Instrument: ecda.i  
Operator: YSI  
Column diameter: 0.25

Page 1



Data File: /chem/ecdl1a.i/012810a.b/004b0401.d  
Report Date: 29-Jan-2010 06:35

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/004b0401.d  
Lab Smp Id: WAR091217-42 Client Smp ID: AR124201  
Inj Date : 28-JAN-2010 09:48  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |WAR091217-42  
Misc Info :  
Comment :  
Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m  
Meth Date : 29-Jan-2010 06:35 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:01 Cal File: 013b1301.d  
Als bottle: 4 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1242.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpc1p1

AMOUNTS

| RT                               | EXP RT | DLT RT | CAL-AMT<br>RESPONSE ( ug/L) | ON-COI.<br>( ug/L) | TARGET RANGE  | RATIO  |
|----------------------------------|--------|--------|-----------------------------|--------------------|---------------|--------|
| 4 Aroclor-1242 CAS #: 53469-21-9 |        |        |                             |                    |               |        |
| 3.195                            | 3.195  | 0.000  | 9836869 1000.00             | 929                | 80.00- 120.00 | 100.00 |
| 3.277                            | 3.277  | 0.000  | 6589412 1000.00             | 818                | 46.99- 86.99  | 66.99  |
| 3.568                            | 3.568  | 0.000  | 5260989 1000.00             | 882                | 33.48- 73.48  | 53.48  |
| 3.802                            | 3.802  | 0.000  | 5406358 1000.00             | 893                | 34.96- 74.96  | 54.96  |
| 3.830                            | 3.830  | 0.000  | 5973536 1000.00             | 891                | 40.73- 80.73  | 60.73  |
| Average of Peak Amounts =        |        |        |                             | 883                |               |        |



Data File: /chem/ecdl1a.i/012810a.b/004b0401.d

Date: 28-JAN-2010 09:48

Client ID: 6R124201

Sample Info: IMR091217-42

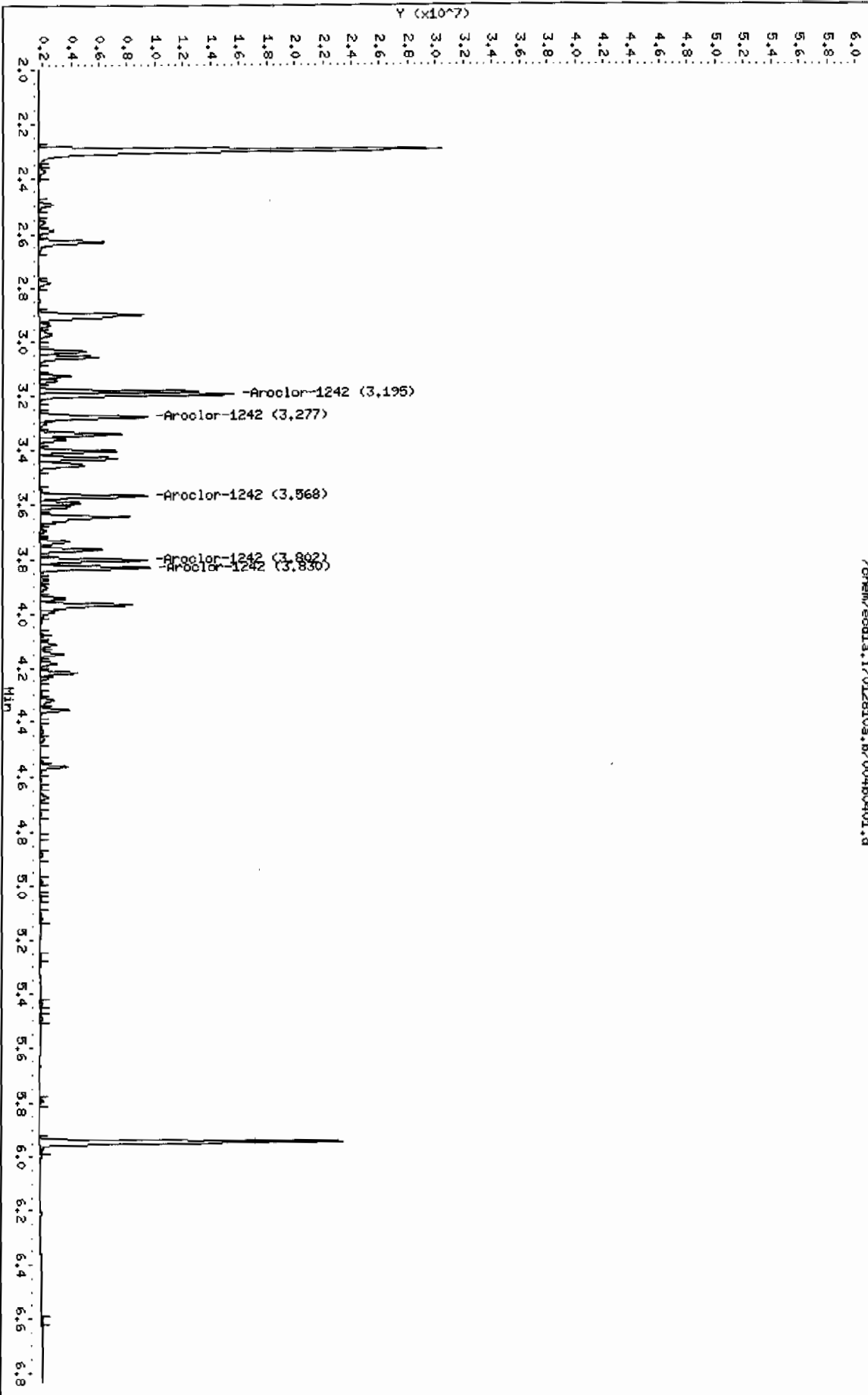
Column Phase: CLP2

Instrument: ecdl1a.i

Operator: YSL

Column diameter: 0.25

/chem/ecdl1a.i/012810a.b/004b0401.d



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/005f0501.d  
Lab Smp Id: WAR091217-48 Client Smp ID: AR124801  
Inj Date : 28-JAN-2010 09:58  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |WAR091217-48  
Misc Info :  
Comment :  
Method : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m  
Meth Date : 29-Jan-2010 06:35 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 5 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1248.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpclp1

AMOUNTS

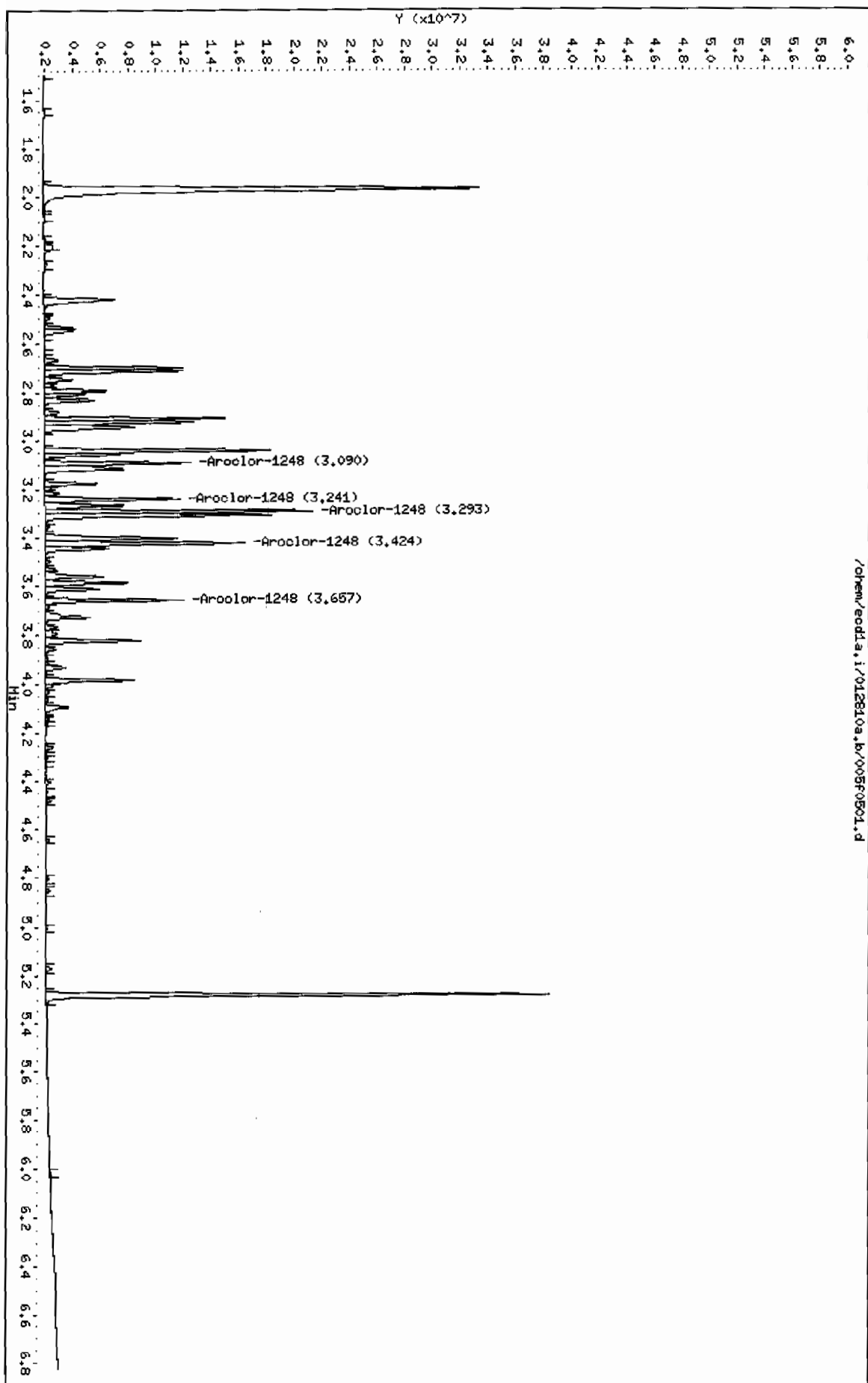
| RT                        | EXP RT | DLT RT | CAL-AMT<br>RESPONSE ( ug/L) | ON-COL<br>( ug/L) | TARGET RANGE   | RATIO  |
|---------------------------|--------|--------|-----------------------------|-------------------|----------------|--------|
| 5 Aroclor-1248            |        |        |                             | CAS #: 12672-29-6 |                |        |
| 3.090                     | 3.090  | 0.000  | 8195837 1000.00             | 1040              | 80.00- 120.00  | 100.00 |
| 3.241                     | 3.241  | 0.000  | 7239990 1000.00             | 1050              | 68.34- 108.34  | 88.34  |
| 3.293                     | 3.293  | 0.000  | 14295779 1000.00            | 1070              | 154.43- 194.43 | 174.43 |
| 3.424                     | 3.424  | 0.000  | 11213181 1000.00            | 1020              | 116.82- 156.82 | 136.82 |
| 3.657                     | 3.657  | 0.000  | 7220919 1000.00             | 968               | 68.10- 108.10  | 88.10  |
| Average of Peak Amounts = |        |        | 1.03e+03                    |                   |                |        |

Data File: /chem/ecdl1a.i/012810a.b/005f0501.d  
Date: 28-JAN-2010 09:58  
Client ID: AR124801  
Sample Info: 114R091217-48

Column phase: CLP1

Instrument: ecdl1a.i  
Operator: YSL  
Column diameter: 0.25

Page 1



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/005b0501.d  
Lab Smp Id: WAR091217-48 Client Smp ID: AR124801  
Inj Date : 28-JAN-2010 09:58  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |WAR091217-48  
Misc Info :  
Comment :  
Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m  
Meth Date : 29-Jan-2010 06:35 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:01 Cal File: 013b1301.d  
Als bottle: 5 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1248.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpc1p1

AMOUNTS

CAL-AMT ON-COL

| RT | EXP RT | DLT RT | RESPONSE ( ug/L) | ( ug/L) | TARGET RANGE | RATIO |
|----|--------|--------|------------------|---------|--------------|-------|
|----|--------|--------|------------------|---------|--------------|-------|

5 Aroclor-1248

CAS #: 12672-29-6

|       |       |       |          |         |                    |        |
|-------|-------|-------|----------|---------|--------------------|--------|
| 3.403 | 3.403 | 0.000 | 7166216  | 1000.00 | 890 80.00- 120.00  | 100.00 |
| 3.569 | 3.569 | 0.000 | 8911660  | 1000.00 | 902 104.36- 144.36 | 124.36 |
| 3.803 | 3.803 | 0.000 | 10167206 | 1000.00 | 906 121.88- 161.88 | 141.88 |
| 3.830 | 3.830 | 0.000 | 11179228 | 1000.00 | 896 136.00- 176.00 | 156.00 |
| 3.967 | 3.967 | 0.000 | 10733641 | 1000.00 | 887 129.78- 169.78 | 149.78 |

Average of Peak Amounts =

896

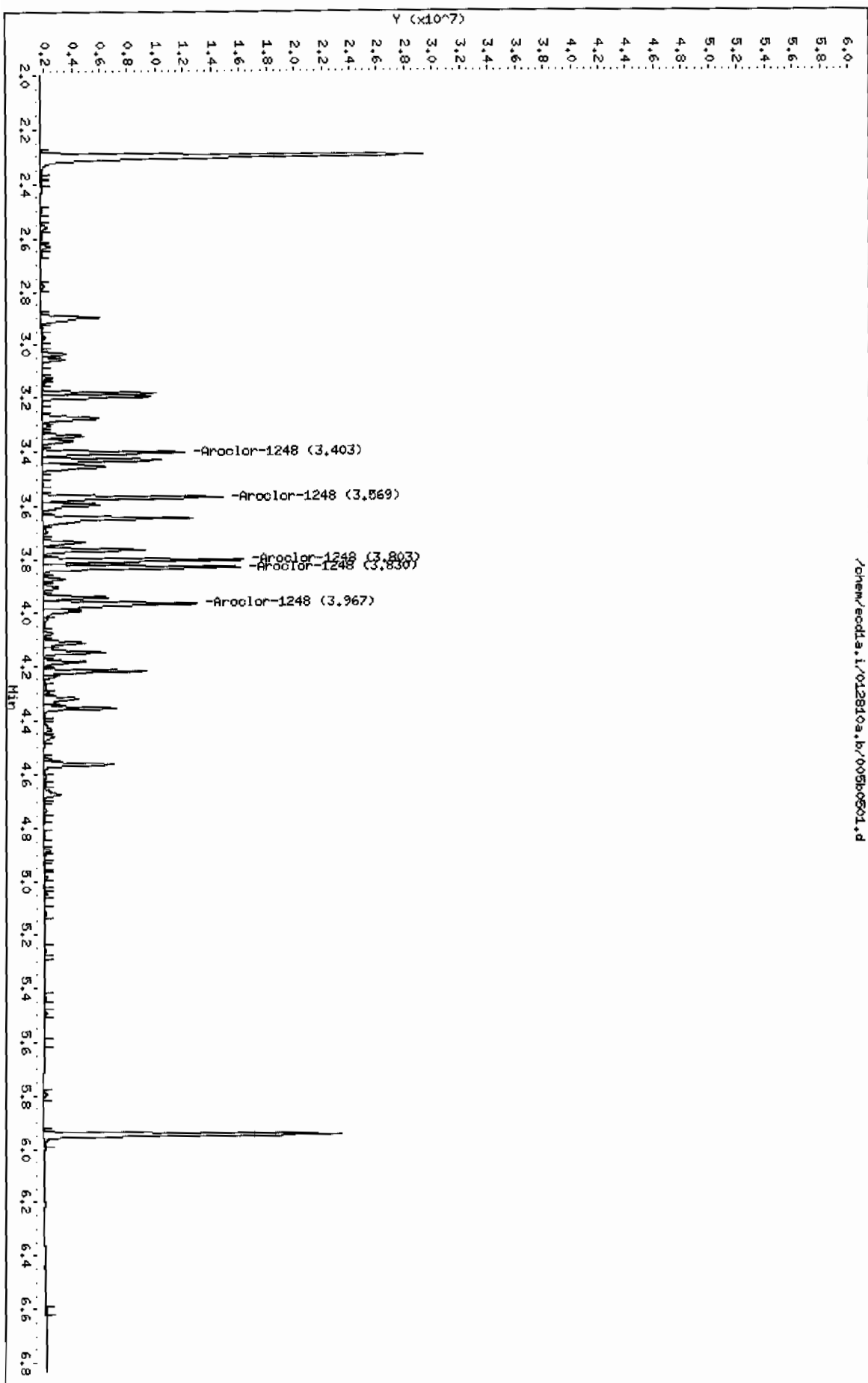
Data File: /chem/ecdl1a.i/012810a.b/005b0501.d  
Date: 28-JAN-2010 09:58  
Client ID: AR124801  
Sample Info: IMR091217-48

Instrument: ecdl1a.i

Page 1

Column phase: CLP2

Operator: YSL  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/012810a.b/006f0601.d  
 Lab Smp Id: WAR100104-32 Client Smp ID: AR123201  
 Inj Date : 28-JAN-2010 10:09  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |WAR100104-32  
 Misc Info :  
 Comment :  
 Method : /chem/ecd1a.i/012810a.b/ECD1-F-8082-121409.m  
 Meth Date : 29-Jan-2010 06:35 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
 Als bottle: 6 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: AR1232.sub  
 Target Version: 3.50 Sample Matrix: None  
 Processing Host: hpc1p1

AMOUNTS

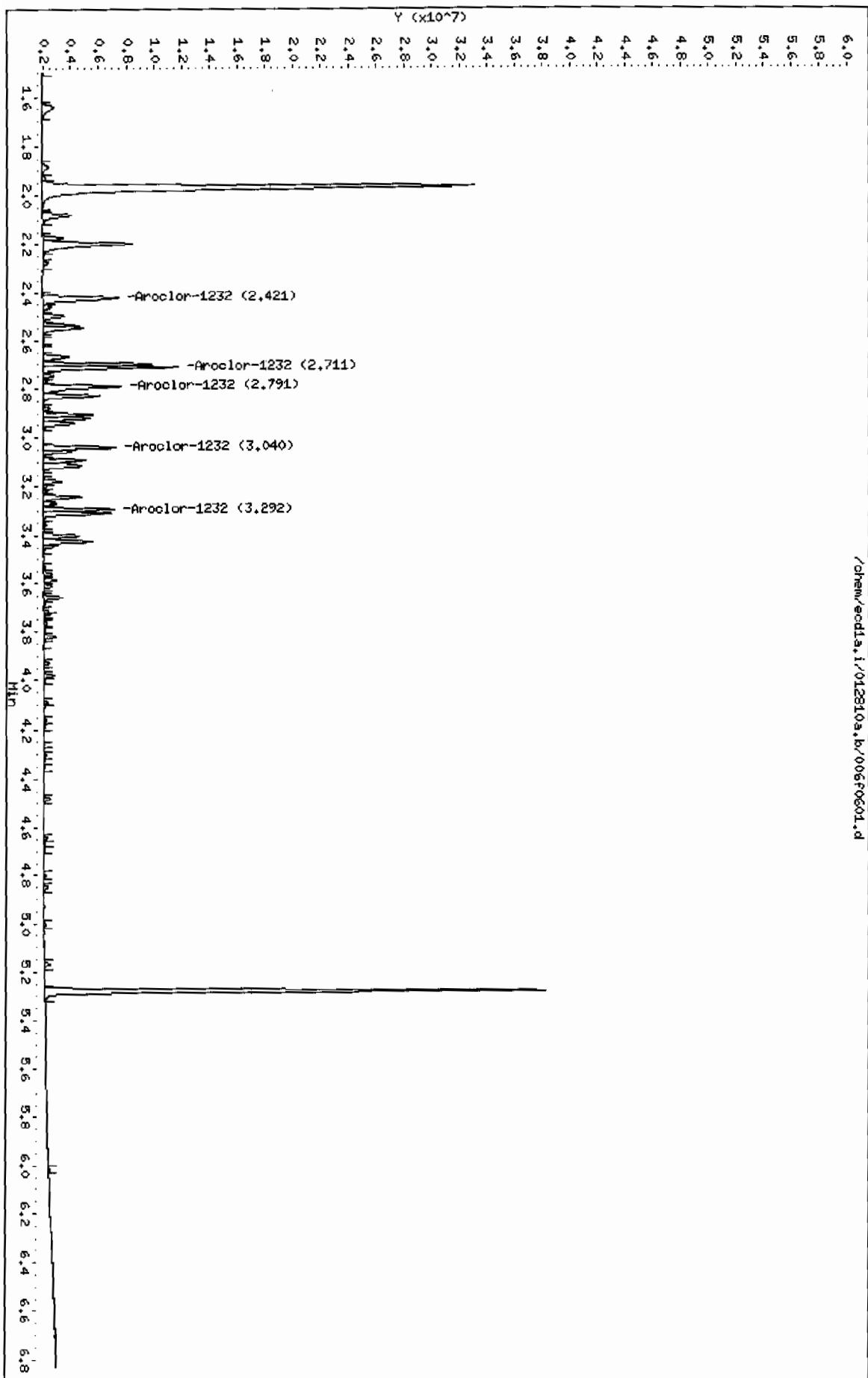
|                           |        |        | CAL-AMT           |         | ON-COL  |                |        |
|---------------------------|--------|--------|-------------------|---------|---------|----------------|--------|
| RT                        | EXP RT | DLT RT | RESPONSE ( ug/L)  |         | ( ug/L) | TARGET RANGE   | RATIO  |
| =====                     |        |        | =====             |         | =====   | =====          | =====  |
| 3 Aroclor-1232            |        |        | CAS #: 11141-16-5 |         |         |                |        |
| 2.421                     | 2.421  | 0.000  | 6428613           | 1000.00 | 938     | 80.00- 120.00  | 100.00 |
| 2.711                     | 2.711  | 0.000  | 8344523           | 1000.00 | 990     | 109.80- 149.80 | 129.80 |
| 2.791                     | 2.791  | 0.000  | 5431354           | 1000.00 | 965     | 64.49- 104.49  | 84.49  |
| 3.040                     | 3.040  | 0.000  | 4063213           | 1000.00 | 1020    | 43.21- 83.21   | 63.21  |
| 3.292                     | 3.292  | 0.000  | 3799065           | 1000.00 | 985     | 39.10- 79.10   | 59.10  |
| Average of Peak Amounts = |        |        | 980               |         |         |                |        |

Data File: /chem/ecdl1a.i/012810a.b/006f0601.d  
Date : 28-JAN-2010 10:09  
Client ID: AR123201  
Sample Info: IMR100104-32

Page 1

Column phase: CLP1

Instrument: ecdl1a.i  
Operator: YS1  
Column diameter: 0.25



Data File: /chem/ecdl1a.i/012810a.b/006b0601.d  
Report Date: 29-Jan-2010 06:35

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/006b0601.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 28-JAN-2010 10:09

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-32

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m

Meth Date : 29-Jan-2010 06:35 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:01

Cal File: 013b1301.d

Als bottle: 6

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1232.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpclp1

AMOUNTS

CAL-AMT ON-COL

| RT                        | EXP RT       | DLT RT | RESPONSE ( ug/L) | ( ug/L) | TARGET RANGE      | RATIO  |
|---------------------------|--------------|--------|------------------|---------|-------------------|--------|
| 3                         | Aroclor-1232 |        |                  |         | CAS #: 11141-16-5 |        |
| 2.897                     | 2.897        | 0.000  | 5164473          | 1000.00 | 876 80.00- 120.00 | 100.00 |
| 3.195                     | 3.195        | 0.000  | 5571782          | 1000.00 | 896 87.89- 127.89 | 107.89 |
| 3.278                     | 3.278        | 0.000  | 3905179          | 1000.00 | 899 55.62- 95.62  | 75.62  |
| 3.569                     | 3.569        | 0.000  | 2903326          | 1000.00 | 933 36.22- 76.22  | 56.22  |
| 3.802                     | 3.802        | 0.000  | 2859048          | 1000.00 | 895 35.36- 75.36  | 55.36  |
| Average of Peak Amounts = |              |        |                  | 900     |                   |        |



Data File: /chem/ecdl1.i/012810a.b/0060601.d

Date : 28-JAN-2010 10:09

Client ID: ARL23201

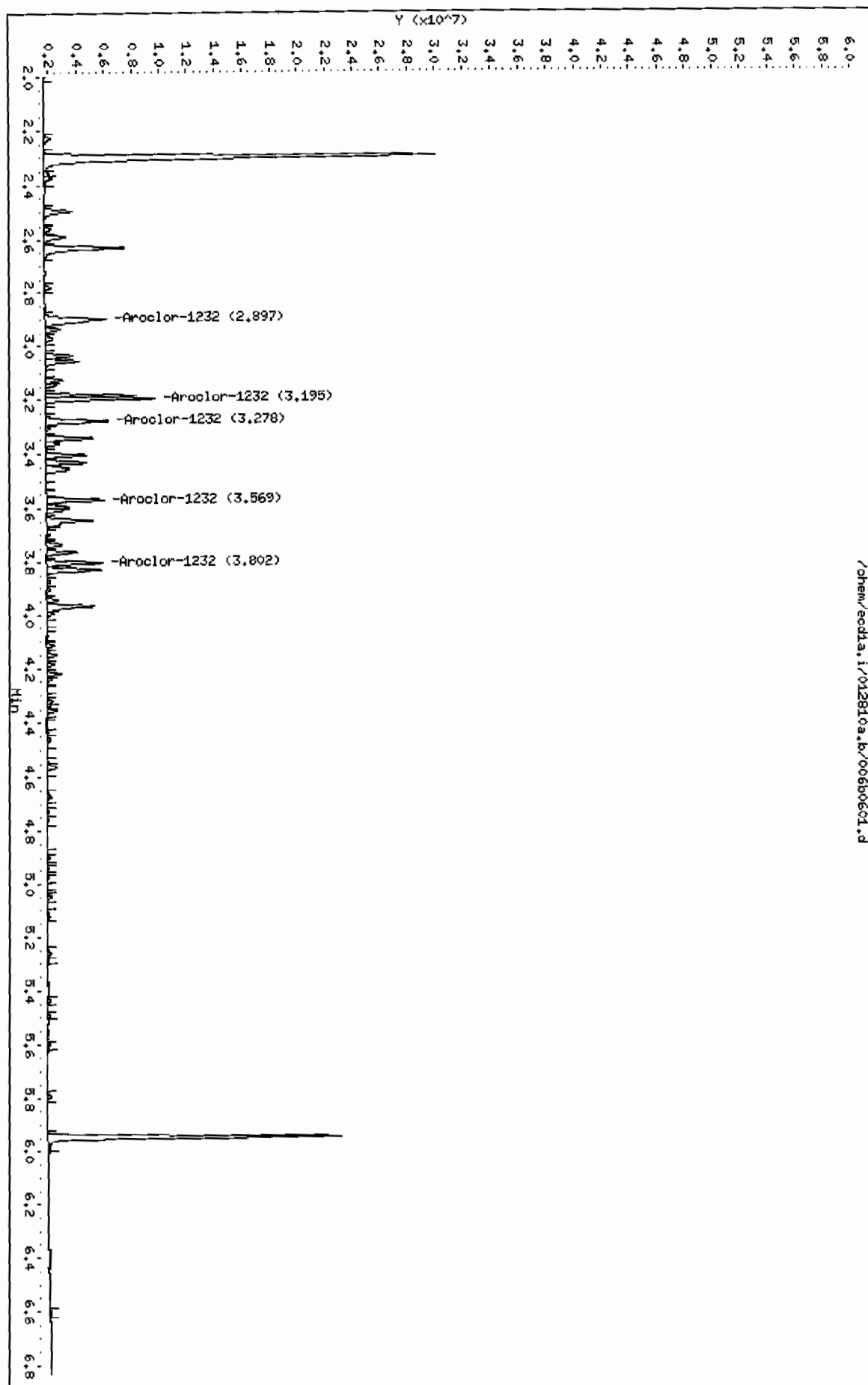
Sample Info: IMR000104-32

Column phase: CLP2

Instrument: ecdl1.i

Operator: YSI

Column diameter: 0.25



Data File: /chem/ecdla.i/012810a.b/007f0701.d  
Report Date: 29-Jan-2010 06:35

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012810a.b/007f0701.d  
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101  
Inj Date : 28-JAN-2010 10:19  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |WAR100104-21  
Misc Info :  
Comment :  
Method : /chem/ecdla.i/012810a.b/ECD1-F-8082-121409.m  
Meth Date : 29-Jan-2010 06:35 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 7 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1221.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpclp1

AMOUNTS

| RT                        | EXP RT | DLT RT | RESPONSE ( ug/L) | CAL-AMT ( ug/L) | ON-COL         | TARGET RANGE | RATIO |
|---------------------------|--------|--------|------------------|-----------------|----------------|--------------|-------|
| 2.078                     | 2.078  | 0.000  | 4144638 1000.00  | 964             | 80.00- 120.00  | 100.00       |       |
| 2.171                     | 2.171  | 0.000  | 2286452 1000.00  | 937             | 35.17- 75.17   | 55.17        |       |
| 2.197                     | 2.197  | 0.000  | 9972671 1000.00  | 971             | 220.62- 260.62 | 240.62       |       |
| Average of Peak Amounts = |        |        |                  | 957             |                |              |       |

Data File: /chem/eccl.a.i/012810a.b/0070701.d

Date: 28-JAN-2010 10:19

Client ID: 6P122101

Sample Info: 1MPC100104-21

Column phase: CLP1

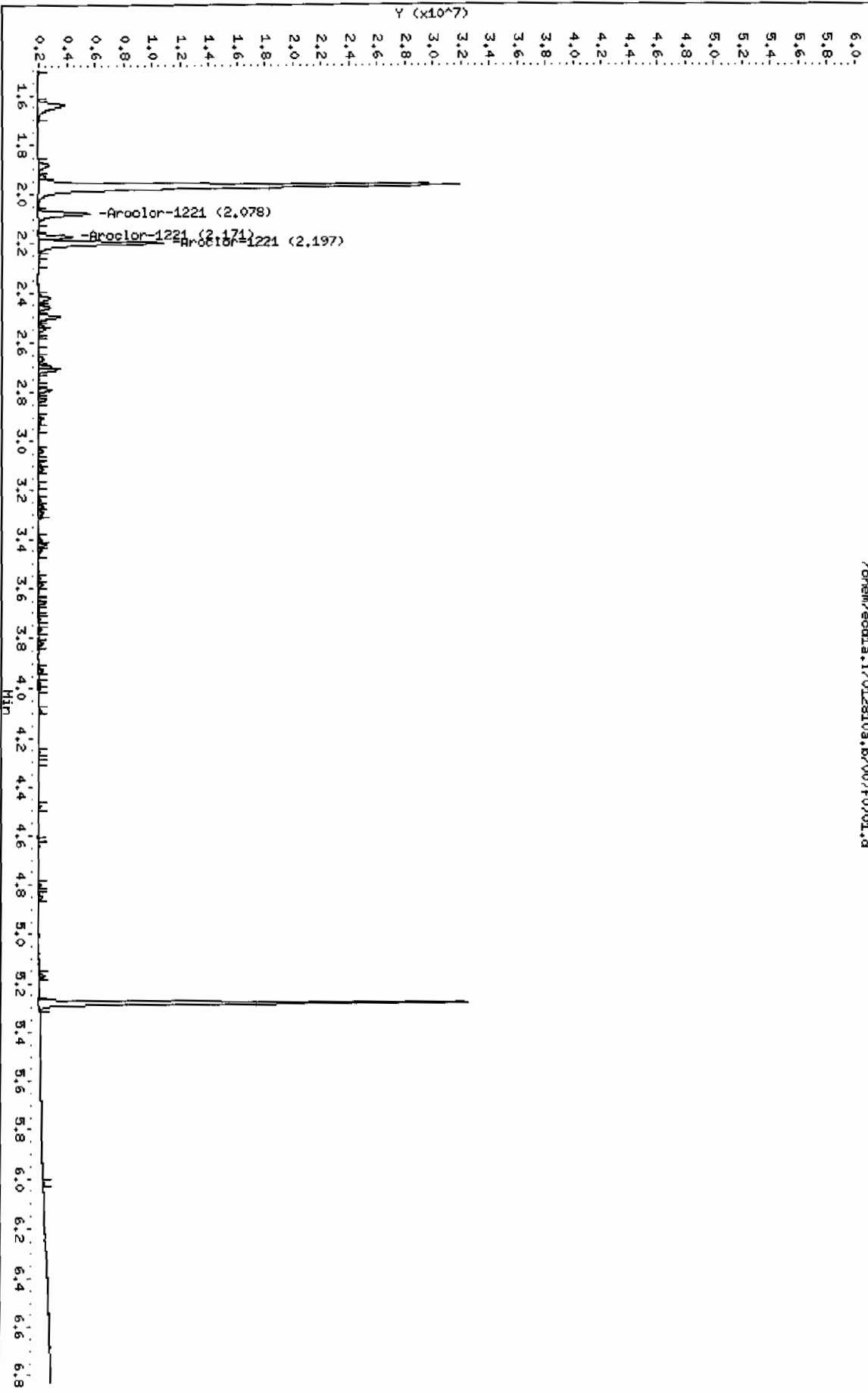
Page 1

Instrument: eccl.a.i

Operator: YSL

Column diameter: 0.25

/chem/eccl.a.i/012810a.b/0070701.d



Data File: /chem/ecdl1a.i/012810a.b/007b0701.d  
Report Date: 29-Jan-2010 06:35

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/007b0701.d

Lab Smp Id: WAR100104-21

Client Smp ID: AR122101

Inj Date : 28-JAN-2010 10:19

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-21

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m

Meth Date : 29-Jan-2010 06:35 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:01 Cal File: 013b1301.d

Als bottle: 7 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1221.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

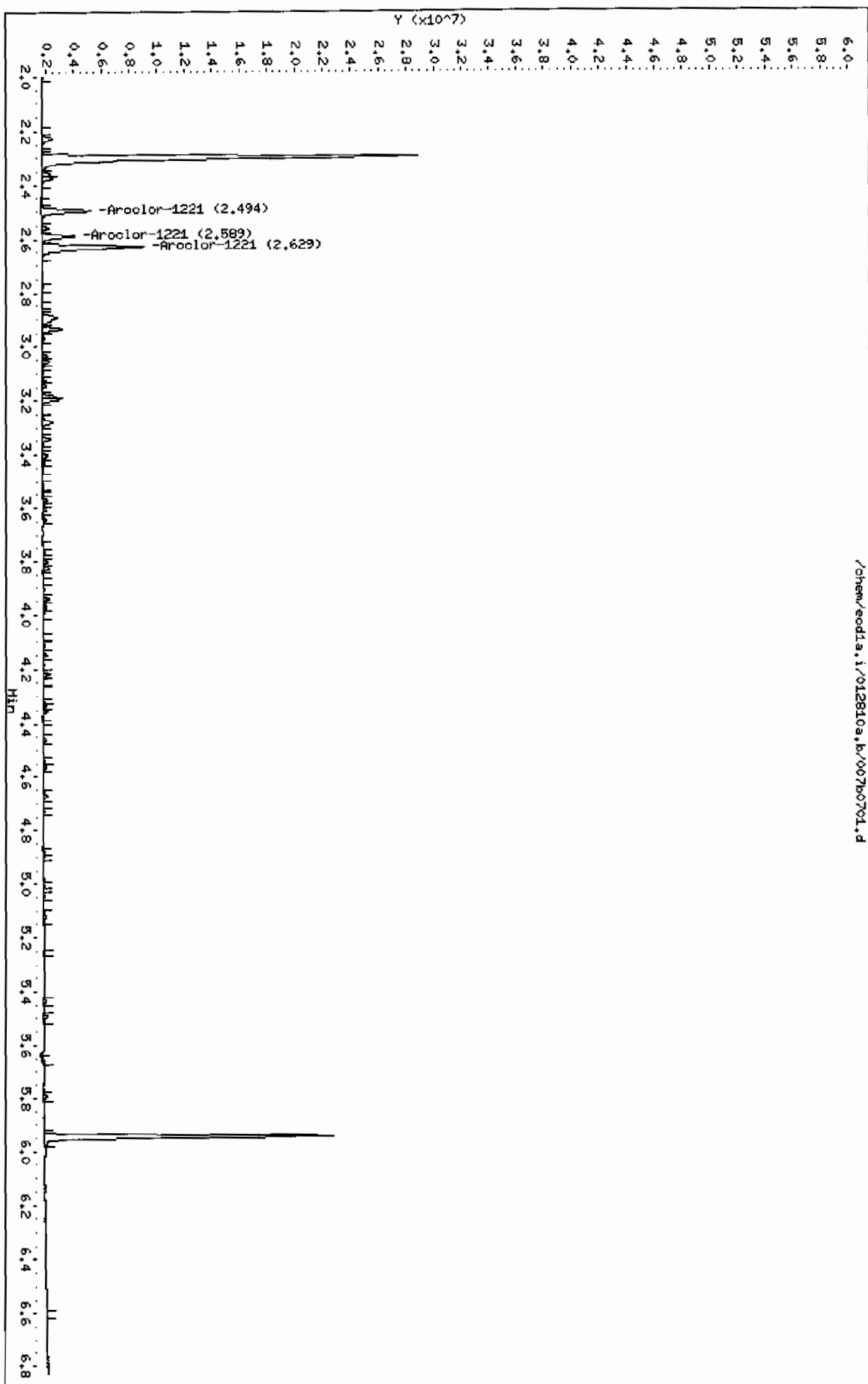
| RT                               | EXP RT | DLT RT | CAL-AMT<br>RESPONSE ( ug/L) | ON-COL<br>( ug/L) | TARGET RANGE   | RATIO  |
|----------------------------------|--------|--------|-----------------------------|-------------------|----------------|--------|
| 2 Aroclor-1221 CAS #: 11104-28-2 |        |        |                             |                   |                |        |
| 2.494                            | 2.494  | 0.000  | 3258705 1000.00             | 895               | 80.00- 120.00  | 100.00 |
| 2.589                            | 2.589  | 0.000  | 2058765 1000.00             | 884               | 43.18- 83.18   | 63.18  |
| 2.629                            | 2.629  | 0.000  | 7100543 1000.00             | 874               | 197.89- 237.89 | 217.89 |
| Average of Peak Amounts =        |        |        |                             | 885               |                |        |

Data File: /chem/eccl1a.i/012810a.b/007b0701.d  
Date: 28-JAN-2010 10:19  
Client ID: AR122101  
Sample Info: IMR100104-21

Column Phase: CLP2

Instrument: eccl1a.i  
Operator: YSL  
Column diameter: 0.25

Page 1



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

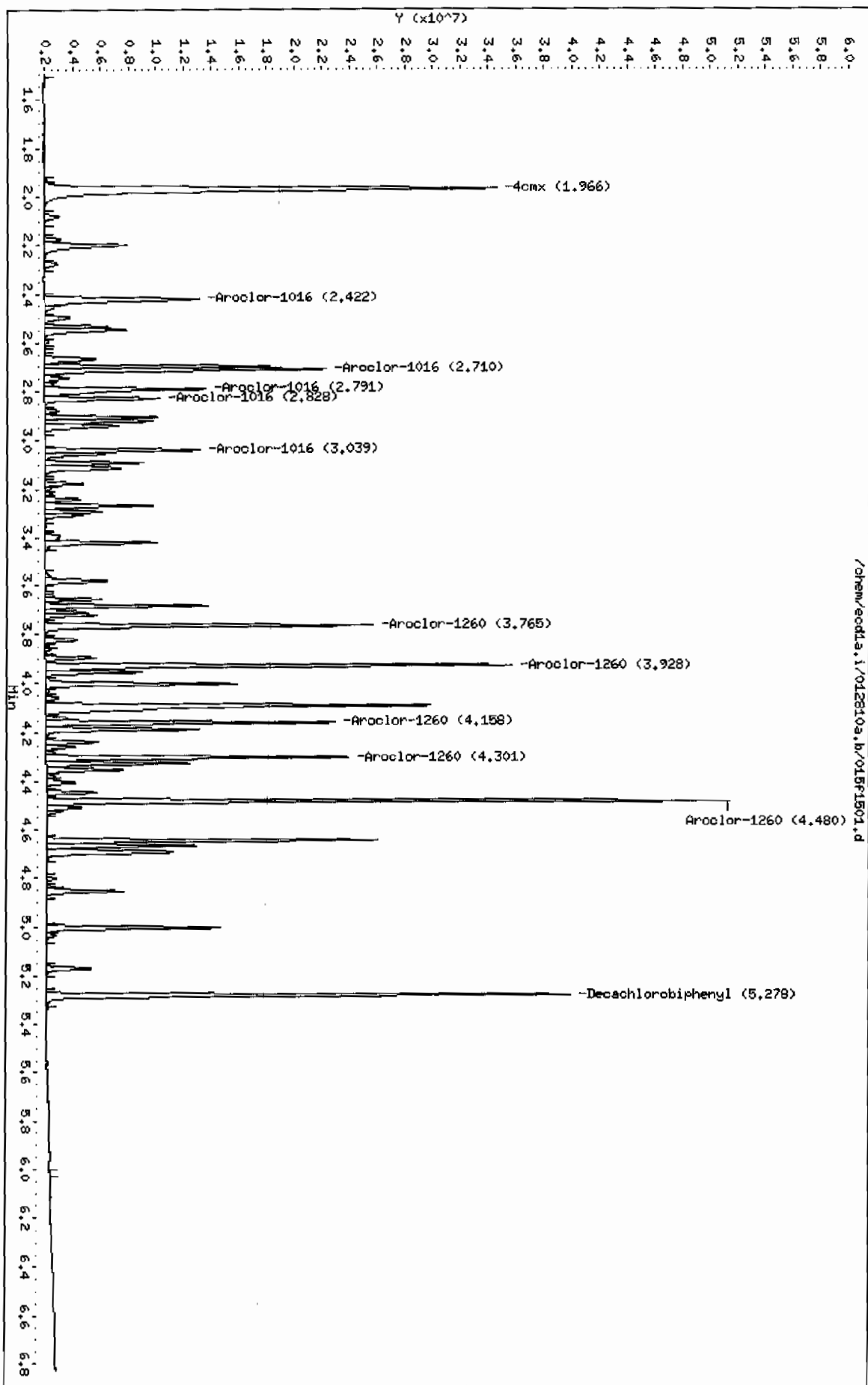
Data file : /chem/ecdl1a.i/012810a.b/015f1501.d  
 Lab Smp Id: WAR100104-60 01 Client Smp ID: AR166001  
 Inj Date : 28-JAN-2010 11:44  
 Operator : YSl Inst ID: ecd1a.i  
 Smp Info : |WAR100104-60 01  
 Misc Info :  
 Comment :  
 Method : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m  
 Meth Date : 29-Jan-2010 06:37 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
 Als bottle: 15 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: AR1660.sub  
 Target Version: 3.50 Sample Matrix: None  
 Processing Host: hpc1p1

| AMOUNTS                   |        |        |          |         |                   |         |        |        |  |
|---------------------------|--------|--------|----------|---------|-------------------|---------|--------|--------|--|
|                           |        |        | CAL-AMT  |         | ON-COL.           |         |        |        |  |
| RT                        | EXP RT | DLT RT | RESPONSE | ( ug/L) | ( ug/L)           | TARGET  | RANGE  | RATIO  |  |
| ---                       | -----  | -----  | -----    | -----   | -----             | -----   | -----  | -----  |  |
| \$ 11 4cmx                |        |        |          |         | CAS #: 877-09-8   |         |        |        |  |
| 1.966                     | 1.966  | 0.000  | 40157233 | 100.000 | 104               | 80.00-  | 120.00 | 100.00 |  |
| -----                     |        |        |          |         |                   |         |        |        |  |
| \$ 12 Decachlorobiphenyl  |        |        |          |         | CAS #: 2051-24-3  |         |        |        |  |
| 5.278                     | 5.278  | 0.000  | 28796267 | 100.000 | 100               | 80.00-  | 120.00 | 100.00 |  |
| -----                     |        |        |          |         |                   |         |        |        |  |
| 1 Aroclor-1016            |        |        |          |         | CAS #: 12674-11-2 |         |        |        |  |
| 2.422                     | 2.422  | 0.000  | 13239829 | 1000.00 | 961               | 80.00-  | 120.00 | 100.00 |  |
| 2.710                     | 2.710  | 0.000  | 17830982 | 1000.00 | 1020              | 114.68- | 154.68 | 134.68 |  |
| 2.791                     | 2.791  | 0.000  | 11177489 | 1000.00 | 972               | 64.42-  | 104.42 | 84.42  |  |
| 2.828                     | 2.828  | 0.000  | 6706479  | 1000.00 | 980               | 30.65-  | 70.65  | 50.65  |  |
| 3.039                     | 3.039  | 0.000  | 8669925  | 1000.00 | 976               | 45.48-  | 85.48  | 65.48  |  |
| Average of Peak Amounts = |        |        |          |         | 981               |         |        |        |  |
| -----                     |        |        |          |         |                   |         |        |        |  |
| 7 Aroclor-1260            |        |        |          |         | CAS #: 11096-82-5 |         |        |        |  |
| 3.765                     | 3.765  | 0.000  | 17007480 | 1000.00 | 1010              | 80.00-  | 120.00 | 100.00 |  |
| 3.928                     | 3.928  | 0.000  | 25794447 | 1000.00 | 1020              | 131.67- | 171.67 | 151.67 |  |
| 4.158                     | 4.158  | 0.000  | 15114035 | 1000.00 | 1010              | 68.87-  | 108.87 | 88.87  |  |
| 4.301                     | 4.301  | 0.000  | 15902550 | 1000.00 | 1020              | 73.50-  | 113.50 | 93.50  |  |
| 4.480                     | 4.480  | 0.000  | 35916863 | 1000.00 | 1040              | 191.18- | 231.18 | 211.18 |  |
| Average of Peak Amounts = |        |        |          |         | 1.02e+03          |         |        |        |  |

Data File: /chem/ecdda.i/012810a.b/015f1501.d  
Date: 28-JAN-2010 11:44  
Client ID: AR166001  
Sample Info: ILMR100104-60 01

Column phase: CLP1

Instrument: ecdda.i  
Operator: YS1  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/015b1501.d  
 Lab Smp Id: WAR100104-60 01 Client Smp ID: AR166001  
 Inj Date : 28-JAN-2010 11:44  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |WAR100104-60 01  
 Misc Info :  
 Comment :  
 Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m  
 Meth Date : 29-Jan-2010 06:37 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
 Als bottle: 15 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: AR1660.sub  
 Target Version: 3.50 Sample Matrix: None  
 Processing Host: hpclp1

AMOUNTS

| RT                        | EXP RT | DLT RT | RESPONSE ( ug/L)  | CAL-AMT ( ug/L) | ON-COL ( ug/L) | TARGET RANGE   | RATIO      |
|---------------------------|--------|--------|-------------------|-----------------|----------------|----------------|------------|
| \$ 11 4cmx                |        |        | CAS #: 877-09-8   |                 |                |                |            |
| 2.298                     | 2.298  | 0.000  | 28349133          | 100.000         | 102            | 80.00- 120.00  | 100.00     |
| \$ 12 Decachlorobiphenyl  |        |        | CAS #: 2051-24-3  |                 |                |                |            |
| 5.944                     | 5.944  | 0.000  | 17259755          | 100.000         | 98.8           | 80.00- 120.00  | 100.00     |
| 1 Aroclor-1016            |        |        | CAS #: 12674-11-2 |                 |                |                |            |
| 3.195                     | 3.195  | 0.000  | 11627012          | 1000.00         | 953            | 80.00- 120.00  | 100.00 (M) |
| 3.278                     | 3.278  | 0.000  | 7750692           | 1000.00         | 946            | 46.66- 86.66   | 66.66      |
| 3.341                     | 3.341  | 0.000  | 4814965           | 1000.00         | 948            | 21.41- 61.41   | 41.41      |
| 3.568                     | 3.568  | 0.000  | 6066099           | 1000.00         | 948            | 32.17- 72.17   | 52.17      |
| 3.644                     | 3.644  | 0.000  | 5594879           | 1000.00         | 945            | 28.12- 68.12   | 48.12      |
| Average of Peak Amounts = |        |        | 948               |                 |                |                |            |
| 7 Aroclor-1260            |        |        | CAS #: 11096-82-5 |                 |                |                |            |
| 4.335                     | 4.335  | 0.000  | 11752154          | 1000.00         | 985            | 80.00- 120.00  | 100.00     |
| 4.459                     | 4.459  | 0.000  | 14264405          | 1000.00         | 993            | 101.38- 141.38 | 121.38     |
| 4.725                     | 4.725  | 0.000  | 10757070          | 1000.00         | 986            | 71.53- 111.53  | 91.53      |
| 4.899                     | 4.899  | 0.000  | 11094832          | 1000.00         | 990            | 74.41- 114.41  | 94.41      |
| 5.046                     | 5.046  | 0.000  | 24615643          | 1000.00         | 1010           | 189.46- 229.46 | 209.46     |
| Average of Peak Amounts = |        |        | 994               |                 |                |                |            |



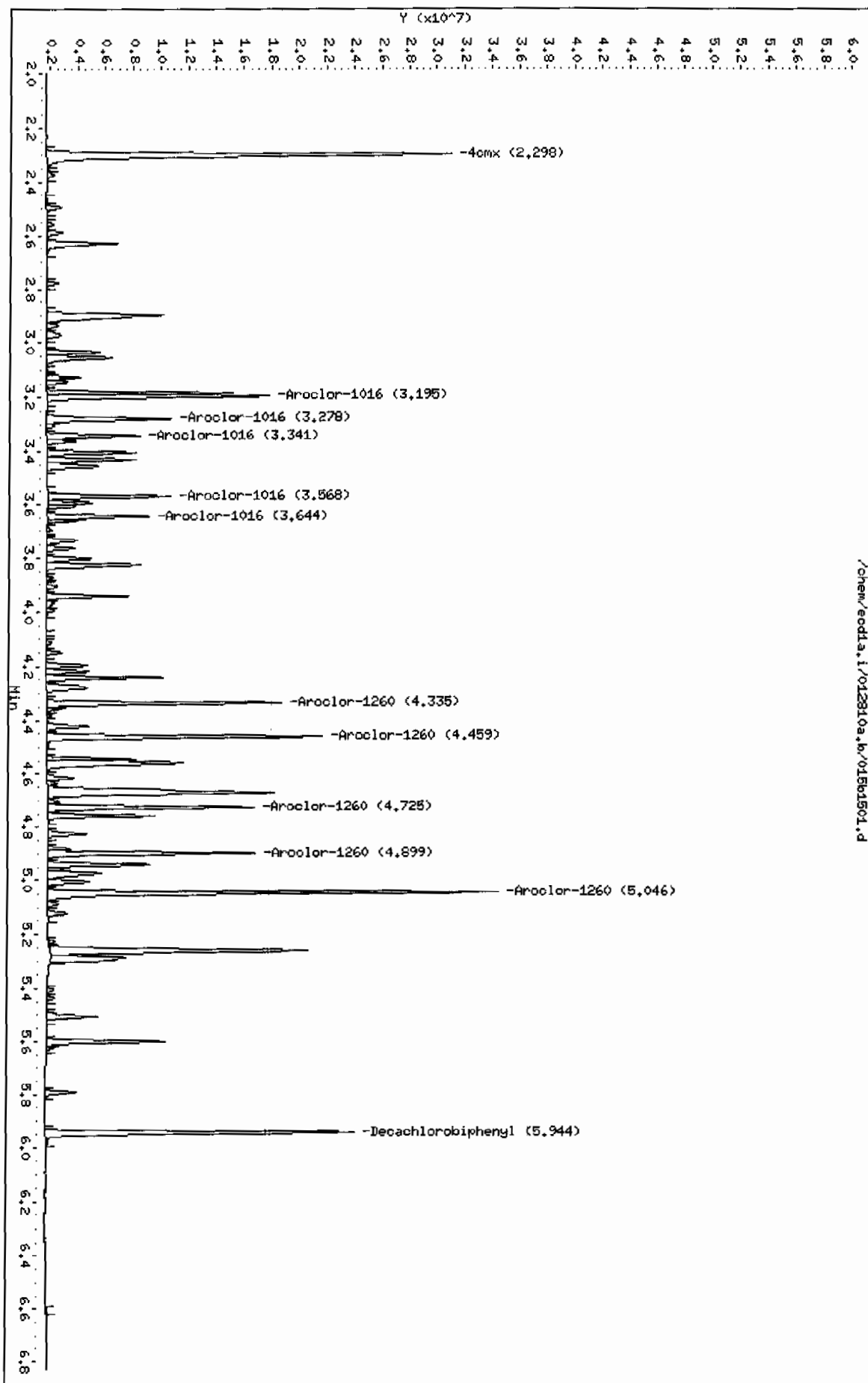
QC Flag Legend

M - Compound response manually integrated.

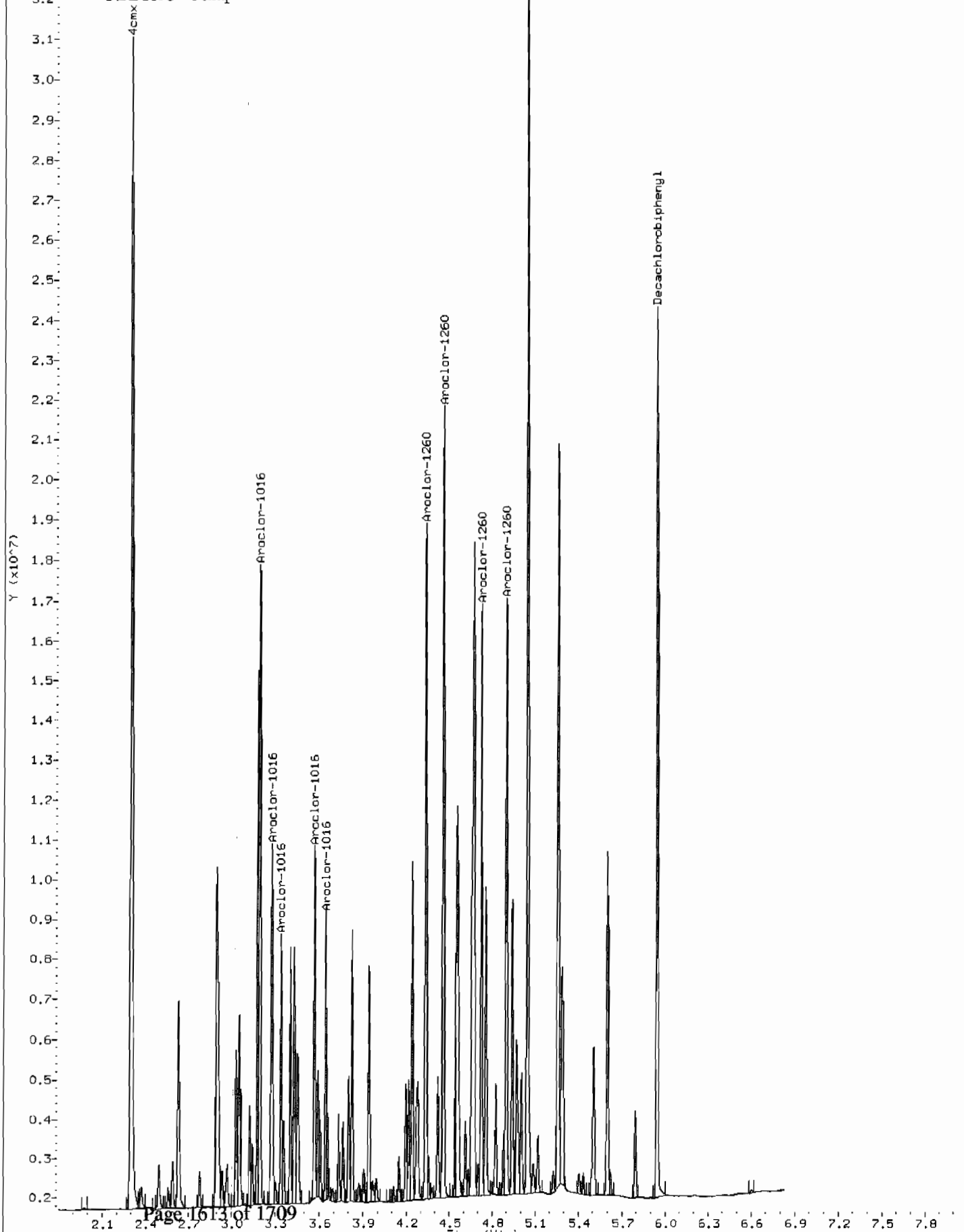
Data File: /chem/ecdl.a.i/012810a.b/015b1501.d  
Date: 28-JAN-2010 11:44  
Client ID: AR166001  
Sample Info: 14AR100104-60 01

Column Phase: CLP2

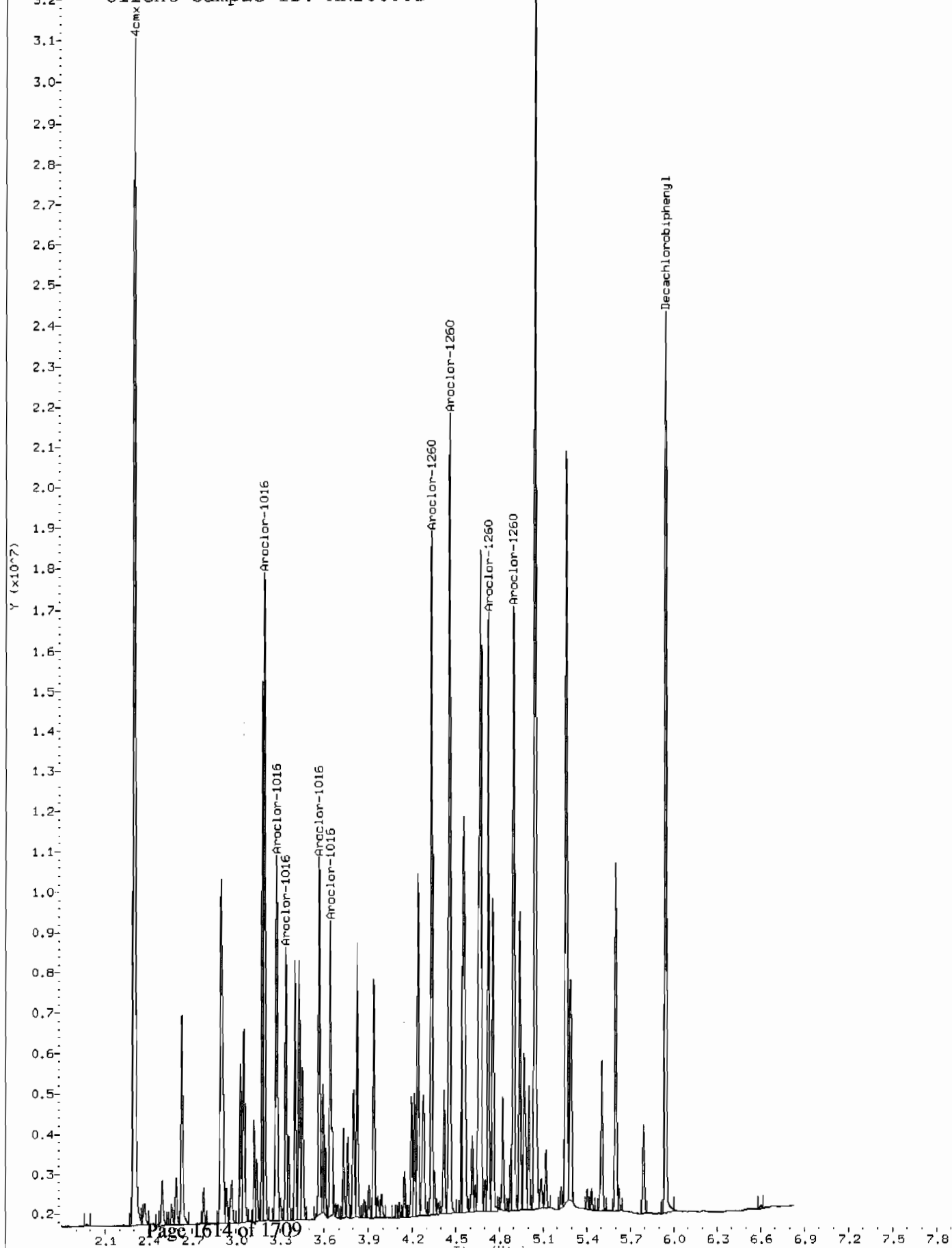
Instrument: ecdl.a.i  
Operator: YSL  
Column diameter: 0.25



Comment: Manually Integrated  
Data File: /chem/ecdl1a.i/012810a.b/015b1501.d  
Operator: YS1  
Injection Date: 28-JAN-2010 11:44  
Instrument: ecd1a.i  
Client Sample ID: AR166001



Comment: Before manual integration  
Data File: /chem/ecdla.i/012810a.b/orig-015b1501.d  
Operator: YS1  
Injection Date: 28-JAN-2010 11:44  
Instrument: ecdla.i  
Client Sample ID: AR166001



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/032f3201.d

Lab Smp Id: WAR100104-60 02

Client Smp ID: AR166002

Inj Date : 28-JAN-2010 14:56

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 02

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m

Meth Date : 29-Jan-2010 06:40 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 32

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

| RT                        | EXP RT | DLT RT | RESPONSE ( ug/L) | CAL-AMT ( ug/L) | ON-COL ( ug/L)    | TARGET RANGE   | RATIO      |
|---------------------------|--------|--------|------------------|-----------------|-------------------|----------------|------------|
| \$ 11 4cmx                |        |        |                  |                 | CAS #: 877-09-8   |                |            |
| 1.966                     | 1.966  | 0.000  | 39337753         | 100.000         | 102               | 80.00- 120.00  | 100.00     |
| -----                     |        |        |                  |                 |                   |                |            |
| \$ 12 Decachlorobiphenyl  |        |        |                  |                 | CAS #: 2051-24-3  |                |            |
| 5.277                     | 5.278  | -0.001 | 25626684         | 100.000         | 89.2              | 80.00- 120.00  | 100.00     |
| -----                     |        |        |                  |                 |                   |                |            |
| 1 Aroclor-1016            |        |        |                  |                 | CAS #: 12674-11-2 |                |            |
| 2.421                     | 2.422  | -0.001 | 13010923         | 1000.00         | 944               | 80.00- 120.00  | 100.00     |
| 2.709                     | 2.710  | -0.001 | 16921766         | 1000.00         | 967               | 110.06- 150.06 | 130.06     |
| 2.789                     | 2.791  | -0.002 | 10983417         | 1000.00         | 955               | 64.42- 104.42  | 84.42      |
| 2.826                     | 2.828  | -0.002 | 6541145          | 1000.00         | 956               | 30.27- 70.27   | 50.27      |
| 3.037                     | 3.039  | -0.002 | 8470741          | 1000.00         | 954               | 45.10- 85.10   | 65.10      |
| Average of Peak Amounts = |        |        |                  |                 | 955               |                |            |
| -----                     |        |        |                  |                 |                   |                |            |
| 7 Aroclor-1260            |        |        |                  |                 | CAS #: 11096-82-5 |                |            |
| 3.763                     | 3.765  | -0.002 | 16357926         | 1000.00         | 975               | 80.00- 120.00  | 100.00 (M) |
| 3.926                     | 3.928  | -0.002 | 25033402         | 1000.00         | 988               | 133.04- 173.04 | 153.04     |
| 4.156                     | 4.158  | -0.002 | 14649411         | 1000.00         | 978               | 69.56- 109.56  | 89.56      |
| 4.299                     | 4.301  | -0.002 | 15281375         | 1000.00         | 982               | 73.42- 113.42  | 93.42      |
| 4.478                     | 4.480  | -0.002 | 34496244         | 1000.00         | 996               | 190.88- 230.88 | 210.88     |
| Average of Peak Amounts = |        |        |                  |                 | 984               |                |            |

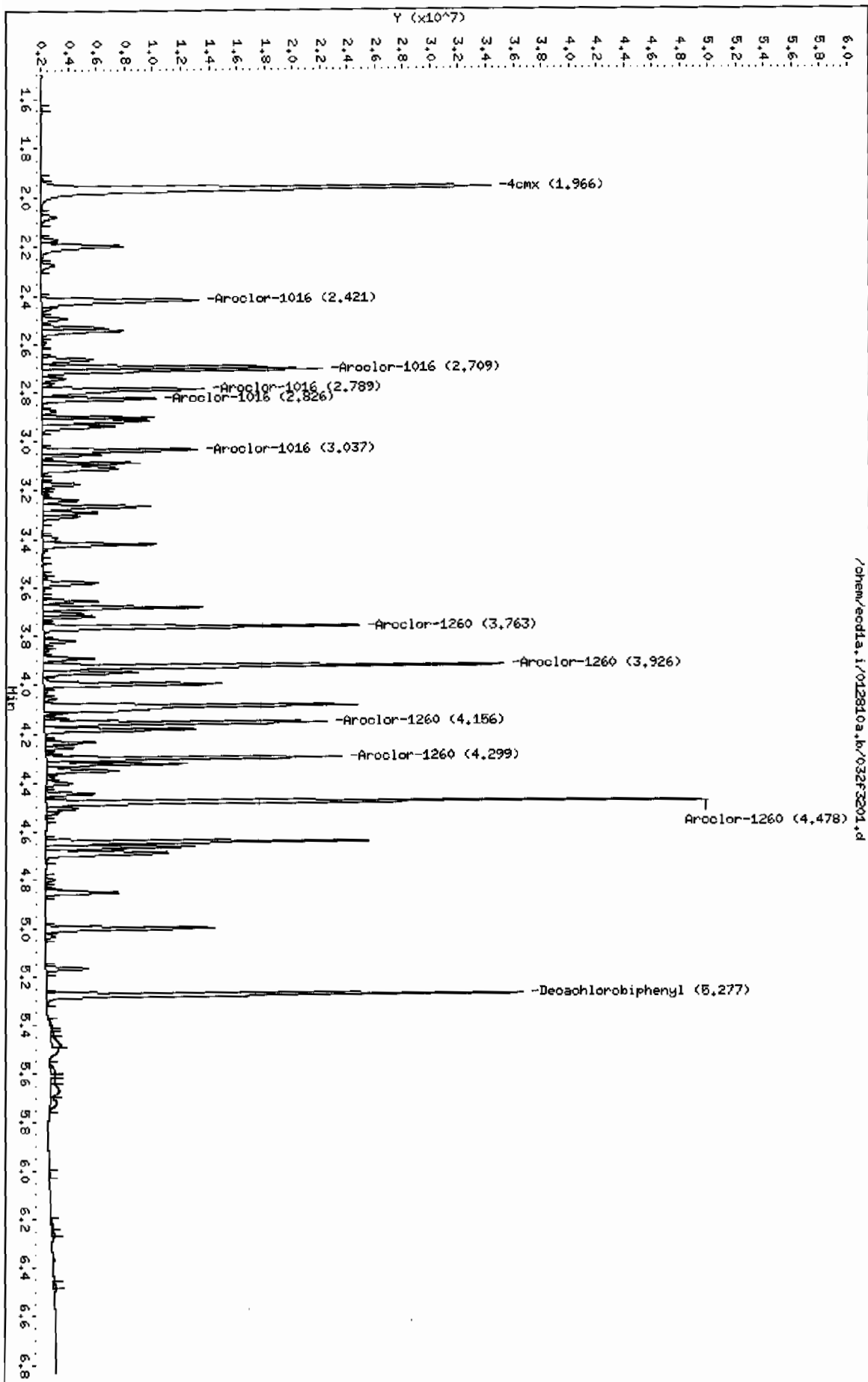
QC Flag Legend

M - Compound response manually integrated.

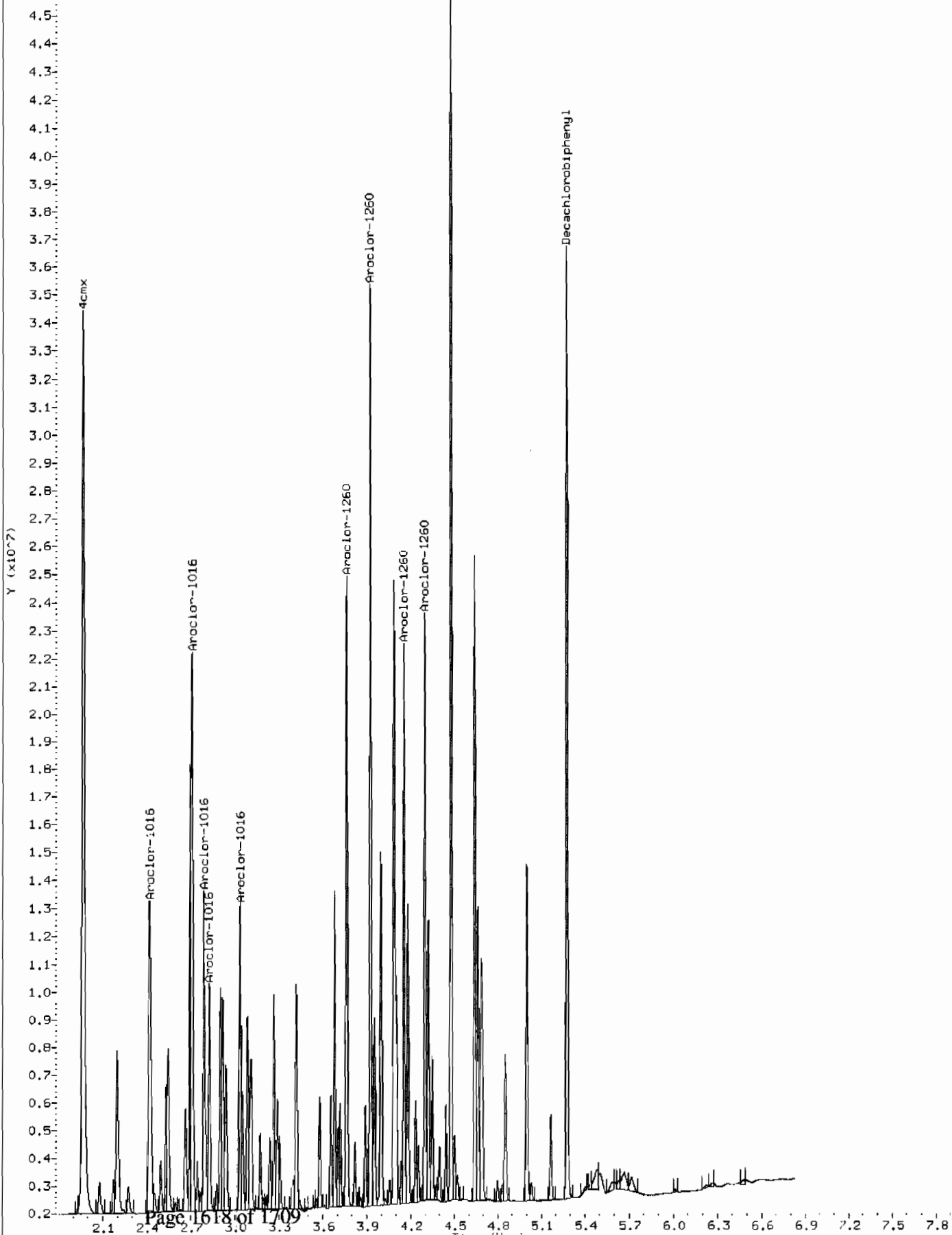
Data File: /chem/ecdda.i/012810a,b/032f3201.d  
Date: 28-JAN-2010 14:56  
Client ID: AR166002  
Sample Info: IMR100104-60 02

Column Phase: CLP1

Instrument: ecdda.i  
Operator: YSI  
Column diameter: 0.25

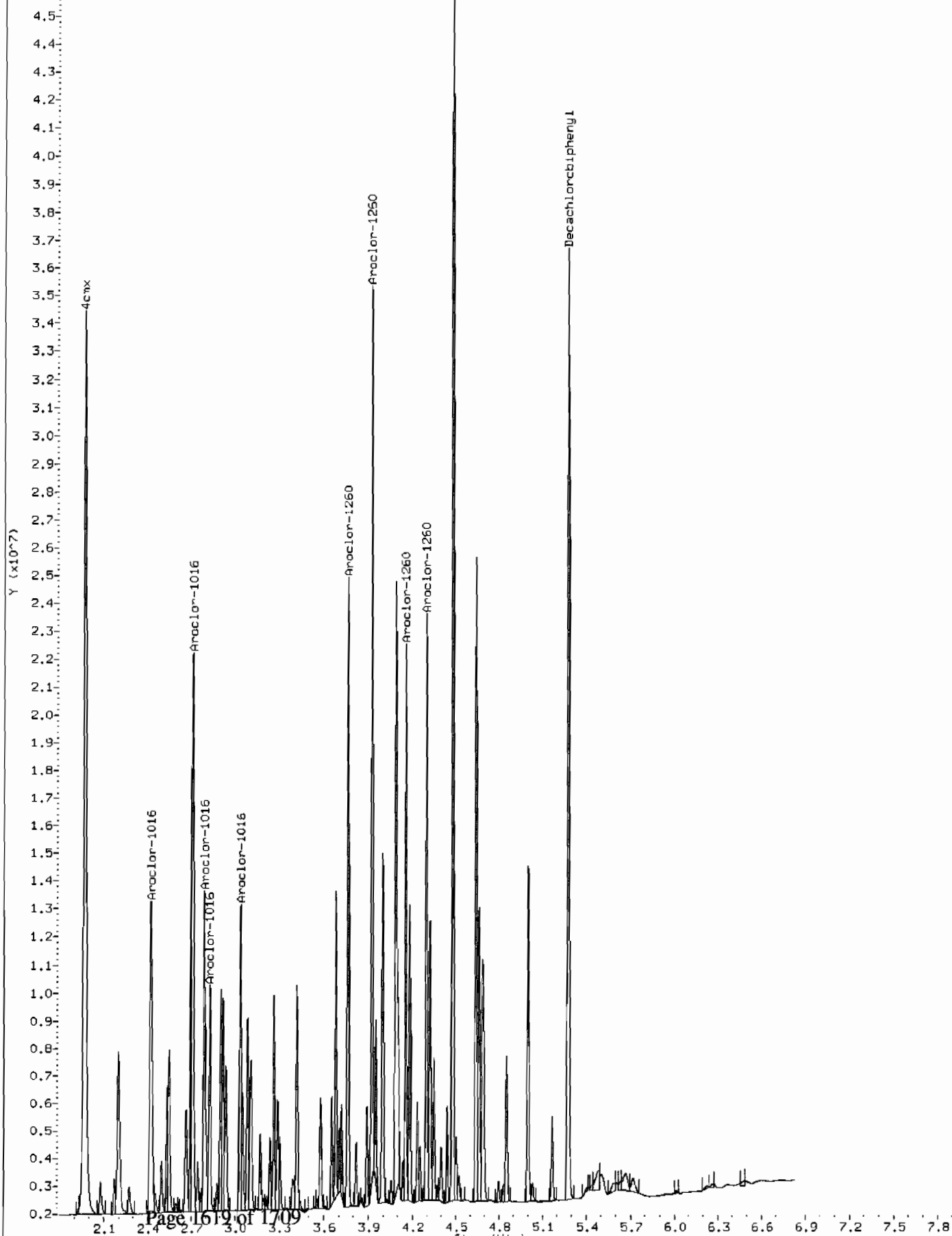


Comment: Manually Integrated  
Data File: /chem/ecdl1a.i/012810a.b/032f3201.d  
Operator: YS1  
Injection Date: 28-JAN-2010 4:56  
Instrument: ecdl1a.i  
Client Sample ID: AR166002





Comment: Before manual integration  
Data File: /chem/ecdl1.i/012810a.b/orig-032f3201.d  
Operator: YS1  
Injection Date: 28-JAN-2010 14:56  
Instrument: ecd1a.i  
Client Sample ID: AR166002



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/032b3201.d

Lab Smp Id: WAR100104-60 02

Client Smp ID: AR166002

Inj Date : 28-JAN-2010 14:56

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 02

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m

Meth Date : 29-Jan-2010 06:40 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 32

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

|                           |        |        | CAL-AMT          |         | ON-COL            |              |        |            |
|---------------------------|--------|--------|------------------|---------|-------------------|--------------|--------|------------|
| RT                        | EXP RT | DLT RT | RESPONSE ( ug/L) |         | ( ug/L)           | TARGET RANGE |        | RATIO      |
| ---                       | -----  | -----  | -----            | -----   | -----             | -----        | -----  | -----      |
| \$ 11 4cmx                |        |        |                  |         | CAS #: 877-09-8   |              |        |            |
| 2.297                     | 2.298  | -0.001 | 27836492         | 100.000 | 99.7              | 80.00-       | 120.00 | 100.00     |
| -----                     |        |        |                  |         |                   |              |        |            |
| \$ 12 Decachlorobiphenyl  |        |        |                  |         | CAS #: 2051-24-3  |              |        |            |
| 5.943                     | 5.944  | -0.001 | 18576215         | 100.000 | 106               | 80.00-       | 120.00 | 100.00     |
| -----                     |        |        |                  |         |                   |              |        |            |
| 1 Aroclor-1016            |        |        |                  |         | CAS #: 12674-11-2 |              |        |            |
| 3.194                     | 3.195  | -0.001 | 11633899         | 1000.00 | 954               | 80.00-       | 120.00 | 100.00 (M) |
| 3.276                     | 3.278  | -0.002 | 7638987          | 1000.00 | 932               | 45.66-       | 85.66  | 65.66      |
| 3.341                     | 3.341  | 0.000  | 4697437          | 1000.00 | 925               | 20.38-       | 60.38  | 40.38      |
| 3.567                     | 3.568  | -0.001 | 5952993          | 1000.00 | 930               | 31.17-       | 71.17  | 51.17      |
| 3.643                     | 3.644  | -0.001 | 5500663          | 1000.00 | 929               | 27.28-       | 67.28  | 47.28      |
| Average of Peak Amounts = |        |        |                  |         | 934               |              |        |            |
| -----                     |        |        |                  |         |                   |              |        |            |
| 7 Aroclor-1260            |        |        |                  |         | CAS #: 11096-82-5 |              |        |            |
| 4.333                     | 4.335  | -0.002 | 11411400         | 1000.00 | 957               | 80.00-       | 120.00 | 100.00     |
| 4.458                     | 4.459  | -0.001 | 13804017         | 1000.00 | 961               | 100.97-      | 140.97 | 120.97     |
| 4.724                     | 4.725  | -0.001 | 10442327         | 1000.00 | 957               | 71.51-       | 111.51 | 91.51      |
| 4.897                     | 4.899  | -0.002 | 10750486         | 1000.00 | 959               | 74.21-       | 114.21 | 94.21      |
| 5.045                     | 5.046  | -0.001 | 23833089         | 1000.00 | 982               | 188.85-      | 228.85 | 208.85     |
| Average of Peak Amounts = |        |        |                  |         | 963               |              |        |            |

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eod1a.i/012810a.b/032b3201.d

Date: 28-JAN-2010 14:56

Client ID: AR166002

Sample Info: INR0100104-60 02

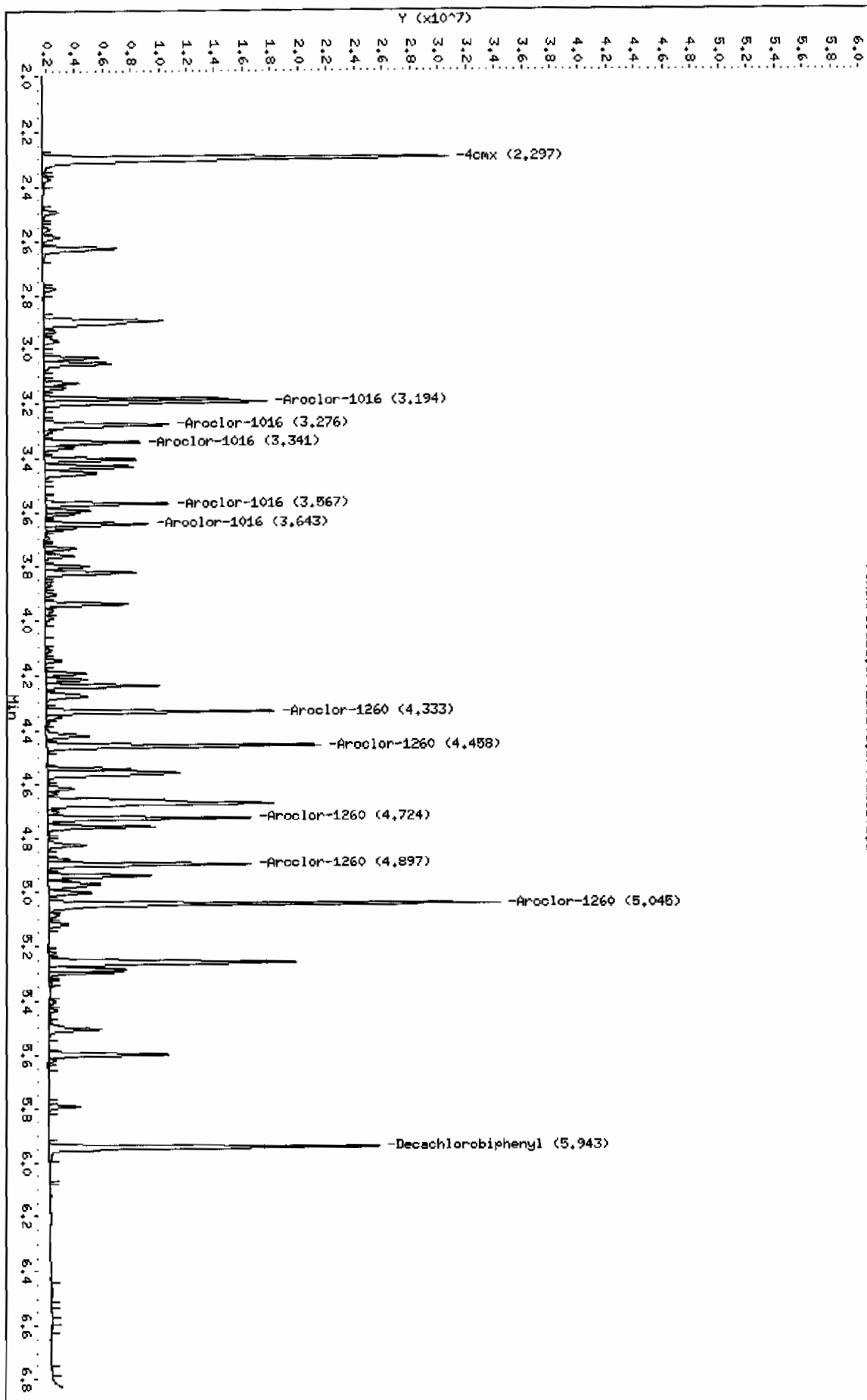
Column Phase: CLP2

Instrument: eod1a.i

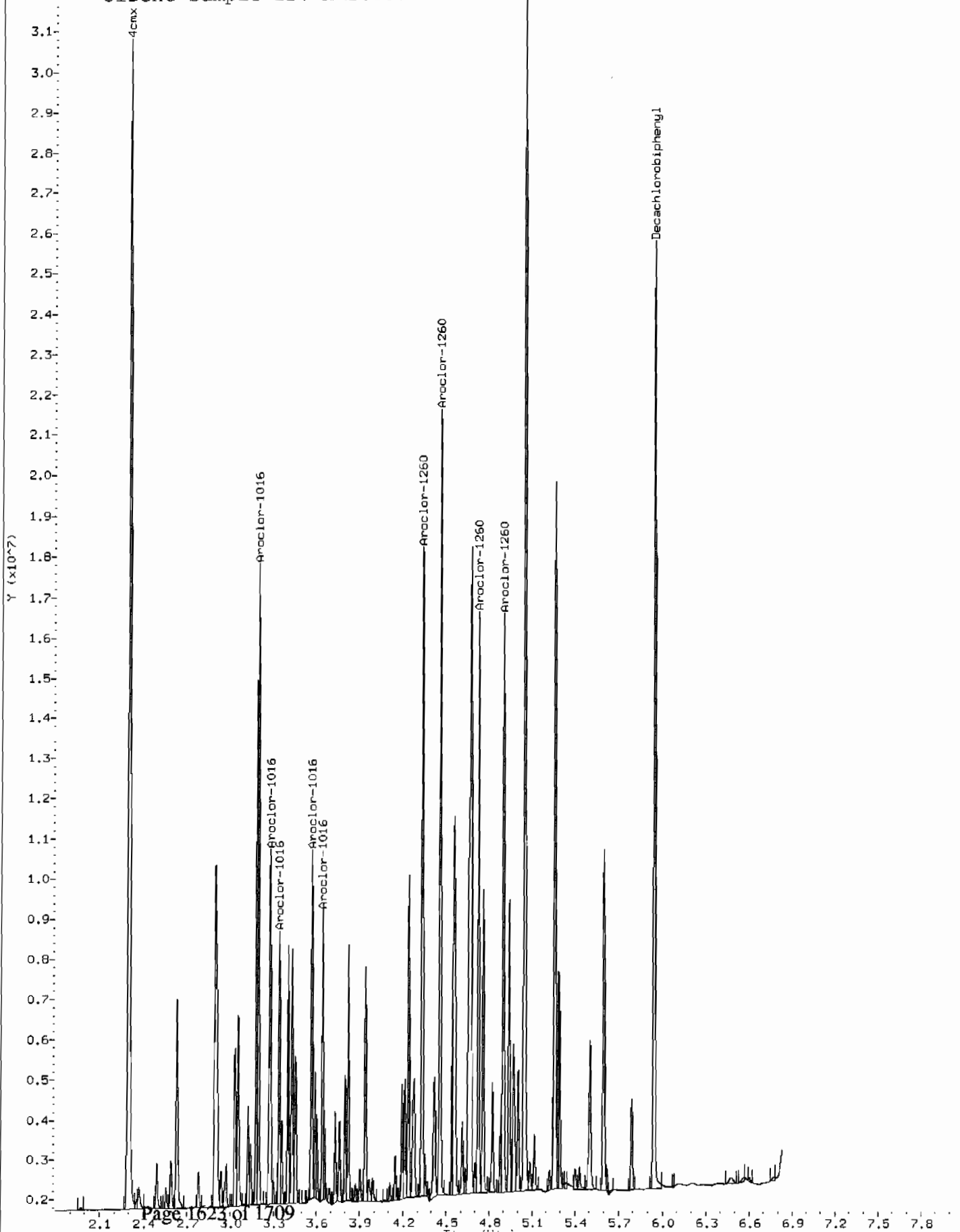
Operator: YSL

Column diameter: 0.25

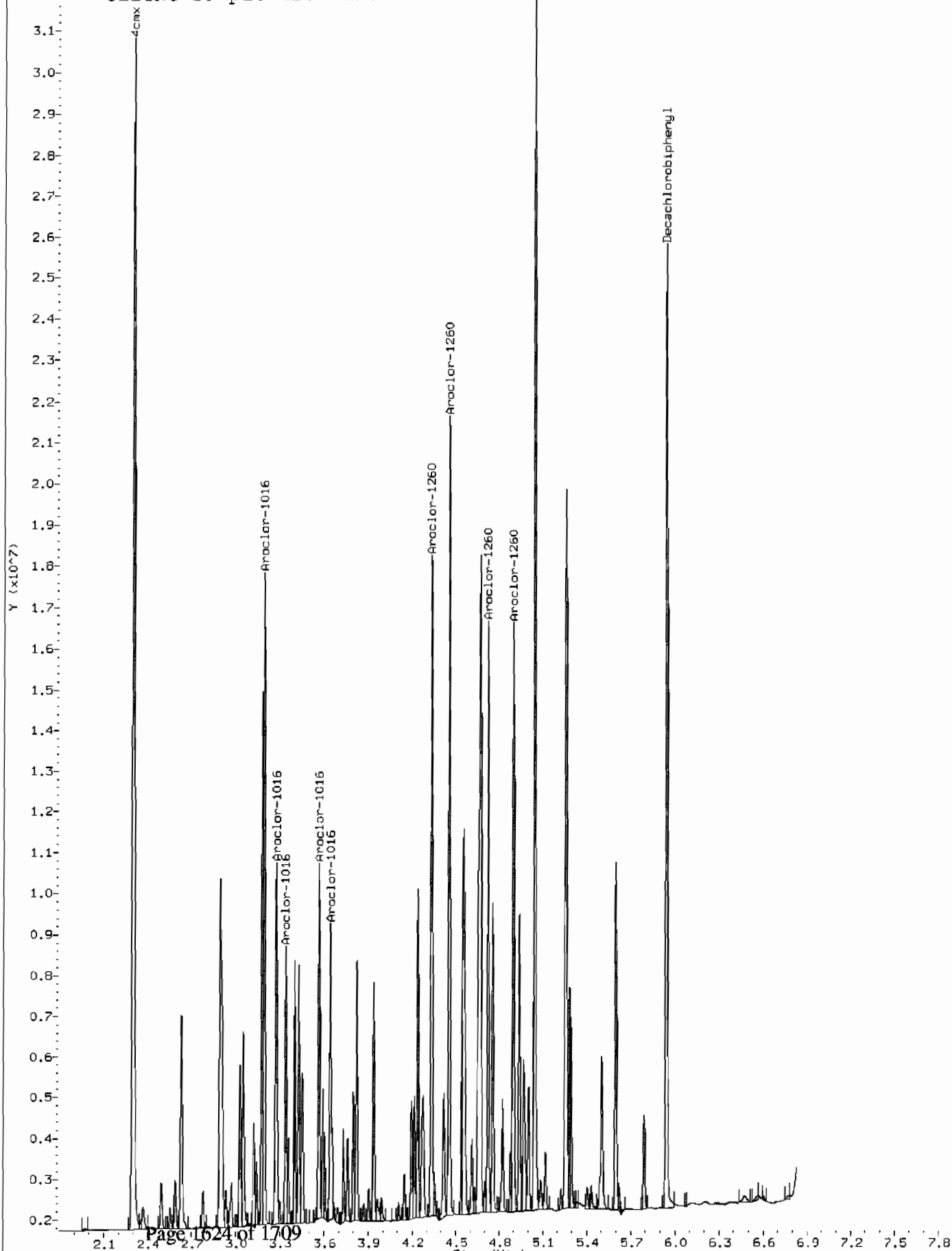
/chem/eod1a.i/012810a.b/032b3201.d



Comment: Manually Integrated  
Data File: /chem/ecdl1.i/012810a.b/032b3201.d  
Operator: YS1  
Injection Date: 28-JAN-2010 14:56  
Instrument: ecdl1.i  
Client Sample ID: AR166002



Comment: Before manual integration  
Data File: /chem/ecdl.a.i/012810a.b/orig-032b3201.d  
Operator: YS1  
Injection Date: 28-JAN-2010 14:56  
Instrument: ecdla.i  
Client Sample ID: AR166002



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/051f5101.d  
 Lab Smp Id: WAR100104-60 03 Client Smp ID: AR166003  
 Inj Date : 28-JAN-2010 18:38  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |WAR100104-60 03  
 Misc Info :  
 Comment :  
 Method : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m  
 Meth Date : 29-Jan-2010 06:55 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
 Als bottle: 51 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: AR1660.sub  
 Target Version: 3.50 Sample Matrix: None

AMOUNTS

|                           |        |        | CAL-AMT          |         | ON-COL            |              |        |        |
|---------------------------|--------|--------|------------------|---------|-------------------|--------------|--------|--------|
| RT                        | EXP RT | DLT RT | RESPONSE ( ug/L) |         | ( ug/L)           | TARGET RANGE |        | RATIO  |
| <hr/>                     |        |        |                  |         |                   |              |        |        |
| \$ 11 4cmx                |        |        |                  |         | CAS #: 877-09-8   |              |        |        |
| 1.966                     | 1.966  | 0.000  | 39601120         | 100.000 | 102               | 80.00-       | 120.00 | 100.00 |
| <hr/>                     |        |        |                  |         |                   |              |        |        |
| \$ 12 Decachlorobiphenyl  |        |        |                  |         | CAS #: 2051-24-3  |              |        |        |
| 5.277                     | 5.278  | -0.001 | 26195776         | 100.000 | 91.2              | 80.00-       | 120.00 | 100.00 |
| <hr/>                     |        |        |                  |         |                   |              |        |        |
| 1 Aroclor-1016            |        |        |                  |         | CAS #: 12674-11-2 |              |        |        |
| 2.421                     | 2.422  | -0.001 | 13468292         | 1000.00 | 977               | 80.00-       | 120.00 | 100.00 |
| 2.708                     | 2.710  | -0.002 | 17643264         | 1000.00 | 1010              | 110.41-      | 150.41 | 131.00 |
| 2.789                     | 2.791  | -0.002 | 11072496         | 1000.00 | 963               | 64.79-       | 104.79 | 82.21  |
| 2.827                     | 2.828  | -0.001 | 6660058          | 1000.00 | 973               | 30.68-       | 70.68  | 49.45  |
| 3.037                     | 3.039  | -0.002 | 8624865          | 1000.00 | 971               | 45.02-       | 85.02  | 64.04  |
| Average of Peak Amounts = |        |        |                  |         | 978               |              |        |        |
| <hr/>                     |        |        |                  |         |                   |              |        |        |
| 7 Aroclor-1260            |        |        |                  |         | CAS #: 11096-82-5 |              |        |        |
| 3.763                     | 3.765  | -0.002 | 16445980         | 1000.00 | 980               | 80.00-       | 120.00 | 100.00 |
| 3.926                     | 3.928  | -0.002 | 24856986         | 1000.00 | 981               | 131.11-      | 171.11 | 151.14 |
| 4.156                     | 4.158  | -0.002 | 14515485         | 1000.00 | 969               | 68.60-       | 108.60 | 88.26  |
| 4.299                     | 4.301  | -0.002 | 14999370         | 1000.00 | 964               | 71.52-       | 111.52 | 91.20  |
| 4.478                     | 4.480  | -0.002 | 34281505         | 1000.00 | 989               | 185.98-      | 225.98 | 208.45 |
| Average of Peak Amounts = |        |        |                  |         | 977               |              |        |        |

Data File: /chem/ecda.i/012810a.b/051f5101.d

Date: 28-JAN-2010 18:38

Client ID: AR16603

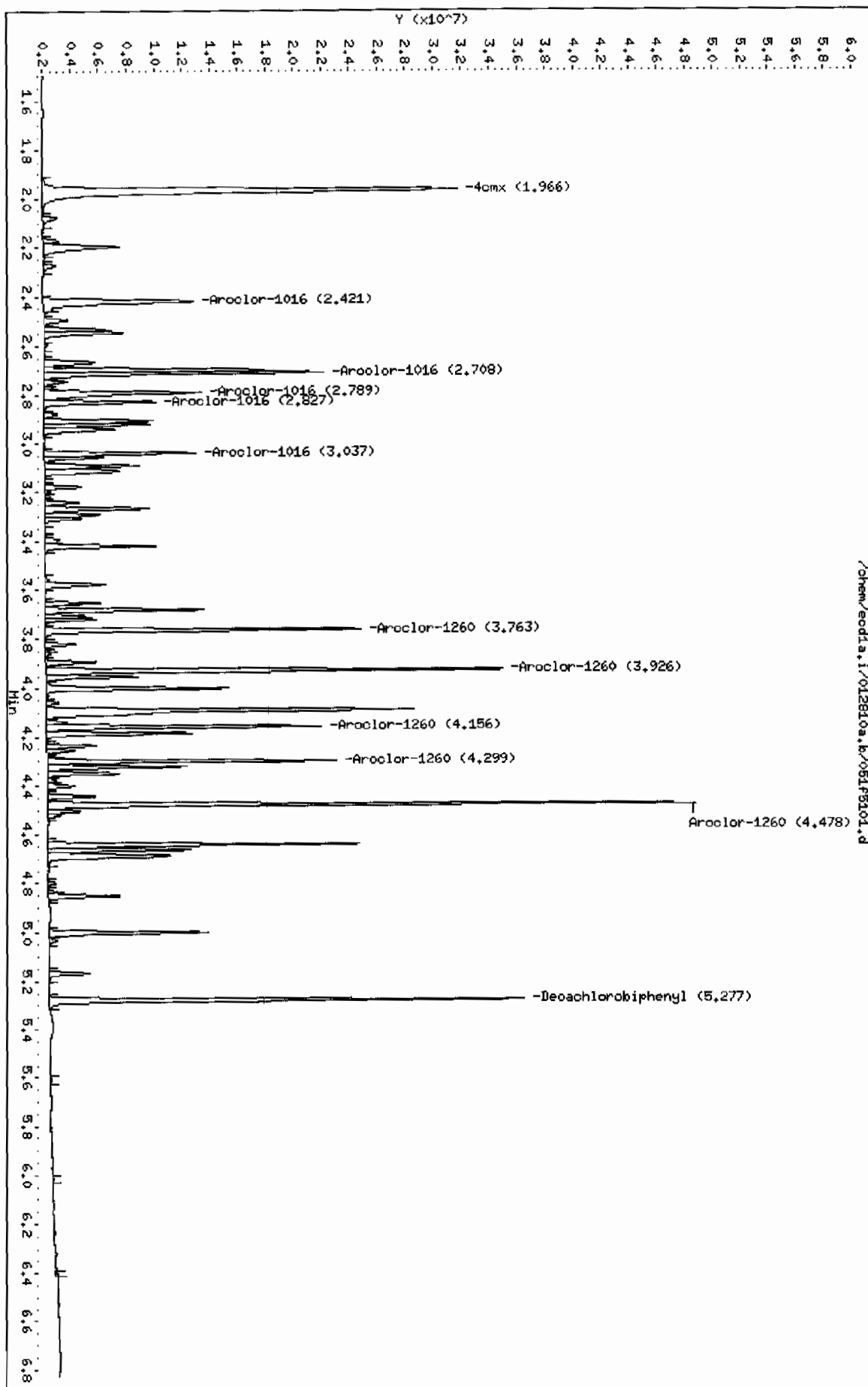
Sample Info: IMR100104-60 03

Column phase: CLP1

Instrument: ecda.i

Operator: YSL

Column diameter: 0.25





GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/051b5101.d  
 Lab Smp Id: WAR100104-60 03 Client Smp ID: AR166003  
 Inj Date : 28-JAN-2010 18:38  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |WAR100104-60 03  
 Misc Info :  
 Comment :  
 Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m  
 Meth Date : 29-Jan-2010 06:54 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
 Als bottle: 51 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: AR1660.sub  
 Target Version: 3.50 Sample Matrix: None

AMOUNTS

| RT                        | EXP RT | DLT RT | RESPONSE ( ug/L) | CAL-AMT ( ug/L) | ON-COL            | TARGET RANGE   | RATIO      |
|---------------------------|--------|--------|------------------|-----------------|-------------------|----------------|------------|
|                           |        |        |                  |                 |                   |                |            |
| \$ 11 4cmx                |        |        |                  |                 | CAS #: 877-09-8   |                |            |
| 2.297                     | 2.298  | -0.001 | 27840279         | 100.000         | 99.7              | 80.00- 120.00  | 100.00     |
| -----                     |        |        |                  |                 |                   |                |            |
| \$ 12 Decachlorobiphenyl  |        |        |                  |                 | CAS #: 2051-24-3  |                |            |
| 5.943                     | 5.944  | -0.001 | 17588694         | 100.000         | 101               | 80.00- 120.00  | 100.00     |
| -----                     |        |        |                  |                 |                   |                |            |
| 1 Aroclor-1016            |        |        |                  |                 | CAS #: 12674-11-2 |                |            |
| 3.194                     | 3.195  | -0.001 | 11844806         | 1000.00         | 971               | 80.00- 120.00  | 100.00 (M) |
| 3.277                     | 3.278  | -0.001 | 7613238          | 1000.00         | 929               | 44.90- 84.90   | 64.27      |
| 3.340                     | 3.341  | -0.001 | 4737947          | 1000.00         | 933               | 20.22- 60.22   | 40.00      |
| 3.567                     | 3.568  | -0.001 | 5921989          | 1000.00         | 926               | 30.82- 70.82   | 50.00      |
| 3.643                     | 3.644  | -0.001 | 5493730          | 1000.00         | 928               | 27.45- 67.45   | 46.38      |
| Average of Peak Amounts = |        |        |                  |                 | 938               |                |            |
| -----                     |        |        |                  |                 |                   |                |            |
| 7 Aroclor-1260            |        |        |                  |                 | CAS #: 11096-82-5 |                |            |
| 4.333                     | 4.335  | -0.002 | 11077109         | 1000.00         | 929               | 80.00- 120.00  | 100.00     |
| 4.458                     | 4.459  | -0.001 | 13481775         | 1000.00         | 938               | 101.61- 141.61 | 121.71     |
| 4.724                     | 4.725  | -0.001 | 10117432         | 1000.00         | 927               | 71.00- 111.00  | 91.34      |
| 4.898                     | 4.899  | -0.001 | 10366108         | 1000.00         | 925               | 73.09- 113.09  | 93.58      |
| 5.045                     | 5.046  | -0.001 | 23064767         | 1000.00         | 951               | 185.37- 225.37 | 208.22     |
| Average of Peak Amounts = |        |        |                  |                 | 934               |                |            |
| -----                     |        |        |                  |                 |                   |                |            |

QC Flag Legend

M - Compound response manually integrated.

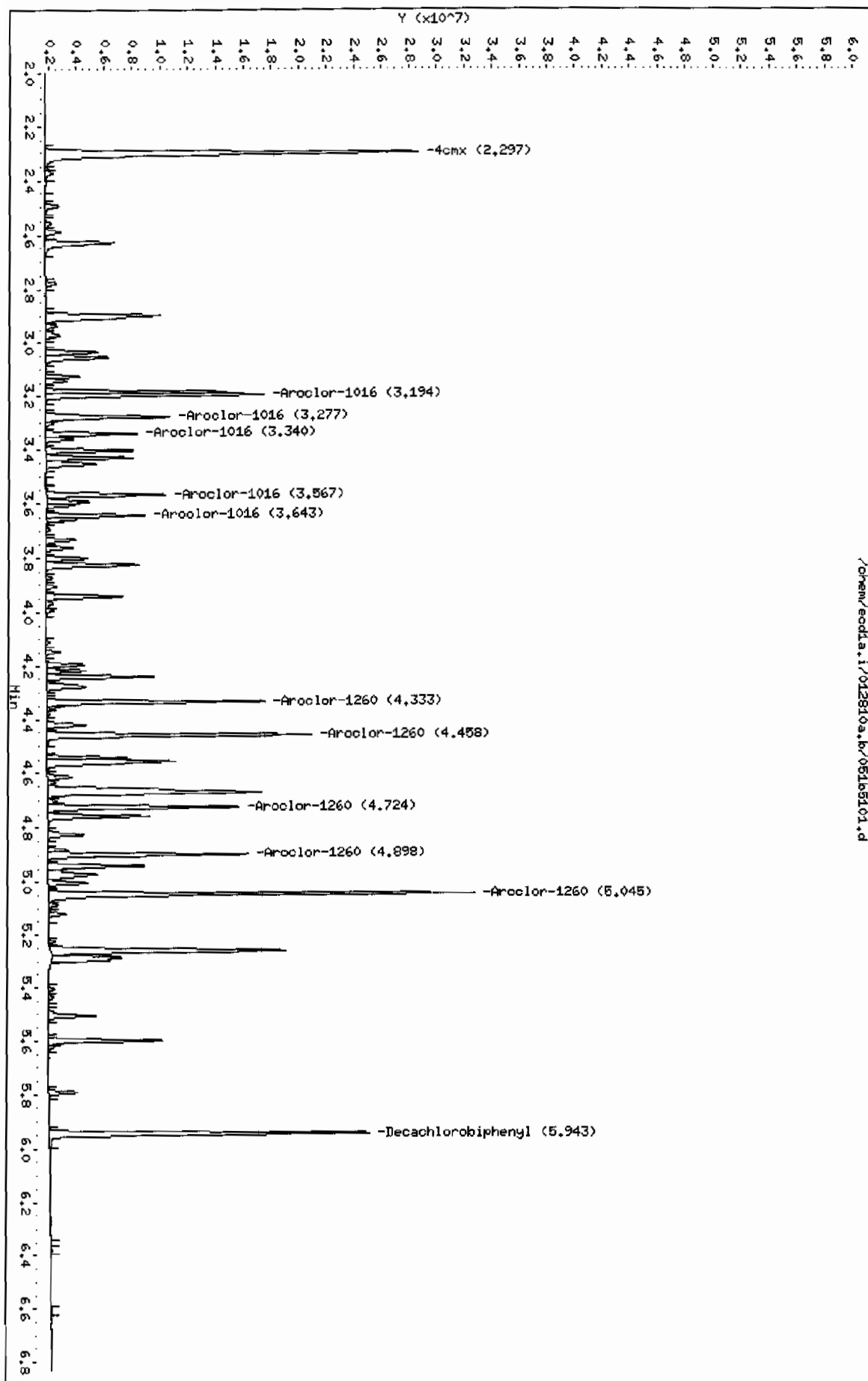
Data File: /chem/ecdda.i/012810a.k/051b5101.d  
Date: 28-JAN-2010 18:38  
Client ID: AR166003  
Sample Info: IMR100104-60 03

Instrument: ecdda.i

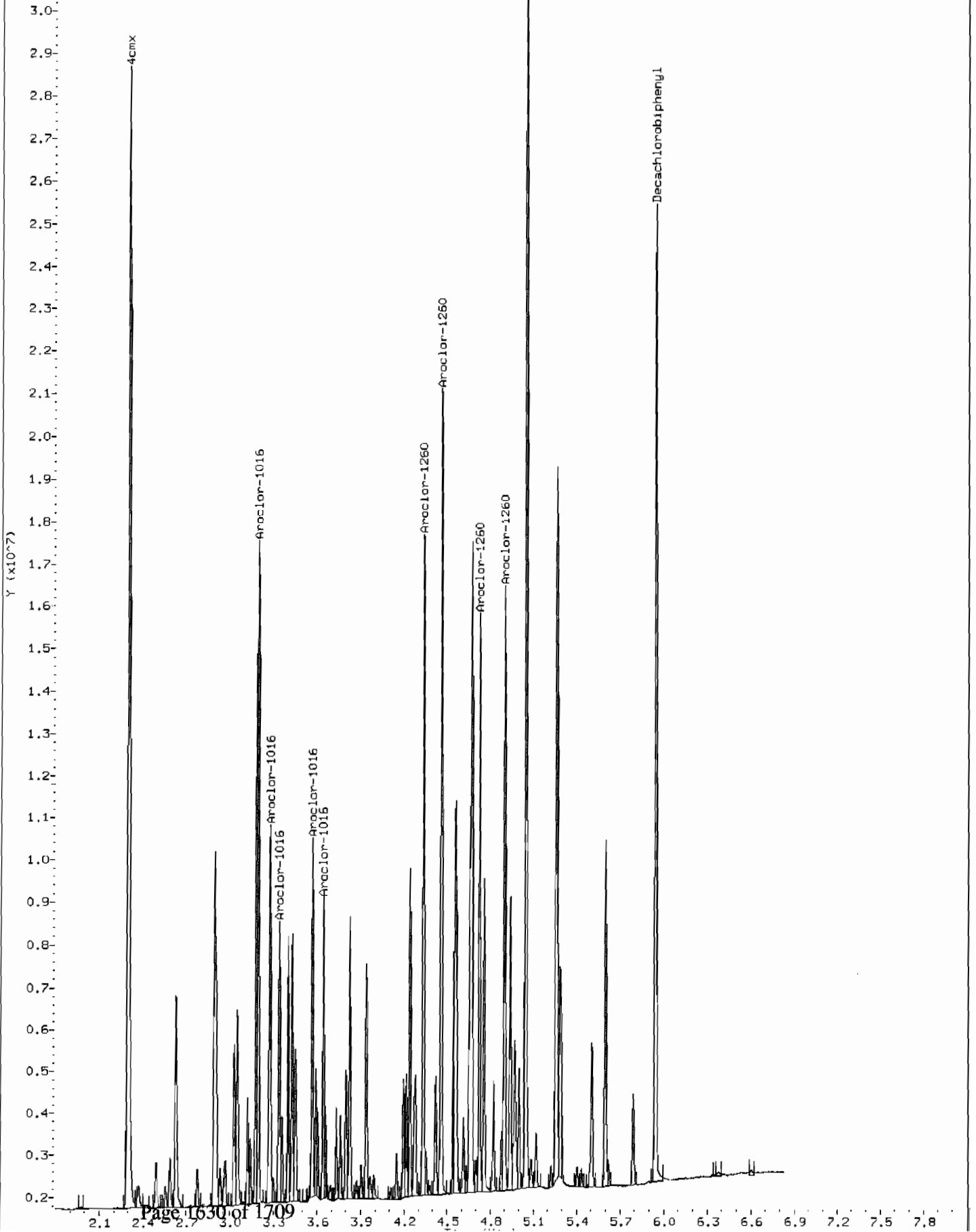
Page 1

Column phase: CLP2

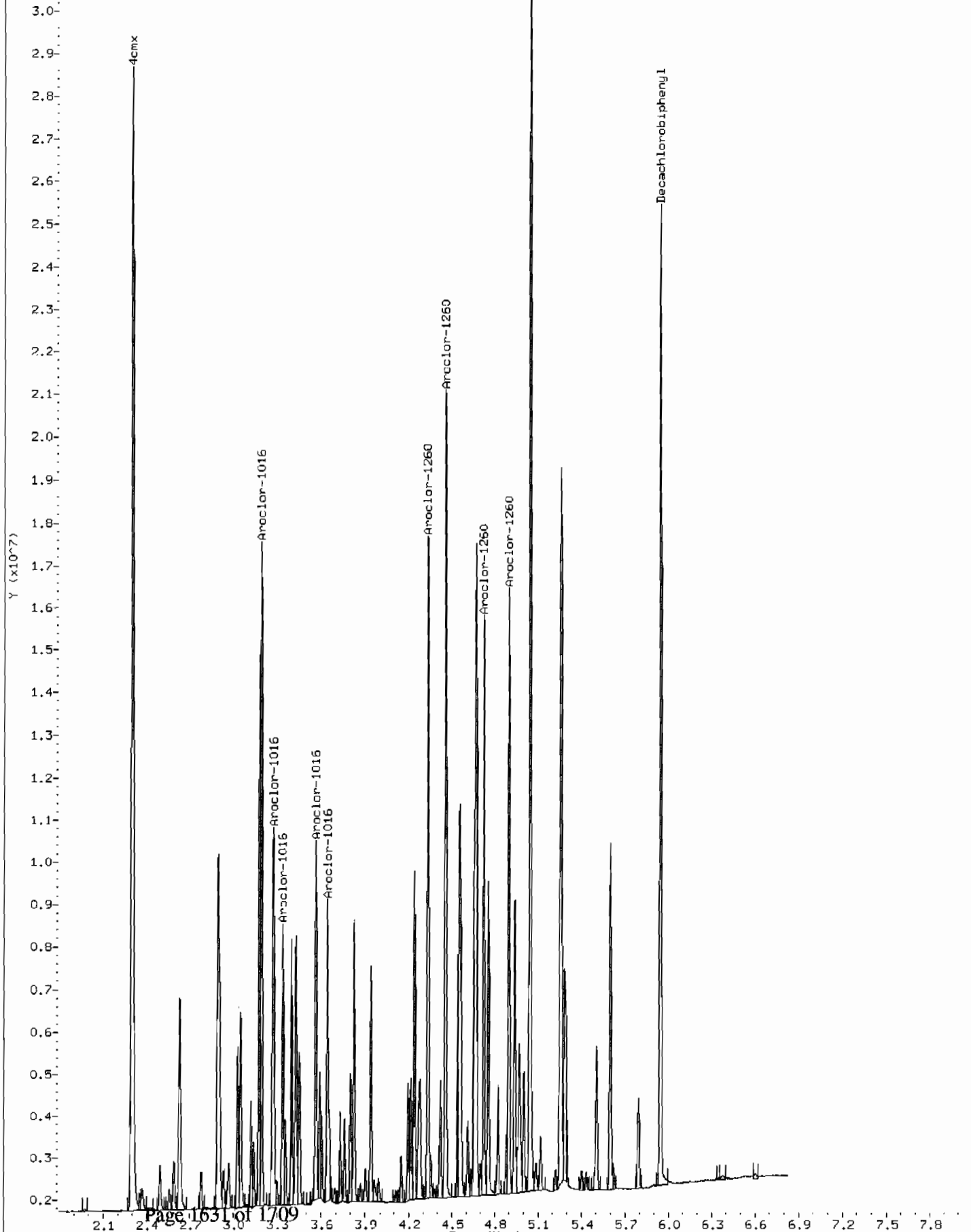
Operator: YSL  
Column diameter: 0.25



Comment: Manually Integrated  
Data File: /chem/ecdl1a.i/012810a.b/051b5101.d  
Operator: YS1  
Injection Date: 28-JAN-2010 18:38  
Instrument: ecd1a.i  
Client Sample ID: AR166003



Comment: Before manual integration  
Data File: /chem/ecdl1.i/012810a.b/orig-051b5101.d  
Operator: YS1  
Injection Date: 28-JAN-2010 18:38  
Instrument: ecd1a.i  
Client Sample ID: AR166003



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

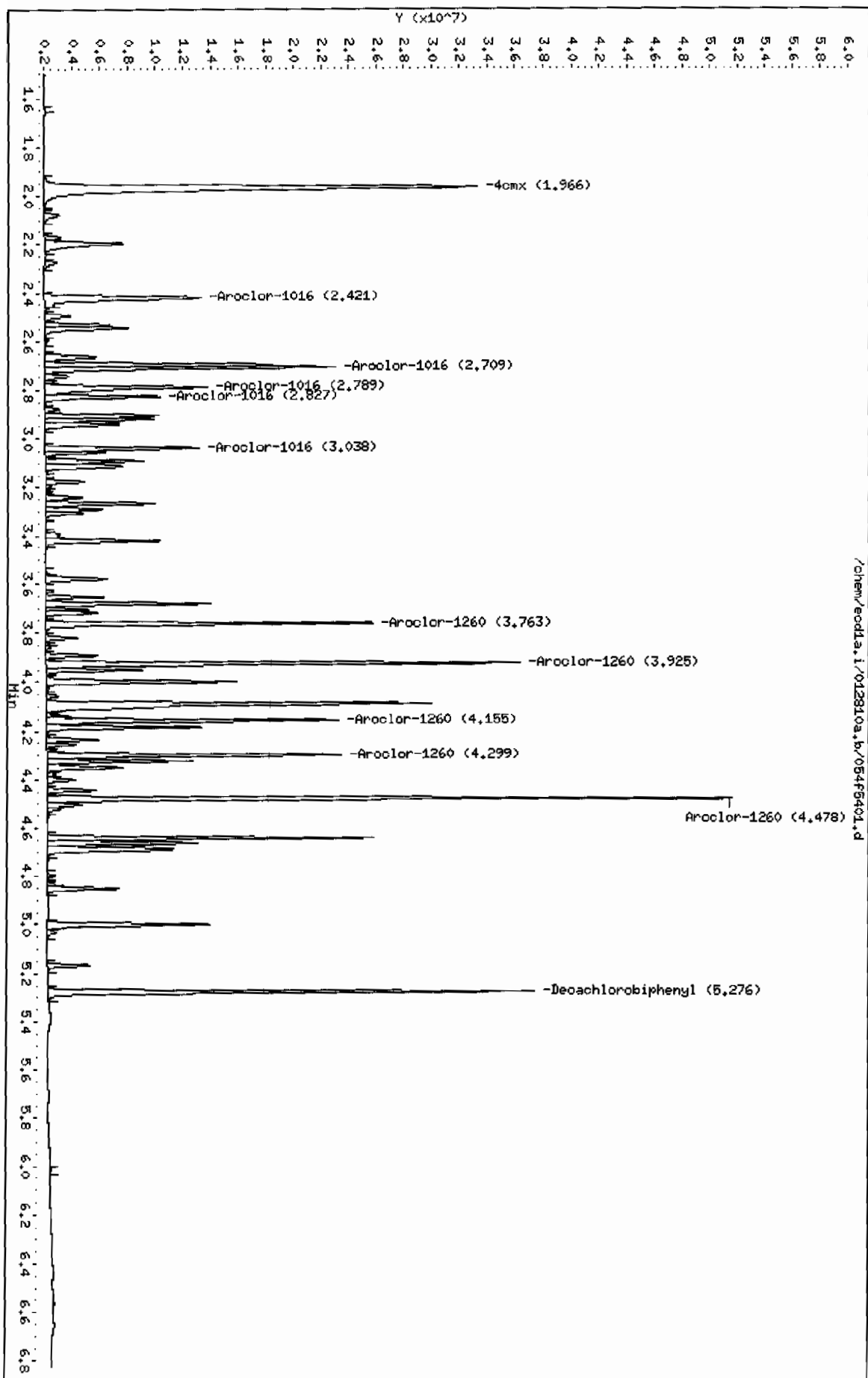
Data file : /chem/ecdl1a.i/012810a.b/054f5401.d  
 Lab Smp Id: WAR100104-60 04 Client Smp ID: AR166004  
 Inj Date : 28-JAN-2010 19:17  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |WAR100104-60 04  
 Misc Info :  
 Comment :  
 Method : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m  
 Meth Date : 29-Jan-2010 06:55 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
 Als bottle: 54 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: AR1660.sub  
 Target Version: 3.50 Sample Matrix: None

| AMOUNTS                   |        |        |          |         |                   |              |        |        |
|---------------------------|--------|--------|----------|---------|-------------------|--------------|--------|--------|
|                           |        |        | CAL-AMT  |         | ON-COL            |              |        |        |
| RT                        | EXP RT | DLT RT | RESPONSE | ( ug/L) | ( ug/L)           | TARGET RANGE | RATIO  |        |
| ==                        | =====  | =====  | =====    | =====   | =====             | =====        | =====  | =====  |
| \$ 11 4cmx                |        |        |          |         | CAS #: 877-09-8   |              |        |        |
| 1.966                     | 1.966  | 0.000  | 41153657 | 100.000 | 106               | 80.00-       | 120.00 | 100.00 |
| -----                     |        |        |          |         |                   |              |        |        |
| \$ 12 Decachlorobiphenyl  |        |        |          |         | CAS #: 2051-24-3  |              |        |        |
| 5.276                     | 5.278  | -0.002 | 26564511 | 100.000 | 92.5              | 80.00-       | 120.00 | 100.00 |
| -----                     |        |        |          |         |                   |              |        |        |
| 1 Aroclor-1016            |        |        |          |         | CAS #: 12674-11-2 |              |        |        |
| 2.421                     | 2.422  | -0.001 | 13894723 | 1000.00 | 1010              | 80.00-       | 120.00 | 100.00 |
| 2.709                     | 2.710  | -0.001 | 18307421 | 1000.00 | 1040              | 110.41-      | 150.41 | 131.76 |
| 2.789                     | 2.791  | -0.002 | 11462810 | 1000.00 | 997               | 64.79-       | 104.79 | 82.50  |
| 2.827                     | 2.828  | -0.001 | 6883260  | 1000.00 | 1000              | 30.68-       | 70.68  | 49.54  |
| 3.038                     | 3.039  | -0.001 | 8939691  | 1000.00 | 1010              | 45.02-       | 85.02  | 64.34  |
| Average of Peak Amounts = |        |        |          |         | 1.01e+03          |              |        |        |
| -----                     |        |        |          |         |                   |              |        |        |
| 7 Aroclor-1260            |        |        |          |         | CAS #: 11096-82-5 |              |        |        |
| 3.763                     | 3.765  | -0.002 | 17156094 | 1000.00 | 1020              | 80.00-       | 120.00 | 100.00 |
| 3.925                     | 3.928  | -0.003 | 25948677 | 1000.00 | 1020              | 131.11-      | 171.11 | 151.25 |
| 4.155                     | 4.158  | -0.003 | 15192163 | 1000.00 | 1010              | 68.60-       | 108.60 | 88.55  |
| 4.299                     | 4.301  | -0.002 | 15723039 | 1000.00 | 1010              | 71.52-       | 111.52 | 91.65  |
| 4.478                     | 4.480  | -0.002 | 35874496 | 1000.00 | 1040              | 185.98-      | 225.98 | 209.11 |
| Average of Peak Amounts = |        |        |          |         | 1.02e+03          |              |        |        |

Data File: /chem/ecdl1.i/012810a.b/054f5401.d  
Date: 28-JAN-2010 19:17  
Client ID: HR166004  
Sample Info: HR100104-60 04

Column phase: CLP1

Instrument: ecdl1.i  
Operator: YSL  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012810a.b/054b5401.d  
 Lab Smp Id: WAR100104-60 04 Client Smp ID: AR166004  
 Inj Date : 28-JAN-2010 19:17  
 Operator : YS1 Inst ID: ecdla.i  
 Smp Info : |WAR100104-60 04  
 Misc Info :  
 Comment :  
 Method : /chem/ecdla.i/012810a.b/ECD1-B-8082-121409.m  
 Meth Date : 29-Jan-2010 06:54 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
 Als bottle: 54 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: AR1660.sub  
 Target Version: 3.50 Sample Matrix: None

| AMOUNTS                   |        |        |                  |         |                   |              |        |            |       |
|---------------------------|--------|--------|------------------|---------|-------------------|--------------|--------|------------|-------|
|                           |        |        | CAL-AMT          |         | ON-COL            |              |        |            |       |
| RT                        | EXP RT | DLT RT | RESPONSE ( ug/L) |         | ( ug/L)           | TARGET RANGE |        | RATIO      |       |
| ==                        | =====  | =====  | =====            | =====   | =====             | =====        |        | =====      | ===== |
| -----                     |        |        |                  |         |                   |              |        |            |       |
| \$ 11 4cmx                |        |        |                  |         | CAS #: 877-09-8   |              |        |            |       |
| 2.298                     | 2.298  | 0.000  | 29109889         | 100.000 | 104               | 80.00-       | 120.00 | 100.00     |       |
| -----                     |        |        |                  |         |                   |              |        |            |       |
| \$ 12 Decachlorobiphenyl  |        |        |                  |         | CAS #: 2051-24-3  |              |        |            |       |
| 5.943                     | 5.944  | -0.001 | 18675177         | 100.000 | 107               | 80.00-       | 120.00 | 100.00     |       |
| -----                     |        |        |                  |         |                   |              |        |            |       |
| 1 Aroclor-1016            |        |        |                  |         | CAS #: 12674-11-2 |              |        |            |       |
| 3.194                     | 3.195  | -0.001 | 12074753         | 1000.00 | 990               | 80.00-       | 120.00 | 100.00 (M) |       |
| 3.277                     | 3.278  | -0.001 | 7993001          | 1000.00 | 976               | 44.90-       | 84.90  | 66.20      |       |
| 3.340                     | 3.341  | -0.001 | 4972829          | 1000.00 | 979               | 20.22-       | 60.22  | 41.18      |       |
| 3.567                     | 3.568  | -0.001 | 6174918          | 1000.00 | 965               | 30.82-       | 70.82  | 51.14      |       |
| 3.643                     | 3.644  | -0.001 | 5764870          | 1000.00 | 974               | 27.45-       | 67.45  | 47.74      |       |
| Average of Peak Amounts = |        |        |                  |         | 977               |              |        |            |       |
| -----                     |        |        |                  |         |                   |              |        |            |       |
| 7 Aroclor-1260            |        |        |                  |         | CAS #: 11096-82-5 |              |        |            |       |
| 4.334                     | 4.335  | -0.001 | 11709739         | 1000.00 | 982               | 80.00-       | 120.00 | 100.00     |       |
| 4.458                     | 4.459  | -0.001 | 14298182         | 1000.00 | 995               | 101.61-      | 141.61 | 122.11     |       |
| 4.724                     | 4.725  | -0.001 | 10676849         | 1000.00 | 979               | 71.00-       | 111.00 | 91.18      |       |
| 4.898                     | 4.899  | -0.001 | 10927237         | 1000.00 | 975               | 73.09-       | 113.09 | 93.32      |       |
| 5.044                     | 5.046  | -0.002 | 24310655         | 1000.00 | 1000              | 185.37-      | 225.37 | 207.61     |       |
| Average of Peak Amounts = |        |        |                  |         | 987               |              |        |            |       |



QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdda.i/012810a.b/054b5401.d

Date: 28-JAN-2010 19:17

Client ID: AR166004

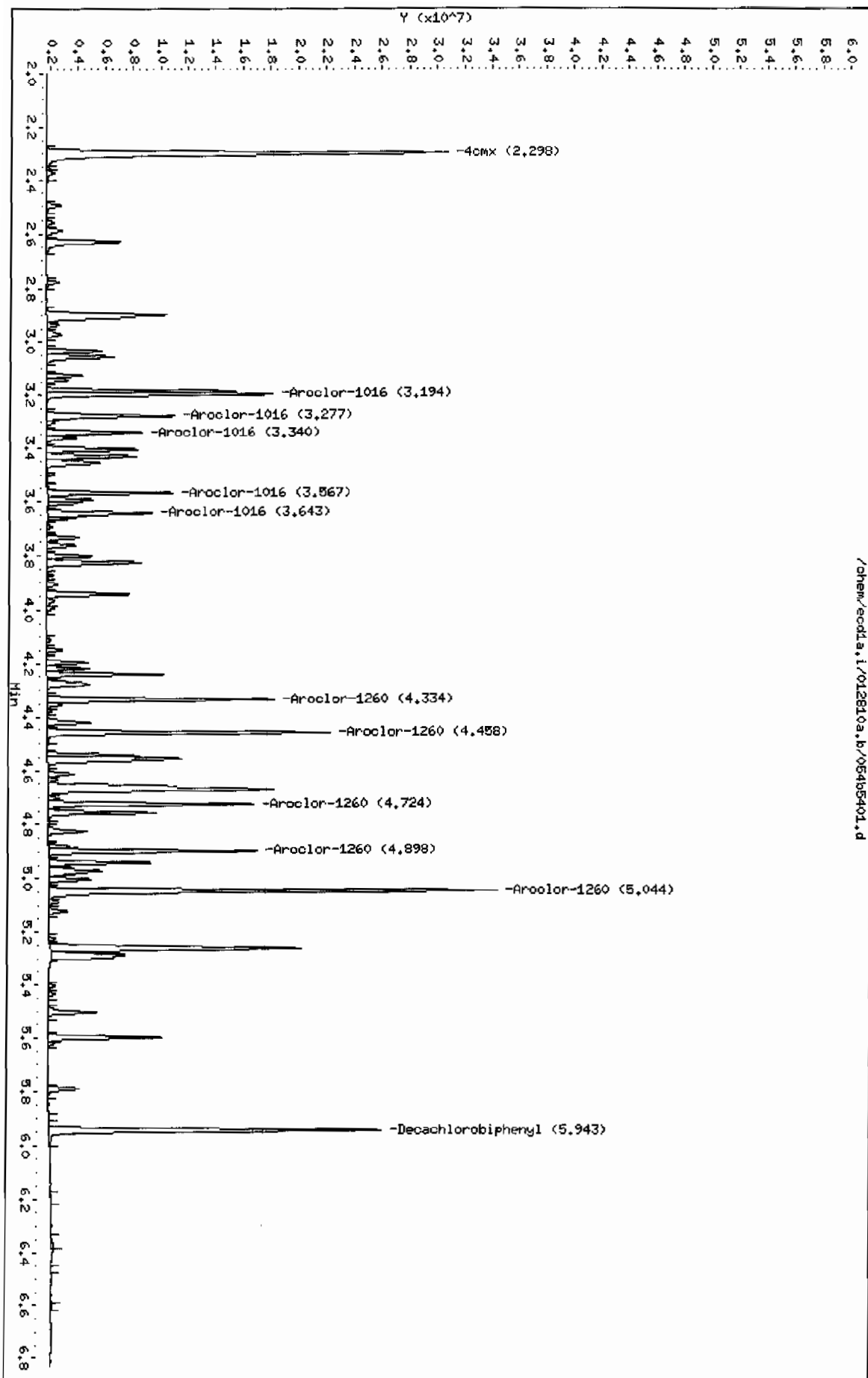
Sample Info: 114R00104-60 04

Column phase: CLP2

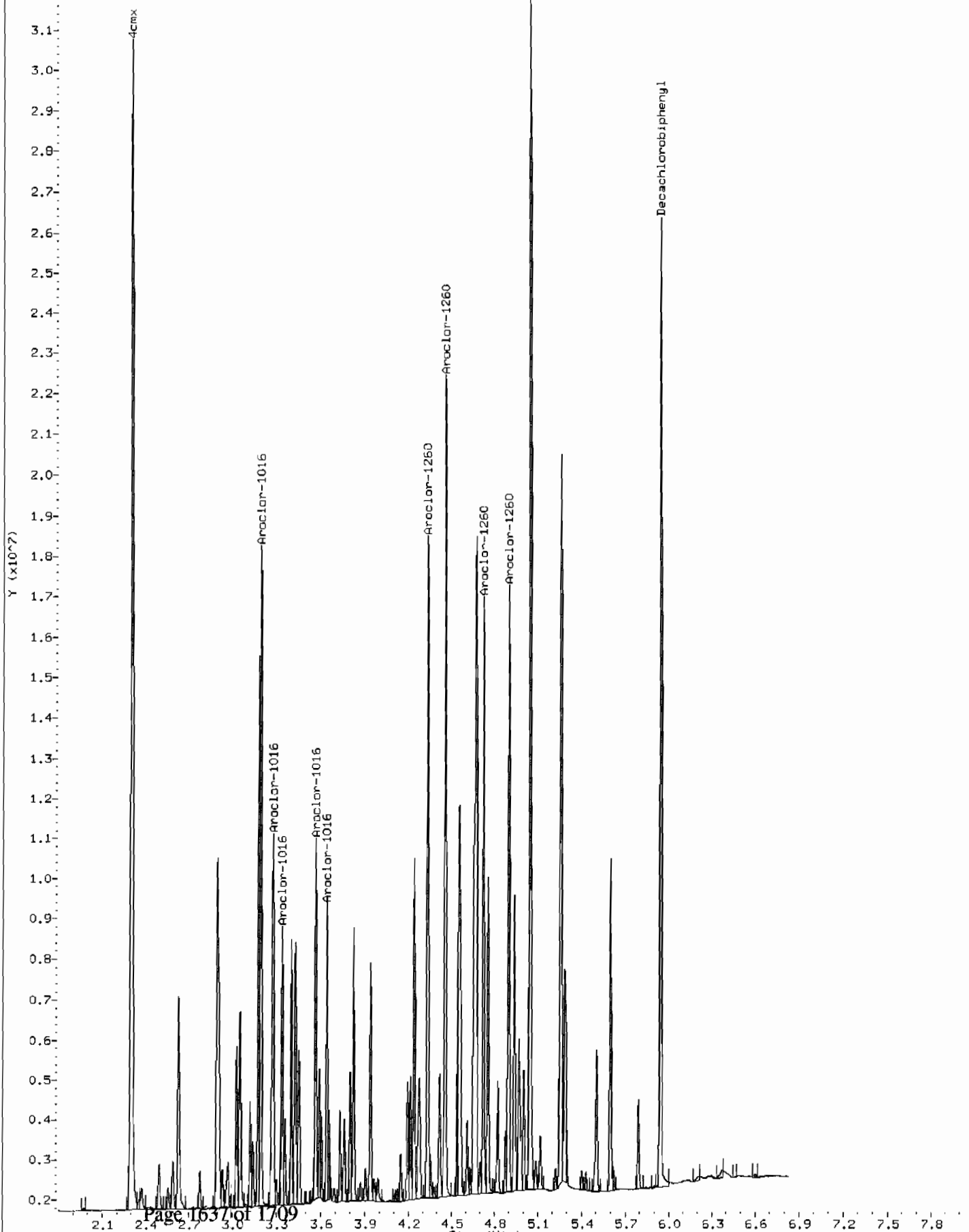
Instrument: ecdda.i

Operator: YSL

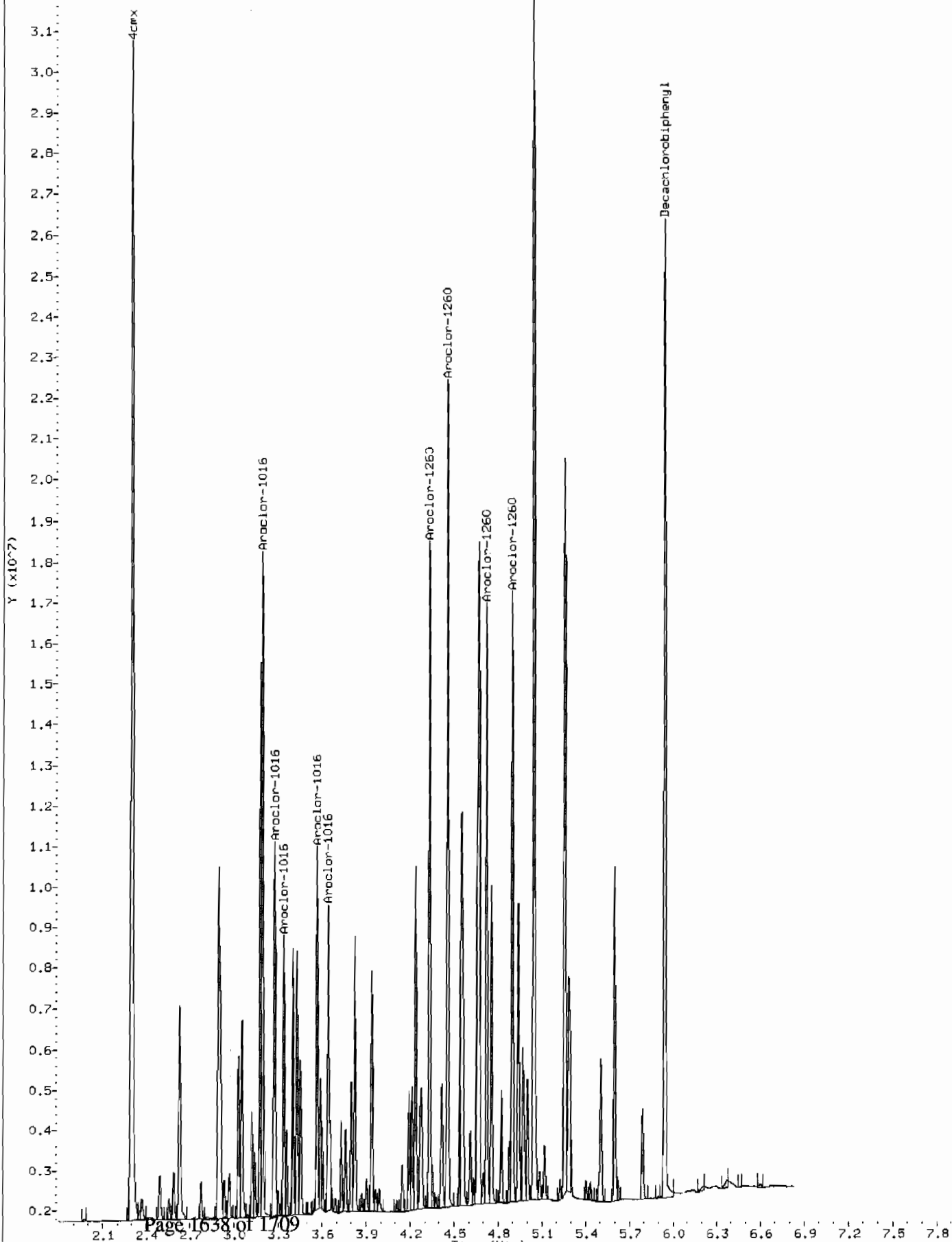
Column diameter: 0.25



Comment: Manually Integrated  
Data File: /chem/ecdl1a.i/012810a.b/054b5401.d  
Operator: YS1  
Injection Date: 28-JAN-2010 19:17  
Instrument: ecd1a.i  
Client Sample ID: AR166004



Comment: Before manual integration  
Data File: /chem/ecdl1a.i/012810a.b/orig-054b5401.d  
Operator: YS1  
Injection Date: 28-JAN-2010 19:17  
Instrument: ecd1a.i  
Client Sample ID: AR166004



8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

| MEAN SURROGATE RT FROM INITIAL CALIBRATION |                  |                  |                  |           |      |           |   |
|--|------------------|------------------|------------------|-----------|------|-----------|---|
| S1 : 1.97                                  |                  |                  |                  | DCB: 5.29 |      |           |   |
| EPA<br>SAMPLE NO.                          | LAB<br>SAMPLE ID | DATE<br>ANALYZED | TIME<br>ANALYZED | SI<br>RT  | #    | DCB<br>RT | # |
| 01   | PIBLK01          | WAR091130-99     | 12/14/09         | 0444      | 1.97 | 5.29      |   |
| 02   | ZZZZZ            | ZZZZZ            | 12/14/09         | 0454      | 1.97 | 5.29      |   |
| 03   | ZZZZZ            | ZZZZZ            | 12/14/09         | 0505      | 1.97 | 5.29      |   |
| 04   | ZZZZZ            | ZZZZZ            | 12/14/09         | 0515      | 1.97 | 5.29      |   |
| 05   | ZZZZZ            | ZZZZZ            | 12/14/09         | 0526      | 1.97 | 5.29      |   |
| 06   | AR123201         | WAR090930-32     | 12/14/09         | 0536      | 1.97 | 5.29      |   |
| 07   | AR122101         | WAR090803-21     | 12/14/09         | 0547      | 1.97 | 5.29      |   |
| 08   | AR126201         | WAR090803-62     | 12/14/09         | 0558      | 1.97 | 5.29      |   |
| 09   | ZZZZZ            | ZZZZZ            | 12/14/09         | 0608      | 1.97 | 5.29      |   |
| 10   | ZZZZZ            | ZZZZZ            | 12/14/09         | 0619      | 1.97 | 5.29      |   |
| 11   | ZZZZZ            | ZZZZZ            | 12/14/09         | 0629      | 1.97 | 5.29      |   |
| 12   | ZZZZZ            | ZZZZZ            | 12/14/09         | 0640      | 1.97 | 5.29      |   |
| 13   | ZZZZZ            | ZZZZZ            | 12/14/09         | 0650      | 1.97 | 5.29      |   |
| 14   | ZZZZZ            | ZZZZZ            | 12/14/09         | 0701      | 1.97 | 5.29      |   |
| 15   | ZZZZZ            | ZZZZZ            | 12/14/09         | 0711      | 1.97 | 5.29      |   |
| 16   | AR125401         | WAR091214-05     | 12/14/09         | 0722      | 1.97 | 5.29      |   |
| 17   | AR125402         | WAR091214-06     | 12/14/09         | 0732      | 1.97 | 5.29      |   |
| 18   | AR125403         | WAR091214-07     | 12/14/09         | 0743      | 1.97 | 5.29      |   |
| 19   | AR125404         | WAR091214-08     | 12/14/09         | 0753      | 1.97 | 5.29      |   |
| 20   | AR125405         | IAR091027-01     | 12/14/09         | 0804      | 1.97 | 5.29      |   |
| 21   | AR125401         | WAR091102-54     | 12/14/09         | 0814      | 1.97 | 5.29      |   |
| 22   | AR124201         | WAR091214-09     | 12/14/09         | 0825      | 1.97 | 5.29      |   |
| 23   | AR124202         | WAR091214-10     | 12/14/09         | 0835      | 1.97 | 5.29      |   |
| 24   | AR124203         | WAR091214-11     | 12/14/09         | 0846      | 1.97 | 5.29      |   |
| 25   | AR124204         | WAR091214-12     | 12/14/09         | 0856      | 1.97 | 5.29      |   |
| 26   | AR124205         | IAR0911111-0     | 12/14/09         | 0907      | 1.97 | 5.29      |   |
| 27   | AR124201         | WAR091102-42     | 12/14/09         | 0917      | 1.97 | 5.29      |   |
| 28   | AR124801         | WAR091214-13     | 12/14/09         | 0928      | 1.97 | 5.29      |   |
| 29   | AR124802         | WAR091214-14     | 12/14/09         | 0938      | 1.97 | 5.29      |   |
| 30   | AR124803         | WAR091214-15     | 12/14/09         | 0949      | 1.97 | 5.29      |   |
| 31   | AR124804         | WAR091214-16     | 12/14/09         | 0959      | 1.97 | 5.29      |   |
| 32   | AR124805         | IAR091027-02     | 12/14/09         | 1010      | 1.97 | 5.29      |   |

QC LIMITS  
S1 = 4cmx (+/- 0.03 MINUTES)  
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

## PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

| MEAN SURROGATE RT FROM INITIAL CALIBRATION |                  |                  |                  |            |             |      |
|--|------------------|------------------|------------------|------------|-------------|------|
| S1 : 1.97                                  |                  |                  | DCB: 5.29        |            |             |      |
| EPA<br>SAMPLE NO.                          | LAB<br>SAMPLE ID | DATE<br>ANALYZED | TIME<br>ANALYZED | S1<br>RT # | DCB<br>RT # |      |
| 01   | AR124801         | WAR091027-48     | 12/14/09         | 1020       | 1.97        | 5.29 |
| 02   | AR166001         | WAR091214-01     | 12/14/09         | 1031       | 1.97        | 5.29 |
| 03   | AR166002         | WAR091214-02     | 12/14/09         | 1041       | 1.97        | 5.29 |
| 04   | AR166003         | WAR091214-03     | 12/14/09         | 1052       | 1.97        | 5.29 |
| 05   | AR166004         | WAR091214-04     | 12/14/09         | 1102       | 1.97        | 5.29 |
| 06   | AR166005         | IAR091102-01     | 12/14/09         | 1113       | 1.97        | 5.29 |
| 07   | AR166001         | WAR091211-60     | 12/14/09         | 1123       | 1.97        | 5.29 |
| 08   | AR126801         | WAR091214-17     | 12/14/09         | 1134       | 1.97        | 5.29 |
| 09   | AR126802         | WAR091214-18     | 12/14/09         | 1144       | 1.97        | 5.29 |
| 10   | AR126803         | WAR091214-19     | 12/14/09         | 1155       | 1.97        | 5.29 |
| 11   | AR126804         | WAR091214-20     | 12/14/09         | 1206       | 1.97        | 5.29 |
| 12   | AR126805         | IAR090817-02     | 12/14/09         | 1216       | 1.97        | 5.29 |
| 13   | AR126801         | WAR091106-68     | 12/14/09         | 1227       | 1.97        | 5.29 |
| 14   | DDTANALOGSTD     | WAR091020-DD     | 12/14/09         | 1237       |             |      |
| 15   | PIBLK02          | WAR091130-99     | 12/14/09         | 1248       | 1.97        | 5.29 |
| 16   | ZZZZZ            | ZZZZZ            | 12/14/09         | 1258       | 1.97        | 5.29 |
| 17   | ZZZZZ            | ZZZZZ            | 12/14/09         | 1309       | 1.97        | 5.29 |
| 18   | ZZZZZ            | ZZZZZ            | 12/14/09         | 1319       | 1.97        | 5.29 |
| 19   | ZZZZZ            | ZZZZZ            | 12/14/09         | 1330       | 1.97        | 5.29 |
| 20   | ZZZZZ            | ZZZZZ            | 12/14/09         | 1340       | 1.97        | 5.29 |
| 21   | ZZZZZ            | ZZZZZ            | 12/14/09         | 1351       | 1.97        | 5.29 |
| 22   | ZZZZZ            | ZZZZZ            | 12/14/09         | 1403       | 1.97        | 5.29 |
| 23   | ZZZZZ            | ZZZZZ            | 12/14/09         | 1416       | 1.97        | 5.29 |
| 24   | ZZZZZ            | ZZZZZ            | 12/14/09         | 1429       | 1.97        | 5.29 |
| 25   | ZZZZZ            | ZZZZZ            | 12/14/09         | 1441       | 1.97        | 5.29 |
| 26   | AR166002         | WAR091211-60     | 12/14/09         | 1452       | 1.97        | 5.29 |
| 27   | PIBLK03          | WAR091130-99     | 12/14/09         | 1502       | 1.97        | 5.29 |
| 28   | ZZZZZ            | ZZZZZ            | 12/14/09         | 1513       | 1.97        | 5.29 |
| 29   | ZZZZZ            | ZZZZZ            | 12/14/09         | 1525       | 1.97        | 5.29 |
| 30   | ZZZZZ            | ZZZZZ            | 12/14/09         | 1538       | 1.97        | 5.29 |
| 31   | ZZZZZ            | ZZZZZ            | 12/14/09         | 1551       | 1.97        | 5.29 |
| 32   | ZZZZZ            | ZZZZZ            | 12/14/09         | 1603       | 1.97        | 5.27 |

QC LIMITS  
 S1 = 4cmx (+/- 0.03 MINUTES)  
 DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
 \* Values outside of QC limits.

8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

| MEAN SURROGATE RT FROM INITIAL CALIBRATION |                  |                  |                  |            |             |
|--|------------------|------------------|------------------|------------|-------------|
| S1 : 2.30                                  |                  | DCB: 5.94        |                  |            |             |
| EPA<br>SAMPLE NO.                          | LAB<br>SAMPLE ID | DATE<br>ANALYZED | TIME<br>ANALYZED | S1<br>RT # | DCB<br>RT # |
| 01   | PIBLK01          | WAR091130-99     | 12/14/09 0444    | 2.30       | 5.95        |
| 02   | ZZZZZ            | ZZZZZ            | 12/14/09 0454    | 2.30       | 5.94        |
| 03   | ZZZZZ            | ZZZZZ            | 12/14/09 0505    | 2.30       | 5.95        |
| 04   | ZZZZZ            | ZZZZZ            | 12/14/09 0515    | 2.30       | 5.95        |
| 05   | ZZZZZ            | ZZZZZ            | 12/14/09 0526    | 2.30       | 5.95        |
| 06   | AR123201         | WAR090930-32     | 12/14/09 0536    | 2.30       | 5.95        |
| 07   | AR122101         | WAR090803-21     | 12/14/09 0547    | 2.30       | 5.95        |
| 08   | AR126201         | WAR090803-62     | 12/14/09 0558    | 2.30       | 5.94        |
| 09   | ZZZZZ            | ZZZZZ            | 12/14/09 0608    | 2.30       | 5.94        |
| 10   | ZZZZZ            | ZZZZZ            | 12/14/09 0619    | 2.30       | 5.95        |
| 11   | ZZZZZ            | ZZZZZ            | 12/14/09 0629    | 2.30       | 5.94        |
| 12   | ZZZZZ            | ZZZZZ            | 12/14/09 0640    | 2.30       | 5.94        |
| 13   | ZZZZZ            | ZZZZZ            | 12/14/09 0650    | 2.30       | 5.95        |
| 14   | ZZZZZ            | ZZZZZ            | 12/14/09 0701    | 2.30       | 5.94        |
| 15   | ZZZZZ            | ZZZZZ            | 12/14/09 0711    | 2.30       | 5.95        |
| 16   | AR125401         | WAR091214-05     | 12/14/09 0722    | 2.30       | 5.94        |
| 17   | AR125402         | WAR091214-06     | 12/14/09 0732    | 2.30       | 5.94        |
| 18   | AR125403         | WAR091214-07     | 12/14/09 0743    | 2.30       | 5.94        |
| 19   | AR125404         | WAR091214-08     | 12/14/09 0753    | 2.30       | 5.94        |
| 20   | AR125405         | IAR091027-01     | 12/14/09 0804    | 2.30       | 5.95        |
| 21   | AR125401         | WAR091102-54     | 12/14/09 0814    | 2.30       | 5.94        |
| 22   | AR124201         | WAR091214-09     | 12/14/09 0825    | 2.30       | 5.94        |
| 23   | AR124202         | WAR091214-10     | 12/14/09 0835    | 2.30       | 5.94        |
| 24   | AR124203         | WAR091214-11     | 12/14/09 0846    | 2.30       | 5.94        |
| 25   | AR124204         | WAR091214-12     | 12/14/09 0856    | 2.30       | 5.94        |
| 26   | AR124205         | IAR0911111-0     | 12/14/09 0907    | 2.30       | 5.94        |
| 27   | AR124201         | WAR091102-42     | 12/14/09 0917    | 2.30       | 5.94        |
| 28   | AR124801         | WAR091214-13     | 12/14/09 0928    | 2.30       | 5.94        |
| 29   | AR124802         | WAR091214-14     | 12/14/09 0938    | 2.30       | 5.94        |
| 30   | AR124803         | WAR091214-15     | 12/14/09 0949    | 2.30       | 5.94        |
| 31   | AR124804         | WAR091214-16     | 12/14/09 0959    | 2.30       | 5.94        |
| 32   | AR124805         | IAR091027-02     | 12/14/09 1010    | 2.30       | 5.94        |

S1 = 4cmx (+/- 0.03 MINUTES)  
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

## PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

| MEAN SURROGATE RT FROM INITIAL CALIBRATION |                   |                  |                  |                  |            |             |
|--|-------------------|------------------|------------------|------------------|------------|-------------|
| S1 : 2.30                                  |                   |                  | DCB: 5.94        |                  |            |             |
|  | EPA<br>SAMPLE NO. | LAB<br>SAMPLE ID | DATE<br>ANALYZED | TIME<br>ANALYZED | S1<br>RT # | DCB<br>RT # |
| 01   | AR124801          | WAR091027-48     | 12/14/09         | 1020             | 2.30       | 5.95        |
| 02   | AR166001          | WAR091214-01     | 12/14/09         | 1031             | 2.30       | 5.94        |
| 03   | AR166002          | WAR091214-02     | 12/14/09         | 1041             | 2.30       | 5.94        |
| 04   | AR166003          | WAR091214-03     | 12/14/09         | 1052             | 2.30       | 5.94        |
| 05   | AR166004          | WAR091214-04     | 12/14/09         | 1102             | 2.30       | 5.94        |
| 06   | AR166005          | IAR091102-01     | 12/14/09         | 1113             | 2.30       | 5.94        |
| 07   | AR166001          | WAR091211-60     | 12/14/09         | 1123             | 2.30       | 5.94        |
| 08   | AR126801          | WAR091214-17     | 12/14/09         | 1134             |            |             |
| 09   | AR126802          | WAR091214-18     | 12/14/09         | 1144             |            |             |
| 10   | AR126803          | WAR091214-19     | 12/14/09         | 1155             |            |             |
| 11   | AR126804          | WAR091214-20     | 12/14/09         | 1206             |            |             |
| 12   | AR126805          | IAR090817-02     | 12/14/09         | 1216             |            |             |
| 13   | AR126801          | WAR091106-68     | 12/14/09         | 1227             | 2.30       | 5.94        |
| 14   | DDTANALOGSTD      | WAR091020-DD     | 12/14/09         | 1237             |            |             |
| 15   | PIBLK02           | WAR091130-99     | 12/14/09         | 1248             | 2.30       | 5.94        |
| 16   | ZZZZZ             | ZZZZZ            | 12/14/09         | 1258             | 2.30       | 5.94        |
| 17   | ZZZZZ             | ZZZZZ            | 12/14/09         | 1309             | 2.30       | 5.94        |
| 18   | ZZZZZ             | ZZZZZ            | 12/14/09         | 1319             | 2.30       | 5.94        |
| 19   | ZZZZZ             | ZZZZZ            | 12/14/09         | 1330             | 2.30       | 5.94        |
| 20   | ZZZZZ             | ZZZZZ            | 12/14/09         | 1340             | 2.30       | 5.94        |
| 21   | ZZZZZ             | ZZZZZ            | 12/14/09         | 1351             | 2.30       | 5.94        |
| 22   | ZZZZZ             | ZZZZZ            | 12/14/09         | 1403             | 2.30       | 5.94        |
| 23   | ZZZZZ             | ZZZZZ            | 12/14/09         | 1416             | 2.30       | 5.94        |
| 24   | ZZZZZ             | ZZZZZ            | 12/14/09         | 1429             | 2.30       | 5.94        |
| 25   | ZZZZZ             | ZZZZZ            | 12/14/09         | 1441             | 2.30       | 5.94        |
| 26   | AR166002          | WAR091211-60     | 12/14/09         | 1452             | 2.30       | 5.94        |
| 27   | PIBLK03           | WAR091130-99     | 12/14/09         | 1502             | 2.30       | 5.94        |
| 28   | ZZZZZ             | ZZZZZ            | 12/14/09         | 1513             | 2.30       | 5.94        |
| 29   | ZZZZZ             | ZZZZZ            | 12/14/09         | 1525             | 2.30       | 5.94        |
| 30   | ZZZZZ             | ZZZZZ            | 12/14/09         | 1538             | 2.30       | 5.94        |
| 31   | ZZZZZ             | ZZZZZ            | 12/14/09         | 1551             | 2.30       | 5.94        |
| 32   | ZZZZZ             | ZZZZZ            | 12/14/09         | 1603             | 2.30       | 5.94        |

S1 = 4cmx  
DCB = Decachlorobiphenyl

QC LIMITS  
(+/- 0.03 MINUTES)  
(+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.



8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 01/22/10 01/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

| MEAN SURROGATE RT FROM INITIAL CALIBRATION |                   |                  |                  |                  |      |      |
|--|-------------------|------------------|------------------|------------------|------|------|
| S1 : 1.97                                  |                   |                  | DCB: 5.28        |                  |      |      |
|  | EPA<br>SAMPLE NO. | LAB<br>SAMPLE ID | DATE<br>ANALYZED | TIME<br>ANALYZED | RT # | RT # |
| 01   | PIBLK01           | WAR100105-99     | 01/22/10         | 0555             | 1.96 | 5.28 |
| 02   | ZZZZZ             | ZZZZZ            | 01/22/10         | 0606             |      |      |
| 03   | AR125401          | WAR091216-54     | 01/22/10         | 0616             |      |      |
| 04   | AR124201          | WAR091217-42     | 01/22/10         | 0627             |      |      |
| 05   | AR124801          | WAR091217-48     | 01/22/10         | 0637             |      |      |
| 06   | AR123201          | WAR100122-05     | 01/22/10         | 0648             |      |      |
| 07   | AR123202          | WAR100122-06     | 01/22/10         | 0658             |      |      |
| 08   | AR123203          | WAR100122-07     | 01/22/10         | 0709             |      |      |
| 09   | AR123204          | WAR100122-08     | 01/22/10         | 0719             |      |      |
| 10   | AR123205          | IAR100104-03     | 01/22/10         | 0730             |      |      |
| 11   | AR123201          | WAR100104-32     | 01/22/10         | 0740             |      |      |
| 12   | AR122101          | WAR100104-21     | 01/22/10         | 0751             |      |      |
| 13   | AR126201          | WAR100122-09     | 01/22/10         | 0801             |      |      |
| 14   | AR126202          | WAR100122-10     | 01/22/10         | 0812             |      |      |
| 15   | AR126203          | WAR100122-11     | 01/22/10         | 0822             |      |      |
| 16   | AR126204          | WAR100122-12     | 01/22/10         | 0836             |      |      |
| 17   | AR126205          | IAR100104-04     | 01/22/10         | 0847             |      |      |
| 18   | AR126201          | WAR100104-62     | 01/22/10         | 0857             |      |      |
| 19   | AR166001          | WAR100122-13     | 01/22/10         | 0908             | 1.97 | 5.28 |
| 20   | AR166002          | WAR100122-14     | 01/22/10         | 0919             | 1.97 | 5.28 |
| 21   | AR166003          | WAR100122-15     | 01/22/10         | 0929             | 1.97 | 5.28 |
| 22   | AR166004          | WAR100122-16     | 01/22/10         | 0940             | 1.97 | 5.28 |
| 23   | AR166005          | IAR100104-01     | 01/22/10         | 0950             | 1.97 | 5.28 |
| 24   | AR166001          | WAR100104-60     | 01/22/10         | 1001             | 1.97 | 5.28 |
| 25   | AR126801          | WAR100122-68     | 01/22/10         | 1011             |      |      |
| 26   | DDTANALOGSTD      | WAR091219-DD     | 01/22/10         | 1022             |      |      |
| 27   | PIBLK02           | WAR100105-99     | 01/22/10         | 1032             | 1.97 | 5.28 |
| 28   | ZZZZZ             | ZZZZZ            | 01/22/10         | 1043             |      |      |
| 29   | ZZZZZ             | ZZZZZ            | 01/22/10         | 1055             |      |      |
| 30   | ZZZZZ             | ZZZZZ            | 01/22/10         | 1108             |      |      |
| 31   | ZZZZZ             | ZZZZZ            | 01/22/10         | 1121             |      |      |
| 32   | ZZZZZ             | ZZZZZ            | 01/22/10         | 1133             |      |      |

QC LIMITS

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 01/22/10 01/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

| MEAN SURROGATE RT FROM INITIAL CALIBRATION |                  |                  |                  |      |      |      |
|--|------------------|------------------|------------------|------|------|------|
| S1 : 2.30                                  |                  |                  | DCB: 5.95        |      |      |      |
| EPA<br>SAMPLE NO.                          | LAB<br>SAMPLE ID | DATE<br>ANALYZED | TIME<br>ANALYZED | RT # | RT # |      |
| 01   | PIBLK01          | WAR100105-99     | 01/22/10         | 0555 | 2.30 | 5.95 |
| 02   | ZZZZZ            | ZZZZZ            | 01/22/10         | 0606 |      |      |
| 03   | AR125401         | WAR091216-54     | 01/22/10         | 0616 |      |      |
| 04   | AR124201         | WAR091217-42     | 01/22/10         | 0627 |      |      |
| 05   | AR124801         | WAR091217-48     | 01/22/10         | 0637 |      |      |
| 06   | AR123201         | WAR100122-05     | 01/22/10         | 0648 |      |      |
| 07   | AR123202         | WAR100122-06     | 01/22/10         | 0658 |      |      |
| 08   | AR123203         | WAR100122-07     | 01/22/10         | 0709 |      |      |
| 09   | AR123204         | WAR100122-08     | 01/22/10         | 0719 |      |      |
| 10   | AR123205         | IAR100104-03     | 01/22/10         | 0730 |      |      |
| 11   | AR123201         | WAR100104-32     | 01/22/10         | 0740 |      |      |
| 12   | AR122101         | WAR100104-21     | 01/22/10         | 0751 |      |      |
| 13   | AR126201         | WAR100122-09     | 01/22/10         | 0801 |      |      |
| 14   | AR126202         | WAR100122-10     | 01/22/10         | 0812 |      |      |
| 15   | AR126203         | WAR100122-11     | 01/22/10         | 0822 |      |      |
| 16   | AR126204         | WAR100122-12     | 01/22/10         | 0836 |      |      |
| 17   | AR126205         | IAR100104-04     | 01/22/10         | 0847 |      |      |
| 18   | AR126201         | WAR100104-62     | 01/22/10         | 0857 |      |      |
| 19   | AR166001         | WAR100122-13     | 01/22/10         | 0908 | 2.30 | 5.95 |
| 20   | AR166002         | WAR100122-14     | 01/22/10         | 0919 | 2.30 | 5.95 |
| 21   | AR166003         | WAR100122-15     | 01/22/10         | 0929 | 2.30 | 5.95 |
| 22   | AR166004         | WAR100122-16     | 01/22/10         | 0940 | 2.30 | 5.95 |
| 23   | AR166005         | IAR100104-01     | 01/22/10         | 0950 | 2.30 | 5.95 |
| 24   | AR166001         | WAR100104-60     | 01/22/10         | 1001 | 2.30 | 5.95 |
| 25   | AR126801         | WAR100122-68     | 01/22/10         | 1011 |      |      |
| 26   | DDTANALOGSTD     | WAR091219-DD     | 01/22/10         | 1022 |      |      |
| 27   | PIBLK02          | WAR100105-99     | 01/22/10         | 1032 | 2.30 | 5.95 |
| 28   | ZZZZZ            | ZZZZZ            | 01/22/10         | 1043 |      |      |
| 29   | ZZZZZ            | ZZZZZ            | 01/22/10         | 1055 |      |      |
| 30   | ZZZZZ            | ZZZZZ            | 01/22/10         | 1108 |      |      |
| 31   | ZZZZZ            | ZZZZZ            | 01/22/10         | 1121 |      |      |
| 32   | ZZZZZ            | ZZZZZ            | 01/22/10         | 1133 |      |      |

QC LIMITS

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 01/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

| MEAN SURROGATE RT FROM INITIAL CALIBRATION |                  |                  |                  |            |             |      |
|--|------------------|------------------|------------------|------------|-------------|------|
| S1 : 1.97                                  |                  |                  | DCB: 5.28        |            |             |      |
| EPA<br>SAMPLE NO.                          | LAB<br>SAMPLE ID | DATE<br>ANALYZED | TIME<br>ANALYZED | S1<br>RT # | DCB<br>RT # |      |
| 01   | PIBLK01          | WAR100105-99     | 01/27/10         | 0627       | 1.96        | 5.28 |
| 02   | AR166001         | WAR100104-60     | 01/27/10         | 0638       | 1.97        | 5.28 |
| 03   | AR125401         | WAR091216-54     | 01/27/10         | 0649       |             |      |
| 04   | AR124201         | WAR091217-42     | 01/27/10         | 0659       |             |      |
| 05   | AR124801         | WAR091217-48     | 01/27/10         | 0709       |             |      |
| 06   | AR123201         | WAR100104-32     | 01/27/10         | 0720       |             |      |
| 07   | AR122101         | WAR100104-21     | 01/27/10         | 0730       |             |      |
| 08   | AR126201         | WAR100104-62     | 01/27/10         | 0741       |             |      |
| 09   | AR126801         | WAR100107-68     | 01/27/10         | 0751       |             |      |
| 10   | DDTANALOGSTD     | WAR091219-DD     | 01/27/10         | 0802       |             |      |
| 11   | PIBLK02          | WAR100105-99     | 01/27/10         | 0812       | 1.97        | 5.28 |
| 12   | ZZZZZ            | ZZZZZ            | 01/27/10         | 0823       | 1.97        | 5.28 |
| 13   | ZZZZZ            | ZZZZZ            | 01/27/10         | 0833       | 1.97        | 5.28 |
| 14   | ZZZZZ            | ZZZZZ            | 01/27/10         | 0844       | 1.97        | 5.28 |
| 15   | ZZZZZ            | ZZZZZ            | 01/27/10         | 0854       | 1.97        | 5.28 |
| 16   | ZZZZZ            | ZZZZZ            | 01/27/10         | 0907       | 1.97        | 5.28 |
| 17   | ZZZZZ            | ZZZZZ            | 01/27/10         | 0919       | 1.97        | 5.28 |
| 18   | ZZZZZ            | ZZZZZ            | 01/27/10         | 0932       | 1.97        | 5.28 |
| 19   | ZZZZZ            | ZZZZZ            | 01/27/10         | 0944       | 1.97        | 5.28 |
| 20   | ZZZZZ            | ZZZZZ            | 01/27/10         | 0957       | 1.97        | 5.28 |
| 21   | AR166002         | WAR100104-60     | 01/27/10         | 1009       | 1.97        | 5.28 |
| 22   | PIBLK03          | WAR100105-99     | 01/27/10         | 1020       | 1.97        | 5.28 |
| 23   | ZZZZZ            | ZZZZZ            | 01/27/10         | 1030       | 1.97        | 5.28 |
| 24   | ZZZZZ            | ZZZZZ            | 01/27/10         | 1041       | 1.97        | 5.28 |
| 25   | ZZZZZ            | ZZZZZ            | 01/27/10         | 1051       | 1.97        | 5.28 |
| 26   | ZZZZZ            | ZZZZZ            | 01/27/10         | 1104       | 1.97        | 5.28 |
| 27   | ZZZZZ            | ZZZZZ            | 01/27/10         | 1117       | 1.97        | 5.28 |
| 28   | ZZZZZ            | ZZZZZ            | 01/27/10         | 1129       | 1.97        | 5.28 |
| 29   | ZZZZZ            | ZZZZZ            | 01/27/10         | 1142       | 1.96        | 5.28 |
| 30   | ZZZZZ            | ZZZZZ            | 01/27/10         | 1154       | 1.97        | 5.28 |
| 31   | ZZZZZ            | ZZZZZ            | 01/27/10         | 1207       | 1.97        | 5.28 |
| 32   | AR166003         | WAR100104-60     | 01/27/10         | 1219       | 1.97        | 5.28 |

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)  
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

## PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 01/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

| MEAN SURROGATE RT FROM INITIAL CALIBRATION |                   |                  |                  |                  |            |             |
|--|-------------------|------------------|------------------|------------------|------------|-------------|
| S1 : 1.97                                  |                   |                  | DCB: 5.28        |                  |            |             |
|  | EPA<br>SAMPLE NO. | LAB<br>SAMPLE ID | DATE<br>ANALYZED | TIME<br>ANALYZED | S1<br>RT # | DCB<br>RT # |
| 01   | PIBLK04           | WAR100105-99     | 01/27/10         | 1230             | 1.97       | 5.28        |
| 02   | PBLK01            | 1202023521       | 01/27/10         | 1240             | 1.97       | 5.28        |
| 03   | PBLK01LCS         | 1202023522       | 01/27/10         | 1251             | 1.97       | 5.28        |
| 04   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1301             | 1.97       | 5.28        |
| 05   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1314             | 1.97       | 5.28        |
| 06   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1326             | 1.97       | 5.28        |
| 07   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1339             | 1.97       | 5.28        |
| 08   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1352             | 1.97       | 5.28        |
| 09   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1404             | 1.97       | 5.28        |
| 10   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1417             | 1.97       | 5.28        |
| 11   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1429             | 1.97       | 5.28        |
| 12   | AR166004          | WAR100104-60     | 01/27/10         | 1442             | 1.97       | 5.28        |
| 13   | PIBLK05           | WAR100105-99     | 01/27/10         | 1452             | 1.97       | 5.28        |
| 14   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1503             | 1.97       | 5.28        |
| 15   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1515             | 1.97       | 5.28        |
| 16   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1528             | 1.97       | 5.28        |
| 17   | RE15-10-8410      | 245114002        | 01/27/10         | 1540             | 1.97       | 5.28        |
| 18   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1553             | 1.97       | 5.28        |
| 19   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1606             | 1.97       | 5.28        |
| 20   | AR166006          | WAR100104-60     | 01/27/10         | 1618             | 1.97       | 5.28        |
| 21   | PIBLK07           | WAR100105-99     | 01/27/10         | 1631             | 1.97       | 5.28        |
| 22   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1643             | 1.97       | 5.28        |
| 23   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1656             | 1.97       | 5.28        |
| 24   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1709             | 1.97       | 5.28        |
| 25   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1721             | 1.97       | 5.30        |
| 26   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1734             | 1.97       | 5.28        |
| 27   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1746             | 1.97       | 5.28        |
| 28   | PIBLK07           | WAR100105-99     | 01/27/10         | 1759             | 1.97       | 5.28        |
| 29   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1812             | 1.97       | 5.28        |
| 30   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1824             | 1.97       | 5.28        |
| 31   | AR166006          | WAR100104-60     | 01/27/10         | 1837             | 1.97       | 5.28        |
| 32   | PIBLK08           | WAR100105-99     | 01/27/10         | 1849             | 1.97       | 5.28        |

QC LIMITS  
S1 = 4cmx (+/- 0.03 MINUTES)  
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 01/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

| MEAN SURROGATE RT FROM INITIAL CALIBRATION |                  |                  |                  |            |             |      |
|--|------------------|------------------|------------------|------------|-------------|------|
| S1 : 2.30                                  |                  |                  | DCB: 5.95        |            |             |      |
| EPA<br>SAMPLE NO.                          | LAB<br>SAMPLE ID | DATE<br>ANALYZED | TIME<br>ANALYZED | S1<br>RT # | DCB<br>RT # |      |
| 01   | PIBLK01          | WAR100105-99     | 01/27/10         | 0627       | 2.30        | 5.94 |
| 02   | AR166001         | WAR100104-60     | 01/27/10         | 0638       | 2.30        | 5.95 |
| 03   | AR125401         | WAR091216-54     | 01/27/10         | 0649       |             |      |
| 04   | AR124201         | WAR091217-42     | 01/27/10         | 0659       |             |      |
| 05   | AR124801         | WAR091217-48     | 01/27/10         | 0709       |             |      |
| 06   | AR123201         | WAR100104-32     | 01/27/10         | 0720       |             |      |
| 07   | AR122101         | WAR100104-21     | 01/27/10         | 0730       |             |      |
| 08   | AR126201         | WAR100104-62     | 01/27/10         | 0741       |             |      |
| 09   | AR126801         | WAR100107-68     | 01/27/10         | 0751       |             |      |
| 10   | DDTANALOGSTD     | WAR091219-DD     | 01/27/10         | 0802       |             |      |
| 11   | PIBLK02          | WAR100105-99     | 01/27/10         | 0812       | 2.30        | 5.95 |
| 12   | ZZZZZ            | ZZZZZ            | 01/27/10         | 0823       | 2.30        | 5.95 |
| 13   | ZZZZZ            | ZZZZZ            | 01/27/10         | 0833       | 2.30        | 5.95 |
| 14   | ZZZZZ            | ZZZZZ            | 01/27/10         | 0844       | 2.30        | 5.95 |
| 15   | ZZZZZ            | ZZZZZ            | 01/27/10         | 0854       | 2.30        | 5.95 |
| 16   | ZZZZZ            | ZZZZZ            | 01/27/10         | 0907       | 2.30        | 5.94 |
| 17   | ZZZZZ            | ZZZZZ            | 01/27/10         | 0919       | 2.30        | 5.94 |
| 18   | ZZZZZ            | ZZZZZ            | 01/27/10         | 0932       | 2.30        | 5.95 |
| 19   | ZZZZZ            | ZZZZZ            | 01/27/10         | 0944       | 2.30        | 5.94 |
| 20   | ZZZZZ            | ZZZZZ            | 01/27/10         | 0957       | 2.30        | 5.94 |
| 21   | AR166002         | WAR100104-60     | 01/27/10         | 1009       | 2.30        | 5.94 |
| 22   | PIBLK03          | WAR100105-99     | 01/27/10         | 1020       | 2.30        | 5.95 |
| 23   | ZZZZZ            | ZZZZZ            | 01/27/10         | 1030       | 2.30        | 5.94 |
| 24   | ZZZZZ            | ZZZZZ            | 01/27/10         | 1041       | 2.30        | 5.94 |
| 25   | ZZZZZ            | ZZZZZ            | 01/27/10         | 1051       | 2.30        | 5.94 |
| 26   | ZZZZZ            | ZZZZZ            | 01/27/10         | 1104       | 2.30        | 5.94 |
| 27   | ZZZZZ            | ZZZZZ            | 01/27/10         | 1117       | 2.30        | 5.94 |
| 28   | ZZZZZ            | ZZZZZ            | 01/27/10         | 1129       | 2.30        | 5.94 |
| 29   | ZZZZZ            | ZZZZZ            | 01/27/10         | 1142       | 2.30        | 5.94 |
| 30   | ZZZZZ            | ZZZZZ            | 01/27/10         | 1154       | 2.30        | 5.94 |
| 31   | ZZZZZ            | ZZZZZ            | 01/27/10         | 1207       | 2.30        | 5.94 |
| 32   | AR166003         | WAR100104-60     | 01/27/10         | 1219       | 2.30        | 5.94 |

QC LIMITS  
S1 = 4cmx (+/- 0.03 MINUTES)  
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

## PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 01/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

| MEAN SURROGATE RT FROM INITIAL CALIBRATION |                   |                  |                  |                  |            |             |
|--|-------------------|------------------|------------------|------------------|------------|-------------|
| S1 : 2.30                                  |                   |                  | DCB: 5.95        |                  |            |             |
|  | EPA<br>SAMPLE NO. | LAB<br>SAMPLE ID | DATE<br>ANALYZED | TIME<br>ANALYZED | S1<br>RT # | DCB<br>RT # |
| 01   | PIBLK04           | WAR100105-99     | 01/27/10         | 1230             | 2.30       | 5.94        |
| 02   | PBLK01            | 1202023521       | 01/27/10         | 1240             | 2.30       | 5.94        |
| 03   | PBLK01LCS         | 1202023522       | 01/27/10         | 1251             | 2.30       | 5.94        |
| 04   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1301             | 2.30       | 5.95        |
| 05   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1314             | 2.30       | 5.94        |
| 06   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1326             | 2.30       | 5.94        |
| 07   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1339             | 2.30       | 5.94        |
| 08   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1352             | 2.30       | 5.94        |
| 09   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1404             | 2.30       | 5.94        |
| 10   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1417             | 2.30       | 5.94        |
| 11   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1429             | 2.30       | 5.94        |
| 12   | AR166004          | WAR100104-60     | 01/27/10         | 1442             | 2.30       | 5.94        |
| 13   | PIBLK05           | WAR100105-99     | 01/27/10         | 1452             | 2.30       | 5.95        |
| 14   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1503             | 2.30       | 5.94        |
| 15   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1515             | 2.30       | 5.94        |
| 16   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1528             | 2.30       | 5.94        |
| 17   | RE15-10-8410      | 245114002        | 01/27/10         | 1540             | 2.30       | 5.94        |
| 18   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1553             | 2.30       | 5.94        |
| 19   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1606             | 2.30       | 5.94        |
| 20   | AR166006          | WAR100104-60     | 01/27/10         | 1618             | 2.30       | 5.94        |
| 21   | PIBLK07           | WAR100105-99     | 01/27/10         | 1631             | 2.30       | 5.94        |
| 22   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1643             | 2.30       | 5.94        |
| 23   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1656             | 2.30       | 5.94        |
| 24   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1709             | 2.30       | 5.94        |
| 25   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1721             | 2.30       | 5.96        |
| 26   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1734             | 2.30       | 5.95        |
| 27   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1746             | 2.30       | 5.95        |
| 28   | PIBLK07           | WAR100105-99     | 01/27/10         | 1759             | 2.30       | 5.95        |
| 29   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1812             | 2.30       | 5.94        |
| 30   | ZZZZZ             | ZZZZZ            | 01/27/10         | 1824             | 2.30       | 5.94        |
| 31   | AR166006          | AR100104-60      | 01/27/10         | 1837             | 2.30       | 5.94        |
| 32   | PIBLK08           | WAR100105-99     | 01/27/10         | 1849             | 2.30       | 5.94        |

QC LIMITS  
S1 = 4cmx (+/- 0.03 MINUTES)  
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 01/28/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

| MEAN SURROGATE RT FROM INITIAL CALIBRATION |                  |                  |                  |      |      |      |
|--|------------------|------------------|------------------|------|------|------|
| S1 : 1.97                                  |                  |                  | DCB: 5.28        |      |      |      |
| EPA<br>SAMPLE NO.                          | LAB<br>SAMPLE ID | DATE<br>ANALYZED | TIME<br>ANALYZED | RT # | RT # |      |
| 01   | PIBLK01          | WAR100105-99     | 01/28/10         | 0916 | 1.97 | 5.28 |
| 02   | ZZZZZ            | ZZZZZ            | 01/28/10         | 0927 |      |      |
| 03   | AR125401         | WAR091216-54     | 01/28/10         | 0937 |      |      |
| 04   | AR124201         | WAR091217-42     | 01/28/10         | 0948 |      |      |
| 05   | AR124801         | WAR091217-48     | 01/28/10         | 0958 |      |      |
| 06   | AR123201         | WAR100104-32     | 01/28/10         | 1009 |      |      |
| 07   | AR122101         | WAR100104-21     | 01/28/10         | 1019 |      |      |
| 08   | AR126201         | WAR100104-62     | 01/28/10         | 1030 |      |      |
| 09   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1040 |      |      |
| 10   | AR166001         | WAR100128-01     | 01/28/10         | 1051 | 1.97 | 5.28 |
| 11   | AR166002         | WAR100128-02     | 01/28/10         | 1101 | 1.97 | 5.28 |
| 12   | AR166003         | WAR100128-03     | 01/28/10         | 1112 | 1.97 | 5.28 |
| 13   | AR166004         | WAR100128-04     | 01/28/10         | 1122 | 1.97 | 5.28 |
| 14   | AR166005         | IAR100104-01     | 01/28/10         | 1134 | 1.97 | 5.28 |
| 15   | AR166001         | WAR100104-60     | 01/28/10         | 1144 | 1.97 | 5.28 |
| 16   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1155 |      |      |
| 17   | DDTANALOGSTD     | WAR091219-DD     | 01/28/10         | 1205 |      |      |
| 18   | AR126801         | WAR100128-05     | 01/28/10         | 1218 |      |      |
| 19   | AR126802         | WAR100128-06     | 01/28/10         | 1229 |      |      |
| 20   | AR126803         | WAR100128-07     | 01/28/10         | 1239 |      |      |
| 21   | AR126804         | WAR100128-08     | 01/28/10         | 1250 |      |      |
| 22   | AR126805         | IAR100104-05     | 01/28/10         | 1300 |      |      |
| 23   | AR126801         | WAR100107-68     | 01/28/10         | 1311 |      |      |
| 24   | PIBLK02          | WAR100105-99     | 01/28/10         | 1321 | 1.97 | 5.28 |
| 25   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1332 | 1.97 | 5.28 |
| 26   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1342 | 1.97 | 5.28 |
| 27   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1353 | 1.97 | 5.28 |
| 28   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1405 | 1.97 | 5.28 |
| 29   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1418 | 1.97 | 5.28 |
| 30   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1430 | 1.97 | 5.28 |
| 31   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1443 | 1.97 | 5.28 |
| 32   | AR166002         | WAR100104-60     | 01/28/10         | 1456 | 1.97 | 5.28 |

QC LIMITS

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

## PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 01/28/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

| MEAN SURROGATE RT FROM INITIAL CALIBRATION |                  |                  |                  |      |      |      |
|--|------------------|------------------|------------------|------|------|------|
| S1 : 1.97                                  |                  |                  | DCB: 5.28        |      |      |      |
| EPA<br>SAMPLE NO.                          | LAB<br>SAMPLE ID | DATE<br>ANALYZED | TIME<br>ANALYZED | RT # | RT # |      |
| 01   | AR125402         | WAR091216-54     | 01/28/10         | 1506 |      |      |
| 02   | AR124201         | WAR091217-42     | 01/28/10         | 1516 |      |      |
| 03   | AR124801         | WAR091217-48     | 01/28/10         | 1527 |      |      |
| 04   | AR123201         | WAR100104-32     | 01/28/10         | 1538 |      |      |
| 05   | AR122101         | WAR100104-21     | 01/28/10         | 1548 |      |      |
| 06   | AR126201         | WAR100104-62     | 01/28/10         | 1558 |      |      |
| 07   | AR126801         | WAR100122-68     | 01/28/10         | 1609 |      |      |
| 08   | PIBLK03          | WAR100105-99     | 01/28/10         | 1619 | 1.97 | 5.28 |
| 09   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1630 | 1.97 | 5.28 |
| 10   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1643 | 1.97 | 5.28 |
| 11   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1655 | 1.97 | 5.28 |
| 12   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1708 | 1.97 | 5.28 |
| 13   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1720 | 1.97 | 5.28 |
| 14   | RE15-10-8411     | 245114003        | 01/28/10         | 1733 | 1.97 | 5.28 |
| 15   | RE15-10-8411MS   | 1202023863       | 01/28/10         | 1745 | 1.97 | 5.28 |
| 16   | RE15-10-8411MSD  | 1202023864       | 01/28/10         | 1758 | 1.97 | 5.28 |
| 17   | RE15-10-8412     | 245114004        | 01/28/10         | 1811 | 1.97 | 5.28 |
| 18   | RE15-10-8441     | 245114005        | 01/28/10         | 1823 | 1.97 | 5.28 |
| 19   | AR166003         | WAR100104-60     | 01/28/10         | 1838 | 1.97 | 5.28 |
| 20   | PIBLK04          | WAR100105-99     | 01/28/10         | 1850 | 1.97 | 5.28 |
| 21   | RE15-10-8413     | 245114006        | 01/28/10         | 1903 | 1.97 | 5.28 |
| 22   | AR166004         | WAR100104-60     | 01/28/10         | 1917 | 1.97 | 5.28 |
| 23   | PIBLKL05         | WAR100105-99     | 01/28/10         | 1930 | 1.97 | 5.28 |
| 24   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1942 | 1.97 | 5.28 |
| 25   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1955 | 1.97 | 5.28 |
| 26   | ZZZZZ            | ZZZZZ            | 01/28/10         | 2008 | 1.97 | 5.28 |
| 27   | ZZZZZ            | ZZZZZ            | 01/28/10         | 2020 | 1.97 | 5.28 |
| 28   | ZZZZZ            | ZZZZZ            | 01/28/10         | 2033 | 1.97 | 5.28 |
| 29   | ZZZZZ            | ZZZZZ            | 01/28/10         | 2045 | 1.97 | 5.28 |
| 30   | ZZZZZ            | ZZZZZ            | 01/28/10         | 2058 | 1.97 | 5.28 |
| 31   | ZZZZZ            | ZZZZZ            | 01/28/10         | 2110 | 1.97 | 5.28 |
| 32   | ZZZZZ            | ZZZZZ            | 01/28/10         | 2123 | 1.97 | 5.28 |

## QC LIMITS

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.



8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 01/28/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

| MEAN SURROGATE RT FROM INITIAL CALIBRATION |                  |                  |                  |      |      |      |
|--|------------------|------------------|------------------|------|------|------|
| S1 : 2.30                                  |                  |                  | DCB: 5.95        |      |      |      |
| EPA<br>SAMPLE NO.                          | LAB<br>SAMPLE ID | DATE<br>ANALYZED | TIME<br>ANALYZED | RT # | RT # |      |
| 01   | PIBLK01          | WAR100105-99     | 01/28/10         | 0916 | 2.30 | 5.95 |
| 02   | ZZZZZ            | ZZZZZ            | 01/28/10         | 0927 |      |      |
| 03   | AR125401         | WAR091216-54     | 01/28/10         | 0937 |      |      |
| 04   | AR124201         | WAR091217-42     | 01/28/10         | 0948 |      |      |
| 05   | AR124801         | WAR091217-48     | 01/28/10         | 0958 |      |      |
| 06   | AR123201         | WAR100104-32     | 01/28/10         | 1009 |      |      |
| 07   | AR122101         | WAR100104-21     | 01/28/10         | 1019 |      |      |
| 08   | AR126201         | WAR100104-62     | 01/28/10         | 1030 |      |      |
| 09   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1040 |      |      |
| 10   | AR166001         | WAR100128-01     | 01/28/10         | 1051 | 2.30 | 5.95 |
| 11   | AR166002         | WAR100128-02     | 01/28/10         | 1101 | 2.30 | 5.95 |
| 12   | AR166003         | WAR100128-03     | 01/28/10         | 1112 | 2.30 | 5.95 |
| 13   | AR166004         | WAR100128-04     | 01/28/10         | 1122 | 2.30 | 5.95 |
| 14   | AR166005         | IAR100104-01     | 01/28/10         | 1134 | 2.30 | 5.95 |
| 15   | AR166001         | WAR100104-60     | 01/28/10         | 1144 | 2.30 | 5.95 |
| 16   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1155 |      |      |
| 17   | DDTANALOGSTD     | WAR091219-DD     | 01/28/10         | 1205 |      |      |
| 18   | AR126801         | WAR100128-05     | 01/28/10         | 1218 |      |      |
| 19   | AR126802         | WAR100128-06     | 01/28/10         | 1229 |      |      |
| 20   | AR126803         | WAR100128-07     | 01/28/10         | 1239 |      |      |
| 21   | AR126804         | WAR100128-08     | 01/28/10         | 1250 |      |      |
| 22   | AR126805         | IAR100104-05     | 01/28/10         | 1300 |      |      |
| 23   | AR126801         | WAR100107-68     | 01/28/10         | 1311 |      |      |
| 24   | PIBLK02          | WAR100105-99     | 01/28/10         | 1321 | 2.30 | 5.95 |
| 25   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1332 | 2.30 | 5.95 |
| 26   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1342 | 2.30 | 5.95 |
| 27   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1353 | 2.30 | 5.95 |
| 28   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1405 | 2.30 | 5.95 |
| 29   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1418 | 2.30 | 5.95 |
| 30   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1430 | 2.30 | 5.95 |
| 31   | ZZZZZ            | ZZZZZ            | 01/28/10         | 1443 | 2.30 | 5.95 |
| 32   | AR166002         | WAR100104-60     | 01/28/10         | 1456 | 2.30 | 5.95 |

QC LIMITS

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

## PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1324

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 01/28/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

| MEAN SURROGATE RT FROM INITIAL CALIBRATION |                   |                  |                  |                  |      |      |
|--|-------------------|------------------|------------------|------------------|------|------|
|  | EPA<br>SAMPLE NO. | LAB<br>SAMPLE ID | DATE<br>ANALYZED | TIME<br>ANALYZED | RT # | RT # |
| 01   | AR125402          | WAR091216-54     | 01/28/10         | 1506             |      |      |
| 02   | AR124202          | WAR091217-42     | 01/28/10         | 1516             |      |      |
| 03   | AR124802          | WAR091217-48     | 01/28/10         | 1527             |      |      |
| 04   | AR123202          | WAR100104-32     | 01/28/10         | 1538             |      |      |
| 05   | AR122102          | WAR100104-21     | 01/28/10         | 1548             |      |      |
| 06   | AR126202          | WAR100104-62     | 01/28/10         | 1558             |      |      |
| 07   | AR126802          | WAR100122-68     | 01/28/10         | 1609             |      |      |
| 08   | PIBLKL04          | WAR100105-99     | 01/28/10         | 1619             | 2.30 | 5.95 |
| 09   | ZZZZZ             | ZZZZZ            | 01/28/10         | 1630             | 2.30 | 5.95 |
| 10   | ZZZZZ             | ZZZZZ            | 01/28/10         | 1643             | 2.30 | 5.95 |
| 11   | ZZZZZ             | ZZZZZ            | 01/28/10         | 1655             | 2.30 | 5.95 |
| 12   | ZZZZZ             | ZZZZZ            | 01/28/10         | 1708             | 2.30 | 5.95 |
| 13   | ZZZZZ             | ZZZZZ            | 01/28/10         | 1720             | 2.30 | 5.95 |
| 14   | RE15-10-8411      | 245114003        | 01/28/10         | 1733             | 2.30 | 5.95 |
| 15   | RE15-10-8411MS    | 1202023863       | 01/28/10         | 1745             | 2.30 | 5.95 |
| 16   | RE15-10-8411MSD   | 1202023864       | 01/28/10         | 1758             | 2.30 | 5.95 |
| 17   | RE15-10-8412      | 245114004        | 01/28/10         | 1811             | 2.30 | 5.95 |
| 18   | RE15-10-8441      | 245114005        | 01/28/10         | 1823             | 2.30 | 5.95 |
| 19   | AR166003          | WAR100104-60     | 01/28/10         | 1838             | 2.30 | 5.95 |
| 20   | PIBLKL04          | WAR100105-99     | 01/28/10         | 1850             | 2.30 | 5.95 |
| 21   | RE15-10-8413      | 245114006        | 01/28/10         | 1903             | 2.30 | 5.95 |
| 22   | AR166004          | WAR100104-60     | 01/28/10         | 1917             | 2.30 | 5.95 |
| 23   | PIBLKL05          | WAR100105-99     | 01/28/10         | 1930             | 2.30 | 5.95 |
| 24   | ZZZZZ             | ZZZZZ            | 01/28/10         | 1942             | 2.30 | 5.95 |
| 25   | ZZZZZ             | ZZZZZ            | 01/28/10         | 1955             | 2.30 | 5.95 |
| 26   | ZZZZZ             | ZZZZZ            | 01/28/10         | 2008             | 2.30 | 5.95 |
| 27   | ZZZZZ             | ZZZZZ            | 01/28/10         | 2020             | 2.30 | 5.95 |
| 28   | ZZZZZ             | ZZZZZ            | 01/28/10         | 2033             | 2.30 | 5.95 |
| 29   | ZZZZZ             | ZZZZZ            | 01/28/10         | 2045             | 2.30 | 5.95 |
| 30   | ZZZZZ             | ZZZZZ            | 01/28/10         | 2058             | 2.30 | 5.95 |
| 31   | ZZZZZ             | ZZZZZ            | 01/28/10         | 2110             | 2.30 | 5.95 |
| 32   | ZZZZZ             | ZZZZZ            | 01/28/10         | 2123             | 2.30 | 5.95 |

## QC LIMITS

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

## Identification Summary

Page 1 of 1

SDG Number: 10-1324

Client ID: LCS for batch 944882

Lab Sample ID: 1202023522

Data File: 035f3501.d

Data File: 035b3501.d

Inst: ECD1A.I\_1

Inst: ECD1A.I\_2

Column: CLP1

Column: CLP2

Analyzed: 27-JAN-10 12:51

Analyzed: 27-JAN-10 12:51

| Analyte      | Peak | RT   | RT Window   | Conc. | Ave Conc. | Units | RPD  |
|--------------|------|------|-------------|-------|-----------|-------|------|
| Aroclor-1016 |      |      |             |       |           |       | 4.37 |
| Column 1     | 1    | 2.42 | 2.39 – 2.45 | 21.1  |           | ug/kg |      |
|              | 2    | 2.71 | 2.68 – 2.74 | 21.3  |           | ug/kg |      |
|              | 3    | 2.79 | 2.76 – 2.82 | 21    |           | ug/kg |      |
|              | 4    | 2.83 | 2.8 – 2.86  | 21    |           | ug/kg |      |
|              | 5    | 3.04 | 3.01 – 3.07 | 21    |           | ug/kg |      |
|              |      |      |             |       | 21.1      |       |      |
| Column 2     | 1    | 3.2  | 3.17 – 3.23 | 21.1  |           | ug/kg |      |
|              | 2    | 3.28 | 3.25 – 3.31 | 20.2  |           | ug/kg |      |
|              | 3    | 3.34 | 3.31 – 3.37 | 19.8  |           | ug/kg |      |
|              | 4    | 3.57 | 3.54 – 3.6  | 19.9  |           | ug/kg |      |
|              | 5    | 3.64 | 3.61 – 3.67 | 19.8  |           | ug/kg |      |
|              |      |      |             |       | 20.2      |       |      |
| Aroclor-1260 |      |      |             |       |           |       | 5.74 |
| Column 1     | 1    | 3.77 | 3.74 – 3.8  | 23.9  |           | ug/kg |      |
|              | 2    | 3.93 | 3.9 – 3.96  | 24.1  |           | ug/kg |      |
|              | 3    | 4.16 | 4.13 – 4.19 | 24.4  |           | ug/kg |      |
|              | 4    | 4.3  | 4.27 – 4.33 | 24.5  |           | ug/kg |      |
|              | 5    | 4.48 | 4.45 – 4.51 | 25.5  |           | ug/kg |      |
|              |      |      |             |       | 24.5      |       |      |
| Column 2     | 1    | 4.34 | 4.31 – 4.37 | 22.6  |           | ug/kg |      |
|              | 2    | 4.46 | 4.43 – 4.49 | 23    |           | ug/kg |      |
|              | 3    | 4.73 | 4.7 – 4.76  | 22.9  |           | ug/kg |      |
|              | 4    | 4.9  | 4.87 – 4.93 | 23.1  |           | ug/kg |      |
|              | 5    | 5.05 | 5.02 – 5.08 | 23.9  |           | ug/kg |      |
|              |      |      |             |       | 23.1      |       |      |

## Identification Summary

Page 1 of 1

SDG Number: 10-1324

Client ID: RE15-10-8411MS

Lab Sample ID: 1202023863

Data File: 047f4701.d

Data File: 047b4701.d

Inst: ECD1A.I\_1

Inst: ECD1A.I\_2

Column: CLP1

Column: CLP2

Analyzed: 28-JAN-10 17:45

Analyzed: 28-JAN-10 17:45

| Analyte      | Peak | RT   | RT Window   | Conc. | Ave Conc. | Units | RPD  |
|--------------|------|------|-------------|-------|-----------|-------|------|
| Aroclor-1016 |      |      |             |       |           |       | 2.31 |
| Column 1     | 1    | 2.42 | 2.39 - 2.45 | 18.7  |           | ug/kg |      |
|              | 2    | 2.71 | 2.68 - 2.74 | 16.2  |           | ug/kg |      |
|              | 3    | 2.79 | 2.76 - 2.82 | 13.1  |           | ug/kg |      |
|              | 4    | 2.83 | 2.8 - 2.86  | 13.4  |           | ug/kg |      |
|              | 5    | 3.04 | 3.01 - 3.07 | 14.7  |           | ug/kg |      |
|              |      |      |             |       | 15.2      |       |      |
| Column 2     | 1    | 3.19 | 3.17 - 3.23 | 14.4  |           | ug/kg |      |
|              | 2    | 3.28 | 3.25 - 3.31 | 16    |           | ug/kg |      |
|              | 3    | 3.34 | 3.31 - 3.37 | 17    |           | ug/kg |      |
|              | 4    | 3.57 | 3.54 - 3.6  | 17    |           | ug/kg |      |
|              | 5    | 3.64 | 3.61 - 3.67 | 13.4  |           | ug/kg |      |
|              |      |      |             |       | 15.6      |       |      |
| Aroclor-1260 |      |      |             |       |           |       | 12   |
| Column 1     | 1    | 3.76 | 3.74 - 3.8  | 16.9  |           | ug/kg |      |
|              | 2    | 3.93 | 3.9 - 3.96  | 14.7  |           | ug/kg |      |
|              | 3    | 4.15 | 4.13 - 4.19 | 13.8  |           | ug/kg |      |
|              | 4    | 4.3  | 4.27 - 4.33 | 15.1  |           | ug/kg |      |
|              | 5    | 4.48 | 4.45 - 4.51 | 17.1  |           | ug/kg |      |
|              |      |      |             |       | 15.5      |       |      |
| Column 2     | 1    | 4.33 | 4.31 - 4.37 | 15.1  |           | ug/kg |      |
|              | 2    | 4.46 | 4.43 - 4.49 | 14.6  |           | ug/kg |      |
|              | 3    | 4.72 | 4.7 - 4.76  | 16.6  |           | ug/kg |      |
|              | 4    | 4.9  | 4.87 - 4.93 | 16.9  |           | ug/kg |      |
|              | 5    | 5.05 | 5.02 - 5.08 | 24.3  |           | ug/kg |      |
|              |      |      |             |       | 17.5      |       |      |

## Identification Summary

Page 1 of 1

SDG Number: 10-1324

Client ID: RE15-10-8411MSD

Lab Sample ID: 1202023864

Data File: 048f4801.d

Data File: 048b4801.d

Inst: ECD1A.I\_1

Inst: ECD1A.I\_2

Column: CLP1

Column: CLP2

Analyzed: 28-JAN-10 17:58

Analyzed: 28-JAN-10 17:58

| Analyte             | Peak | RT   | RT Window   | Conc. | Ave Conc. | Units | RPD  |
|---------------------|------|------|-------------|-------|-----------|-------|------|
| <b>Aroclor-1016</b> |      |      |             |       |           |       | 8.86 |
| <i>Column 1</i>     | 1    | 2.42 | 2.39 – 2.45 | 17.6  |           | ug/kg |      |
|                     | 2    | 2.71 | 2.68 – 2.74 | 15.5  |           | ug/kg |      |
|                     | 3    | 2.79 | 2.76 – 2.82 | 14.8  |           | ug/kg |      |
|                     | 4    | 2.83 | 2.8 – 2.86  | 12.5  |           | ug/kg |      |
|                     | 5    | 3.04 | 3.01 – 3.07 | 14.3  |           | ug/kg |      |
|                     |      |      |             |       | 15        |       |      |
| <i>Column 2</i>     | 1    | 3.19 | 3.17 – 3.23 | 13    |           | ug/kg |      |
|                     | 2    | 3.28 | 3.25 – 3.31 | 13.9  |           | ug/kg |      |
|                     | 3    | 3.34 | 3.31 – 3.37 | 13.7  |           | ug/kg |      |
|                     | 4    | 3.57 | 3.54 – 3.6  | 13.8  |           | ug/kg |      |
|                     | 5    | 3.64 | 3.61 – 3.67 | 14.1  |           | ug/kg |      |
|                     |      |      |             |       | 13.7      |       |      |
| <b>Aroclor-1260</b> |      |      |             |       |           |       | 9.02 |
| <i>Column 1</i>     | 1    | 3.76 | 3.74 – 3.8  | 15.3  |           | ug/kg |      |
|                     | 2    | 3.93 | 3.9 – 3.96  | 14.5  |           | ug/kg |      |
|                     | 3    | 4.16 | 4.13 – 4.19 | 14.2  |           | ug/kg |      |
|                     | 4    | 4.3  | 4.27 – 4.33 | 16.4  |           | ug/kg |      |
|                     | 5    | 4.48 | 4.45 – 4.51 | 16    |           | ug/kg |      |
|                     |      |      |             |       | 15.3      |       |      |
| <i>Column 2</i>     | 1    | 4.33 | 4.31 – 4.37 | 14.4  |           | ug/kg |      |
|                     | 2    | 4.46 | 4.43 – 4.49 | 13.6  |           | ug/kg |      |
|                     | 3    | 4.72 | 4.7 – 4.76  | 15.6  |           | ug/kg |      |
|                     | 4    | 4.9  | 4.87 – 4.93 | 16.5  |           | ug/kg |      |
|                     | 5    | 5.05 | 5.02 – 5.08 | 23.5  |           | ug/kg |      |
|                     |      |      |             |       | 16.7      |       |      |

## Identification Summary

Page 1 of 1

SDG Number: 10-1324

Client ID: RE15-10-8412

Lab Sample ID: 245114004

Data File: 049f4901.d

Data File: 049b4901.d

Inst: ECD1A.I\_1

Inst: ECD1A.I\_2

Column: CLP1

Column: CLP2

Analyzed: 28-JAN-10 18:11

Analyzed: 28-JAN-10 18:11

| Analyte      | Peak | RT   | RT Window   | Conc. | Ave Conc. | Units | RPD  |
|--------------|------|------|-------------|-------|-----------|-------|------|
| Aroclor-1254 |      |      |             |       |           |       | 60.7 |
| Column 1     | 1    | 3.27 | 3.24 – 3.3  | 2.54  |           | ug/kg |      |
|              | 2    | 3.42 | 3.39 – 3.45 | 3.34  |           | ug/kg |      |
|              | 3    | 3.65 | 3.63 – 3.69 | 5.07  |           | ug/kg |      |
|              | 4    | 3.82 | 3.79 – 3.85 | 3.64  |           | ug/kg |      |
|              | 5    | 3.93 | 3.9 – 3.96  | 8.6   |           | ug/kg |      |
|              |      |      |             |       | 4.64      |       |      |
| Column 2     | 1    | 3.4  | 3.37 – 3.43 | .748  |           | ug/kg |      |
|              | 2    | 3.82 | 3.8 – 3.86  | 1.4   |           | ug/kg |      |
|              | 3    | 3.94 | 3.91 – 3.97 | 2.96  |           | ug/kg |      |
|              | 4    | 4.22 | 4.19 – 4.25 | 4.5   |           | ug/kg |      |
|              | 5    | 4.35 | 4.32 – 4.38 | 2.78  |           | ug/kg |      |
|              |      |      |             |       | 2.48      |       |      |
| Aroclor-1260 |      |      |             |       |           |       | 1.57 |
| Column 1     | 1    | 3.76 | 3.74 – 3.8  | 4.44  |           | ug/kg |      |
|              | 2    | 3.93 | 3.9 – 3.96  | 5.15  |           | ug/kg |      |
|              | 3    | 4.16 | 4.13 – 4.19 | .818  |           | ug/kg |      |
|              | 4    | 4.3  | 4.27 – 4.33 | 1.09  |           | ug/kg |      |
|              | 5    | 4.48 | 4.45 – 4.51 | 1.07  |           | ug/kg |      |
|              |      |      |             |       | 2.51      |       |      |
| Column 2     | 1    | 4.33 | 4.31 – 4.37 | 4.05  |           | ug/kg |      |
|              | 2    | 4.46 | 4.43 – 4.49 | 4.26  |           | ug/kg |      |
|              | 3    | 4.73 | 4.7 – 4.76  | 1.5   |           | ug/kg |      |
|              | 4    | 4.9  | 4.87 – 4.93 | .859  |           | ug/kg |      |
|              | 5    | 5.05 | 5.02 – 5.08 | 1.7   |           | ug/kg |      |
|              |      |      |             |       | 2.47      |       |      |

## Identification Summary

Page 1 of 1

SDG Number: 10-1324

Client ID: RE15-10-8413

Lab Sample ID: 245114006

Data File: 053f5301.d

Data File: 053b5301.d

Inst: ECD1A.I\_1

Inst: ECD1A.I\_2

Column: CLP1

Column: CLP2

Analyzed: 28-JAN-10 19:03

Analyzed: 28-JAN-10 19:03

| Analyte      | Peak | RT   | RT Window   | Conc. | Ave Conc. | Units | RPD  |
|--------------|------|------|-------------|-------|-----------|-------|------|
| Aroclor-1254 |      |      |             |       |           |       | 58.7 |
| Column 1     | 1    | 3.27 | 3.24 – 3.3  | 4.3   |           | ug/kg |      |
|              | 2    | 3.42 | 3.39 – 3.45 | 3.75  |           | ug/kg |      |
|              | 3    | 3.66 | 3.63 – 3.69 | 8.07  |           | ug/kg |      |
|              | 4    | 3.82 | 3.79 – 3.85 | 4.02  |           | ug/kg |      |
|              | 5    | 3.93 | 3.9 – 3.96  | 12.2  |           | ug/kg |      |
|              |      |      |             |       | 6.47      |       |      |
| Column 2     | 1    | 3.41 | 3.37 – 3.43 | .814  |           | ug/kg |      |
|              | 2    | 3.82 | 3.8 – 3.86  | 2.57  |           | ug/kg |      |
|              | 3    | 3.94 | 3.91 – 3.97 | 4.32  |           | ug/kg |      |
|              | 4    | 4.22 | 4.19 – 4.25 | 6.94  |           | ug/kg |      |
|              | 5    | 4.35 | 4.32 – 4.38 | 3.02  |           | ug/kg |      |
|              |      |      |             |       | 3.53      |       |      |

## Identification Summary

Page 1 of 1

SDG Number: 10-1324

Client ID: RE15-10-8441

Lab Sample ID: 245114005

Data File: 050f5001.d

Data File: 050b5001.d

Inst: ECD1A.I\_1

Inst: ECD1A.I\_2

Column: CLP1

Column: CLP2

Analyzed: 28-JAN-10 18:23

Analyzed: 28-JAN-10 18:23

| Analyte      | Peak | RT   | RT Window   | Conc. | Ave Conc. | Units | RPD  |
|--------------|------|------|-------------|-------|-----------|-------|------|
| Aroclor-1254 |      |      |             |       |           |       | 54.1 |
| Column 1     | 1    | 3.28 | 3.24 - 3.3  | 4     |           | ug/kg |      |
|              | 2    | 3.42 | 3.39 - 3.45 | 3.08  |           | ug/kg |      |
|              | 3    | 3.66 | 3.63 - 3.69 | 5.76  |           | ug/kg |      |
|              | 4    | 3.82 | 3.79 - 3.85 | 4.03  |           | ug/kg |      |
|              | 5    | 3.93 | 3.9 - 3.96  | 8.33  |           | ug/kg |      |
|              |      |      |             |       | 5.04      |       |      |
| Column 2     | 1    | 3.4  | 3.37 - 3.43 | .578  |           | ug/kg |      |
|              | 2    | 3.82 | 3.8 - 3.86  | 2.02  |           | ug/kg |      |
|              | 3    | 3.94 | 3.91 - 3.97 | 3.26  |           | ug/kg |      |
|              | 4    | 4.22 | 4.19 - 4.25 | 5.57  |           | ug/kg |      |
|              | 5    | 4.35 | 4.32 - 4.38 | 3.04  |           | ug/kg |      |
|              |      |      |             |       | 2.89      |       |      |



# QUALITY CONTROL DATA

**PCB**  
**Certificate of Analysis**  
**Sample Summary**

|                |                     |          |            |
|----------------|---------------------|----------|------------|
| SDG Number:    | 10-1324             | Matrix:  | SOIL       |
| Lab Sample ID: | 1202023521          |          |            |
| Client Sample: | QC for batch 944882 | Client:  | LANL010    |
| Client ID:     | MB for batch 944882 | Method:  | SW846 8082 |
| Batch ID:      | 944883              | Inst:    | ECD1A.I    |
| Run Date:      | 01/27/2010 12:40    | Analyst: | YS1        |
| Prep Date:     | 01/25/2010 20:44    | Aliquot: | 30 g       |
| Data File:     | 034f3401-1.d        | Column:  | 1 CLP1     |
|                | 034b3401-1.d        |          | 2 CLP2     |
|                |                     | Level:   | LOW        |

| CAS No.    | Parmname     | Qualifier | Result | Units | MDL/LOD | PQL/LOQ | Column |
|------------|--------------|-----------|--------|-------|---------|---------|--------|
| 12674-11-2 | Aroclor-1016 | U         | 3.33   | ug/kg | 1.11    | 3.33    | 1      |
| 11104-28-2 | Aroclor-1221 | U         | 3.33   | ug/kg | 1.11    | 3.33    | 1      |
| 11141-16-5 | Aroclor-1232 | U         | 3.33   | ug/kg | 1.11    | 3.33    | 1      |
| 53469-21-9 | Aroclor-1242 | U         | 3.33   | ug/kg | 1.11    | 3.33    | 1      |
| 12672-29-6 | Aroclor-1248 | U         | 3.33   | ug/kg | 1.11    | 3.33    | 1      |
| 11097-69-1 | Aroclor-1254 | U         | 3.33   | ug/kg | 1.11    | 3.33    | 1      |
| 11096-82-5 | Aroclor-1260 | U         | 3.33   | ug/kg | 1.11    | 3.33    | 1      |

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecdl1a.i/012710.b/034f3401-2.d  
 Lab Smp Id: 1202023521 Client Smp ID: PBLK01  
 Inj Date : 27-JAN-2010 12:40  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |1202023521|1|  
 Misc Info : |ECD82P\_1S|944883|SVA|QC A|SOIL|MB|||  
 Comment :  
 Method : /chem/ecdl1a.i/012710.b/ECD1-F-8082-121409.m  
 Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
 Als bottle: 34 QC Sample: BLANK  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1324.sub  
 Target Version: 3.50 Sample Matrix: Soil  
 Processing Host: hpclp1

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

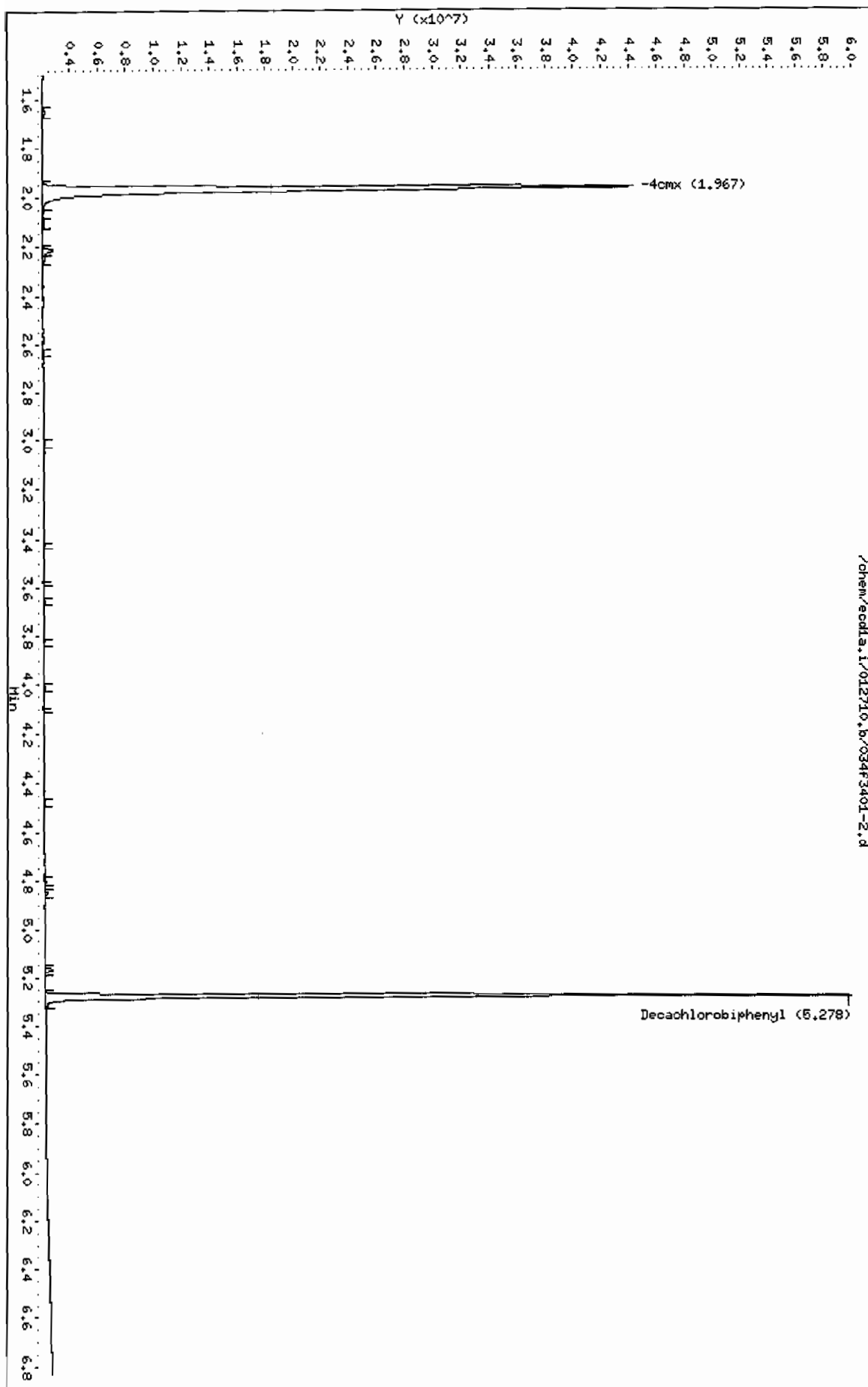
| Name | Value    | Description                    |
|------|----------|--------------------------------|
| DF   | 1.00000  | Dilution Factor                |
| Uf   | 1.00000  | Correction factor              |
| Vt   | 1.00000  | Volume of final extract (mL)   |
| Vi   | 1.00000  | Volume injected (uL)           |
| Ws   | 30.00000 | Weight of sample extracted (g) |
| M    | 0.00000  | % Moisture                     |

Cpnd Variable Local Compound Variable

| CONCENTRATIONS           |        |        |          |         |                  |               |        |  |
|--------------------------|--------|--------|----------|---------|------------------|---------------|--------|--|
|                          |        |        | ON-COL   | FINAL   |                  |               |        |  |
| RT                       | EXP RT | DLT RT | RESPONSE | ( ug/L) | (ug/Kg)          | TARGET RANGE  | RATIO  |  |
| ==                       | =====  | =====  | =====    | =====   | =====            | =====         | =====  |  |
| \$ 11 4cmx               |        |        |          |         | CAS #: 877-09-8  |               |        |  |
| 1.967                    | 1.967  | 0.000  | 53582314 | 136.361 | 4.5              | 80.00- 120.00 | 100.00 |  |
| -----                    |        |        |          |         |                  |               |        |  |
| \$ 12 Decachlorobiphenyl |        |        |          |         | CAS #: 2051-24-3 |               |        |  |
| 5.278                    | 5.279  | -0.001 | 46068813 | 139.665 | 4.6              | 80.00- 120.00 | 100.00 |  |

Data File: /chem/ecdl1.i/012710.b/034F3401-2.d  
Date: 27-JAN-2010 12:40  
Client ID: PLK01  
Sample Info: 1120202352111  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: eccl1.i  
Operator: YSL  
Column diameter: 0.25



Data File: /chem/ecdl1a.i/012710.b/034b3401-2.d  
Report Date: 28-Jan-2010 11:30

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecdl1a.i/012710.b/034b3401-2.d  
Lab Smp Id: 1202023521 Client Smp ID: PBLK01  
Inj Date : 27-JAN-2010 12:40  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |1202023521|1|  
Misc Info : |ECD82P\_1S|944883|SVA|QC A|SOIL|MB|||  
Comment :  
Method : /chem/ecdl1a.i/012710.b/ECD1-B-8082-121409.m  
Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:12 Cal File: 014b1401.d  
Als bottle: 34 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1324.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1p1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

| Name | Value    | Description                    |
|------|----------|--------------------------------|
| DF   | 1.00000  | Dilution Factor                |
| Uf   | 1.00000  | Correction factor              |
| Vt   | 1.00000  | Volume of final extract (mL)   |
| Vi   | 1.00000  | Volume injected (uL)           |
| Ws   | 30.00000 | Weight of sample extracted (g) |
| M    | 0.00000  | % Moisture                     |

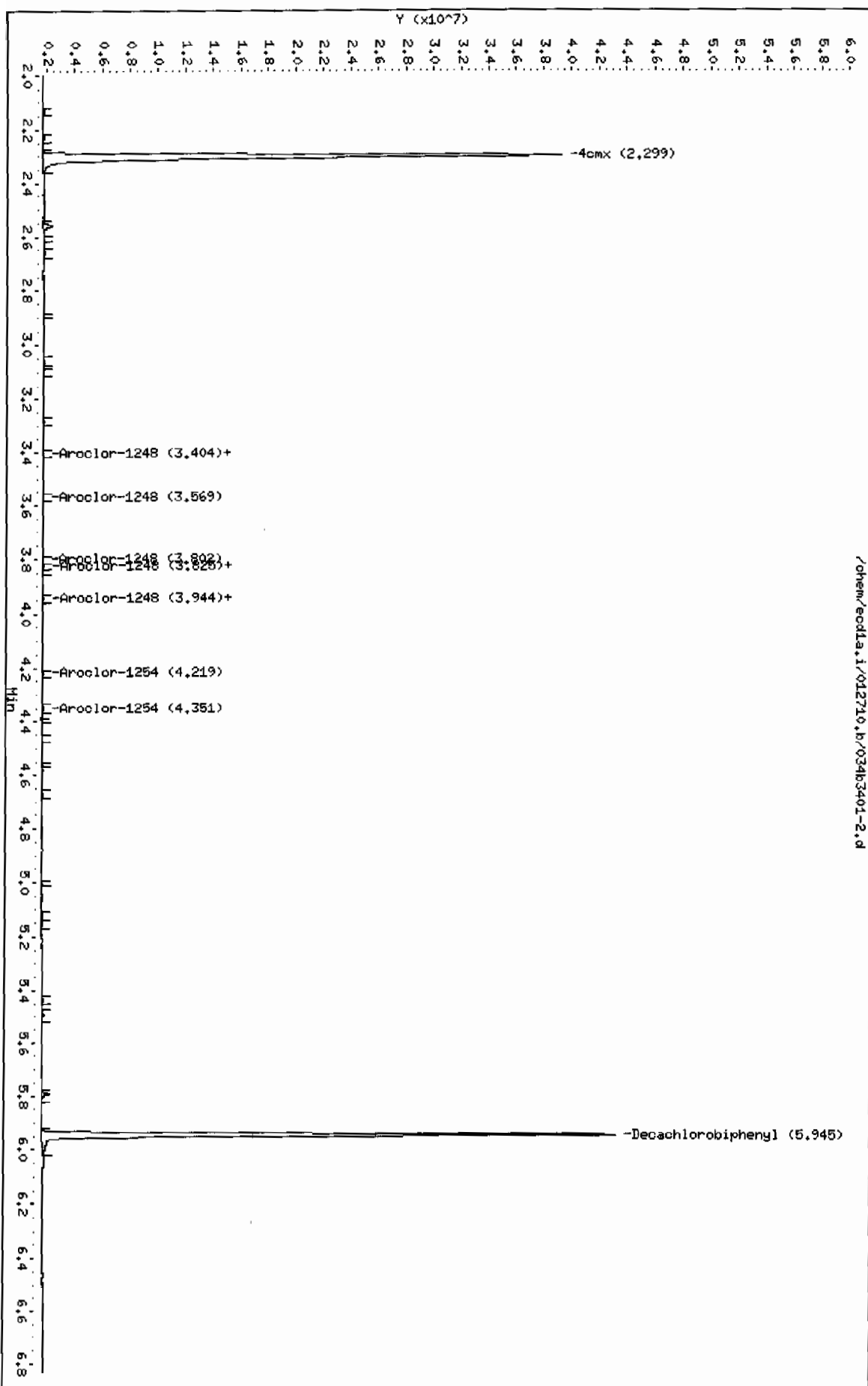
Cpnd Variable Local Compound Variable

| CONCENTRATIONS           |        |        |                  |         |                   |        |  |
|--------------------------|--------|--------|------------------|---------|-------------------|--------|--|
|                          |        |        | ON-COL           | FINAL   |                   |        |  |
| RT                       | EXP RT | DLT RT | RESPONSE ( ug/L) | (ug/Kg) | TARGET RANGE      | RATIO  |  |
| <hr/>                    |        |        |                  |         |                   |        |  |
| \$ 11 4cmx               |        |        |                  |         | CAS #: 877-09-8   |        |  |
| 2.299                    | 2.299  | 0.000  | 37667961         | 129.798 | 4.3 80.00- 120.00 | 100.00 |  |
| <hr/>                    |        |        |                  |         |                   |        |  |
| \$ 12 Decachlorobiphenyl |        |        |                  |         | CAS #: 2051-24-3  |        |  |
| 5.945                    | 5.945  | 0.000  | 32259788         | 132.226 | 4.4 80.00- 120.00 | 100.00 |  |
| <hr/>                    |        |        |                  |         |                   |        |  |

Data File: /chem/ecda.i/012710.b/034b3401-2.d  
Date: 27-JUN-2010 12:40  
Client ID: PLK01  
Sample Info: 1120202352111  
Volume Injected (uL): 1.0  
Column Phase: CLP2

Instrument: ecda.i  
Operator: YSL  
Column diameter: 0.25

Page 1



**PCB**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 1

SDG Number: 10-1324

Matrix: SOIL

Lab Sample ID: 1202023522

Client Sample: QC for batch 944882

Client: LANL010

Project: QC

Client ID: LCS for batch 944882

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 944883

Inst: ECD1A.I

Dilution: 1

Run Date: 01/27/2010 12:51

Analyst: YS1

Inj. Vol: 1 uL

Prep Date: 01/25/2010 20:44

Aliquot: 30 g

Final Volume: 1 mL

Data File: 035f3501-1.d

Column: 1 CLP1

Level: LOW

035b3501-1.d

2 CLP2

| CAS No.    | Parname      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ | Column |
|------------|--------------|-----------|--------|-------|---------|---------|--------|
| 12674-11-2 | Aroclor-1016 |           | 21.1   | ug/kg | 1.11    | 3.33    | 1      |
| 11104-28-2 | Aroclor-1221 | U         | 3.33   | ug/kg | 1.11    | 3.33    | 1      |
| 11141-16-5 | Aroclor-1232 | U         | 3.33   | ug/kg | 1.11    | 3.33    | 1      |
| 53469-21-9 | Aroclor-1242 | U         | 3.33   | ug/kg | 1.11    | 3.33    | 1      |
| 12672-29-6 | Aroclor-1248 | U         | 3.33   | ug/kg | 1.11    | 3.33    | 1      |
| 11097-69-1 | Aroclor-1254 | U         | 3.33   | ug/kg | 1.11    | 3.33    | 1      |
| 11096-82-5 | Aroclor-1260 |           | 24.5   | ug/kg | 1.11    | 3.33    | 1      |

Data File: /chem/ecdla.i/012710.b/035f3501-2.d  
Report Date: 28-Jan-2010 11:32

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012710.b/035f3501-2.d  
Lab Smp Id: 1202023522 Client Smp ID: PBLK01LCS  
Inj Date : 27-JAN-2010 12:51  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |1202023522|1|  
Misc Info : |ECD82P\_1S|944883|SVA|QC A|SOIL|LCS|||  
Comment :  
Method : /chem/ecdla.i/012710.b/ECD1-F-8082-121409.m  
Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 35 QC Sample: LCS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1324.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value    | Description                    |
|------|----------|--------------------------------|
| DF   | 1.00000  | Dilution Factor                |
| Uf   | 1.00000  | Correction factor              |
| Vt   | 1.00000  | Volume of final extract (mL)   |
| Vi   | 1.00000  | Volume injected (uL)           |
| Ws   | 30.00000 | Weight of sample extracted (g) |
| M    | 0.00000  | % Moisture                     |

Cpnd Variable Local Compound Variable

CONCENTRATIONS

ON-COL FINAL

| RT                | EXP RT | DLT RT | RESPONSE ( ug/L) | (ug/Kg) | TARGET RANGE        | RATIO  |
|-------------------|--------|--------|------------------|---------|---------------------|--------|
| =====             |        |        |                  |         |                     |        |
| CAS #: 877-09-8   |        |        |                  |         |                     |        |
| 1.968             | 1.967  | 0.001  | 49826642         | 126.804 | 4.2 80.00- 120.00   | 100.00 |
| -----             |        |        |                  |         |                     |        |
| CAS #: 2051-24-3  |        |        |                  |         |                     |        |
| 5.278             | 5.279  | -0.001 | 44059823         | 133.575 | 4.4 80.00- 120.00   | 100.00 |
| -----             |        |        |                  |         |                     |        |
| CAS #: 12674-11-2 |        |        |                  |         |                     |        |
| 2.422             | 2.423  | -0.001 | 9154294          | 633.500 | 21.1 80.00- 120.00  | 100.00 |
| 2.711             | 2.710  | 0.001  | 11603648         | 637.572 | 21.2 106.82- 146.82 | 126.76 |
| 2.791             | 2.791  | 0.000  | 7560618          | 630.929 | 21.0 65.47- 105.47  | 82.59  |
| 2.829             | 2.829  | 0.000  | 4518066          | 629.455 | 21.0 31.32- 71.32   | 49.35  |



CONCENTRATIONS

ON-COL. FINAL

| RT | EXP RT | DLT RT | RESPONSE ( ug/L) | (ug/Kg) | TARGET RANGE | RATIO |
|----|--------|--------|------------------|---------|--------------|-------|
|----|--------|--------|------------------|---------|--------------|-------|

1 Aroclor-1016 (continued)

|                                  |       |       |         |         |                   |       |
|----------------------------------|-------|-------|---------|---------|-------------------|-------|
| 3.039                            | 3.039 | 0.000 | 5835820 | 630.256 | 21.0 44.60- 84.60 | 63.75 |
| Average of Peak Concentrations = |       |       |         | 21.1    |                   |       |

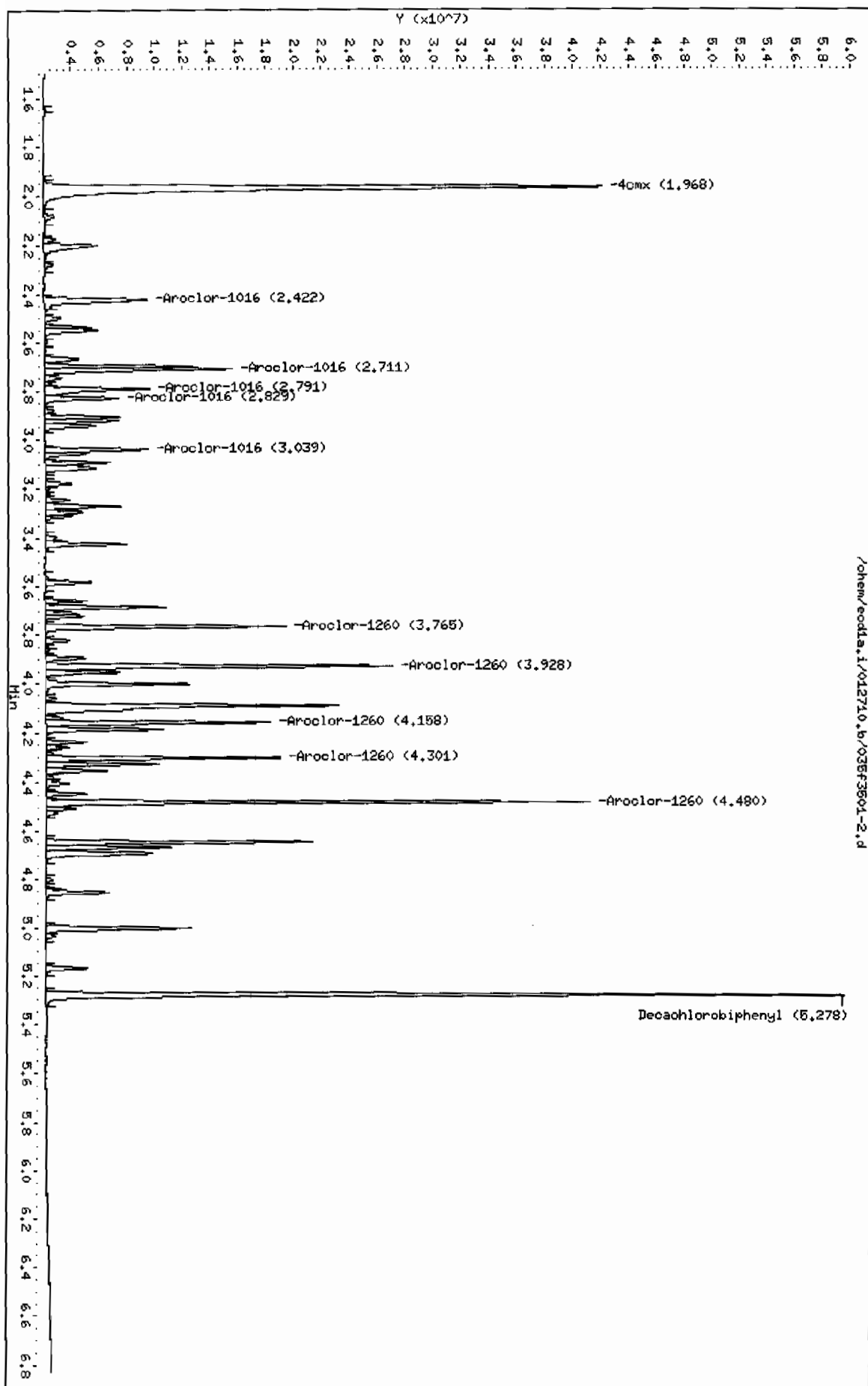
7 Aroclor-1260

CAS #: 11096-82-5

|                                  |       |       |          |         |                     |        |
|----------------------------------|-------|-------|----------|---------|---------------------|--------|
| 3.765                            | 3.765 | 0.000 | 12696403 | 716.551 | 23.9 80.00- 120.00  | 100.00 |
| 3.928                            | 3.928 | 0.000 | 19510041 | 724.516 | 24.2 131.61- 171.61 | 153.67 |
| 4.158                            | 4.158 | 0.000 | 11833422 | 731.073 | 24.4 68.06- 108.06  | 93.20  |
| 4.301                            | 4.300 | 0.001 | 12410729 | 734.017 | 24.5 71.84- 111.84  | 97.75  |
| 4.480                            | 4.480 | 0.000 | 28768957 | 763.800 | 25.4 194.61- 234.61 | 226.59 |
| Average of Peak Concentrations = |       |       |          | 24.5    |                     |        |

Data File: /chem/ecdl.a.i/012710.b/035F3501-2.d  
Date: 27-JAN-2010 12:51  
Client ID: PLK01LCS  
Sample Info: 11202023522111  
Volume Injected (uL): 1.0  
Column phase: DLP1

Instrument: ecdl.a.i  
Operator: YSL  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecdl1a.i/012710.b/035b3501-2.d  
 Lab Smp Id: 1202023522 Client Smp ID: PBLK01LCS  
 Inj Date : 27-JAN-2010 12:51  
 Operator : YSl Inst ID: ecd1a.i  
 Smp Info : |1202023522|1|  
 Misc Info : |ECD82P\_1S|944883|SVA|QC A|SOIL|LCS|||  
 Comment :  
 Method : /chem/ecdl1a.i/012710.b/ECD1-B-8082-121409.m  
 Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:12 Cal File: 014b1401.d  
 Als bottle: 35 QC Sample: LCS  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1324.sub  
 Target Version: 3.50 Sample Matrix: Soil  
 Processing Host: hpclp1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value    | Description                    |
|------|----------|--------------------------------|
| DF   | 1.00000  | Dilution Factor                |
| Uf   | 1.00000  | Correction factor              |
| Vt   | 1.00000  | Volume of final extract (mL)   |
| Vi   | 1.00000  | Volume injected (uL)           |
| Ws   | 30.00000 | Weight of sample extracted (g) |
| M    | 0.00000  | % Moisture                     |

Cpnd Variable Local Compound Variable

| CONCENTRATIONS           |        |        |                  |         |                   |        |        |            |
|--------------------------|--------|--------|------------------|---------|-------------------|--------|--------|------------|
|                          |        |        | ON-COL           | FINAL   |                   |        |        |            |
| RT                       | EXP RT | DIT RT | RESPONSE ( ug/L) | (ug/Kg) | TARGET RANGE      | RATIO  |        |            |
| ==                       | =====  | =====  | =====            | =====   | =====             | =====  |        |            |
| \$ 11 4cmx               |        |        |                  |         | CAS #: 877-09-8   |        |        |            |
| 2.298                    | 2.299  | -0.001 | 34917748         | 120.321 | 4.0               | 80.00- | 120.00 | 100.00     |
| -----                    |        |        |                  |         |                   |        |        |            |
| \$ 12 Decachlorobiphenyl |        |        |                  |         | CAS #: 2051-24-3  |        |        |            |
| 5.944                    | 5.945  | -0.001 | 30826726         | 126.352 | 4.2               | 80.00- | 120.00 | 100.00     |
| -----                    |        |        |                  |         |                   |        |        |            |
| 1 Aroclor-1016           |        |        |                  |         | CAS #: 12674-11-2 |        |        |            |
| 3.195                    | 3.195  | 0.000  | 8037223          | 633.507 | 21.1              | 80.00- | 120.00 | 100.00 (M) |
| 3.278                    | 3.279  | -0.001 | 5324719          | 605.210 | 20.2              | 44.37- | 84.37  | 66.25      |
| 3.342                    | 3.342  | 0.000  | 3257459          | 594.512 | 19.8              | 19.84- | 59.84  | 40.53      |
| 3.568                    | 3.569  | -0.001 | 4182408          | 597.722 | 19.9              | 31.13- | 71.13  | 52.04      |

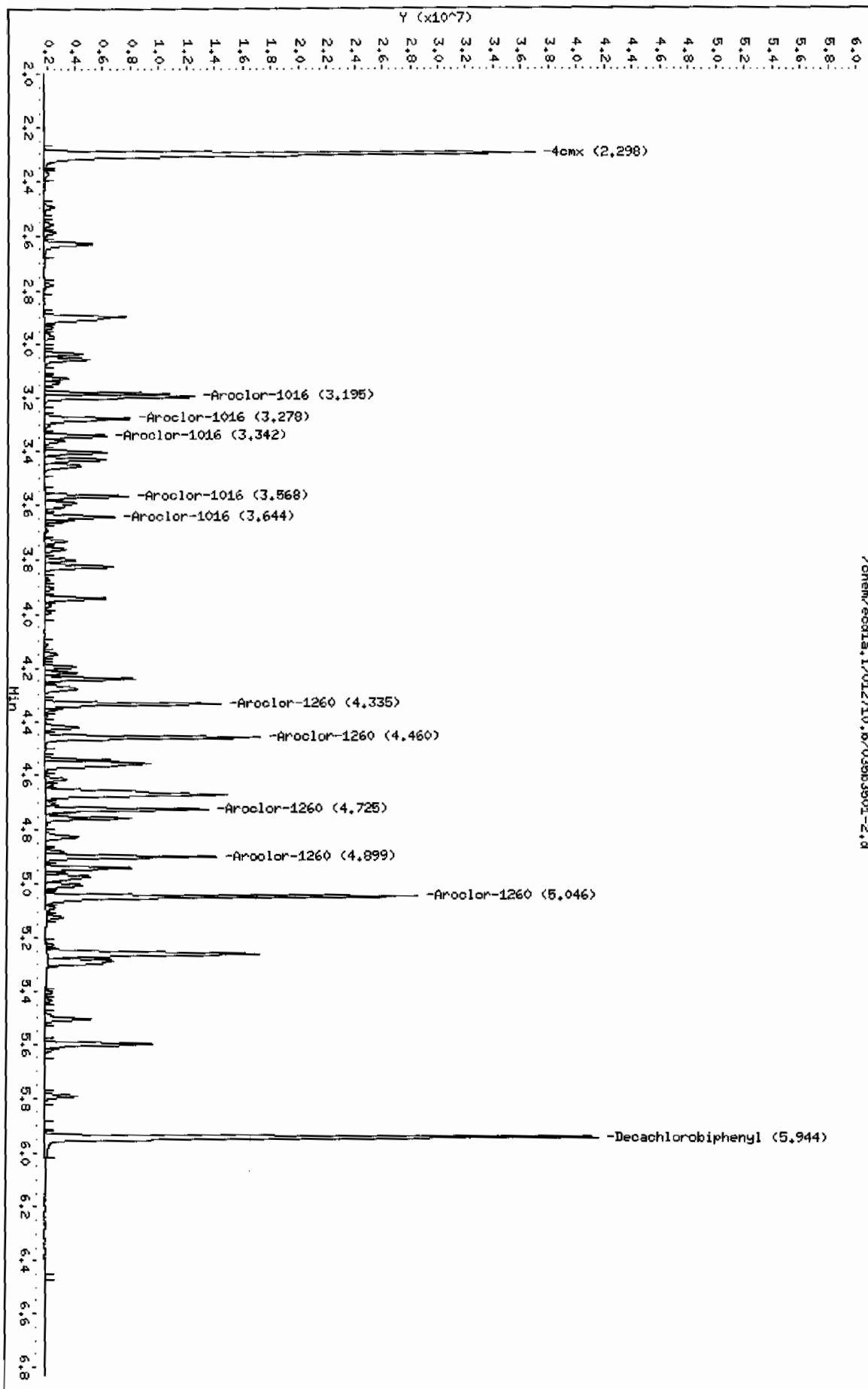
| CONCENTRATIONS                   |        |        |                  |         |                   |              |        |        |  |
|----------------------------------|--------|--------|------------------|---------|-------------------|--------------|--------|--------|--|
|                                  |        |        | ON-COL           |         | FINAL             |              |        |        |  |
| RT                               | EXP RT | DLT RT | RESPONSE ( ug/L) |         | (ug/Kg)           | TARGET RANGE |        | RATIO  |  |
| ==                               | =====  | =====  | =====            | =====   | =====             | =====        | =====  | =====  |  |
| 1 Aroclor-1016 (continued)       |        |        |                  |         |                   |              |        |        |  |
| 3.644                            | 3.644  | 0.000  | 3908485          | 595.481 | 19.8              | 27.00-       | 67.00  | 48.63  |  |
| Average of Peak Concentrations = |        |        |                  |         | 20.2              |              |        |        |  |
| -----                            |        |        |                  |         |                   |              |        |        |  |
| 7 Aroclor-1260                   |        |        |                  |         | CAS #: 11096-82-5 |              |        |        |  |
| 4.335                            | 4.335  | 0.000  | 8991900          | 677.351 | 22.6              | 80.00-       | 120.00 | 100.00 |  |
| 4.460                            | 4.459  | 0.001  | 11143876         | 689.683 | 23.0              | 104.23-      | 144.23 | 123.93 |  |
| 4.725                            | 4.725  | 0.000  | 8604631          | 688.414 | 22.9              | 72.03-       | 112.03 | 95.69  |  |
| 4.899                            | 4.899  | 0.000  | 8958671          | 692.928 | 23.1              | 75.50-       | 115.50 | 99.63  |  |
| 5.046                            | 5.046  | 0.000  | 20389073         | 716.774 | 23.9              | 197.36-      | 237.36 | 226.75 |  |
| Average of Peak Concentrations = |        |        |                  |         | 23.1              |              |        |        |  |

# QC Flag Legend

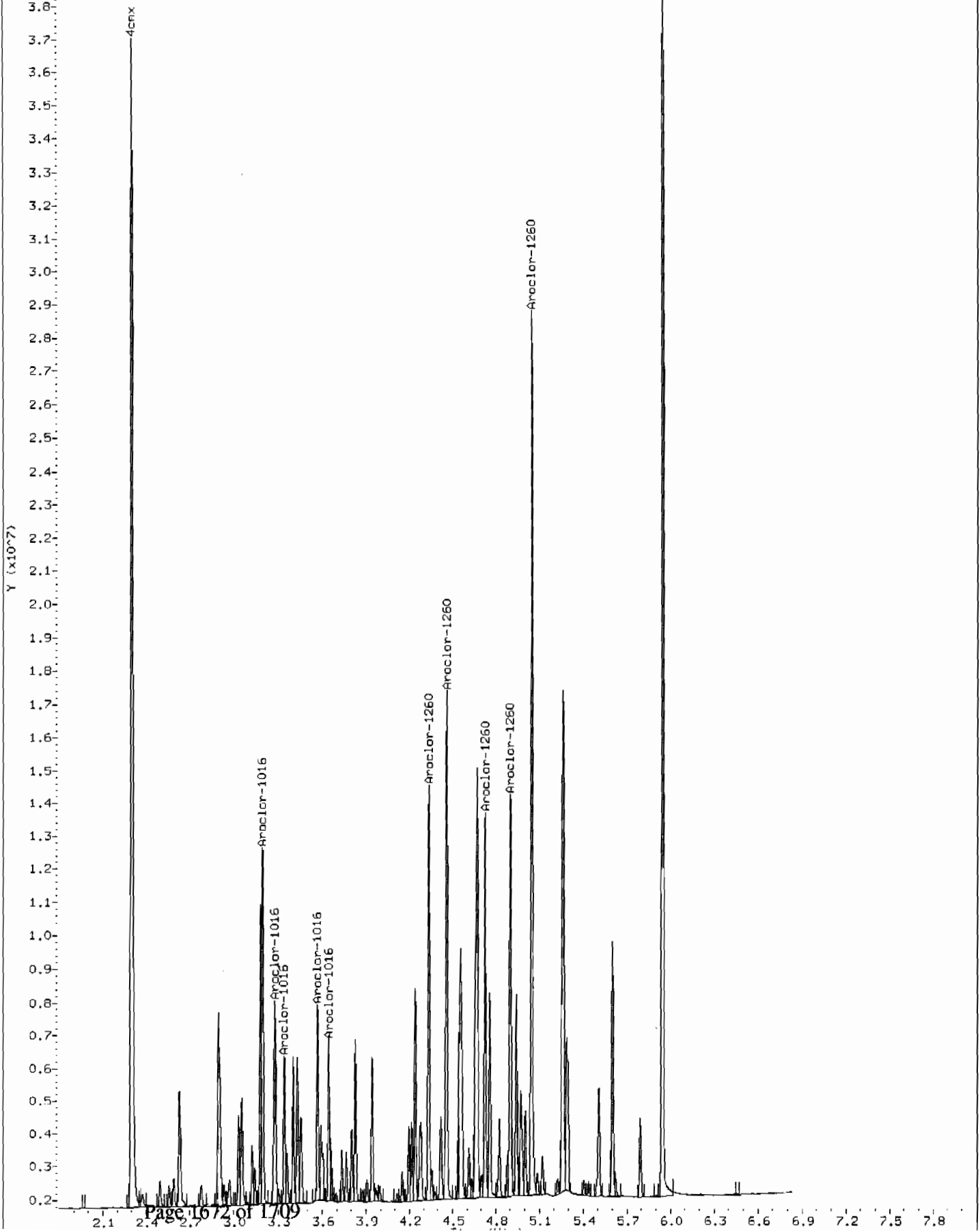
M - Compound response manually integrated.

Data File: /chem/eccl1a.i/012710.b/035b3501-2.d  
Date: 27-JAN-2010 12:51  
Client ID: PRLK01LCS  
Sample Info: 1120202352211  
Volume Injected (uL): 1.0  
Column Phase: CLP2

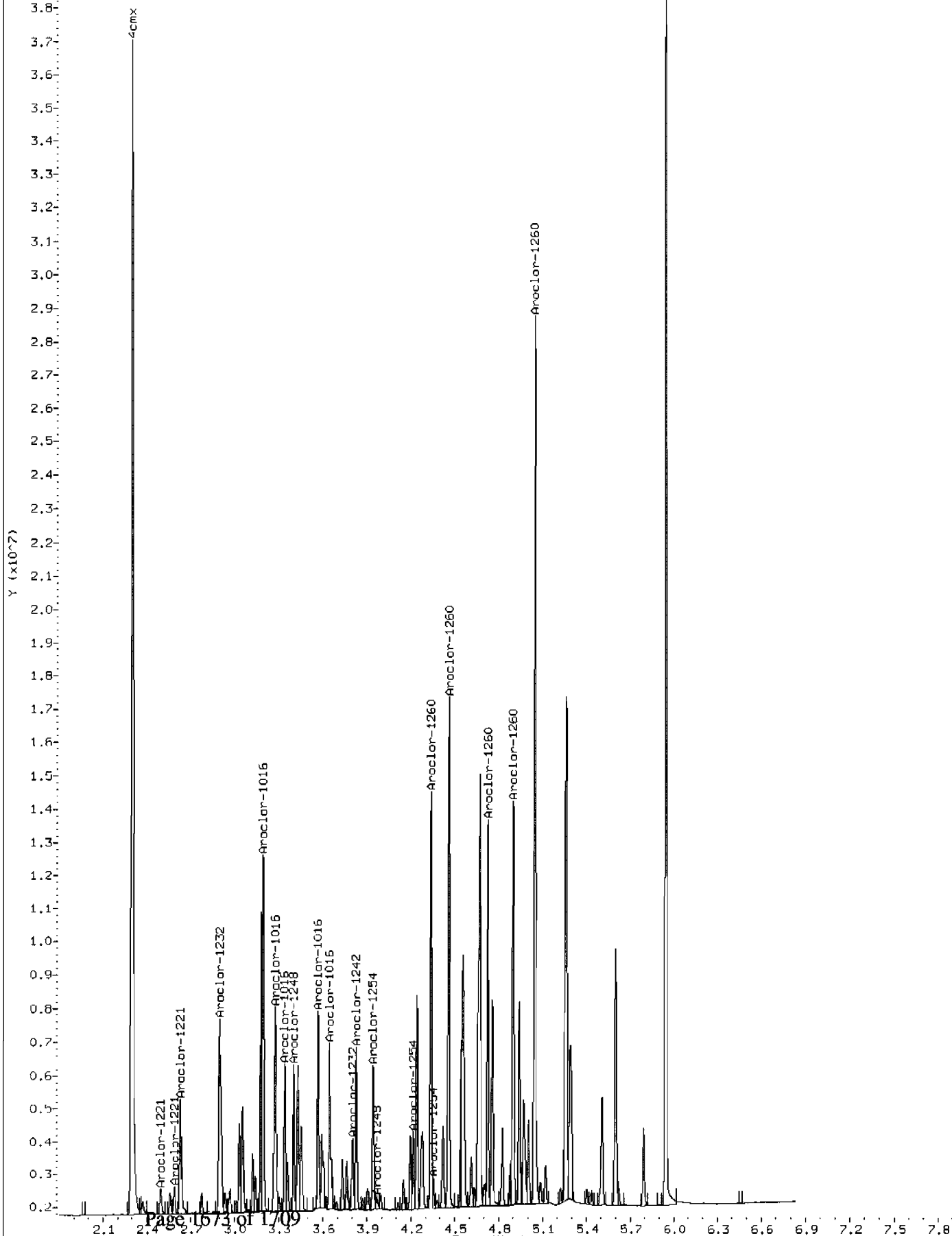
Instrument: eccl1a.i  
Operator: YSL  
Column diameter: 0.25



Comment: Manually Integrated  
Data File: /chem/ecdl1.i/012710.b/035b3501-2.  
Operator: YS1  
Injection Date: 27-JAN-2010 12:51  
Instrument: ecd1a.i  
Client Sample ID: PBLK01LCS



Comment: Before manual integration  
Data File: /chem/ecdl1.i/012710.b/orig-035b3501-2.d  
Operator: YS1  
Injection Date: 27-JAN-2010 12:51  
Instrument: ecd1a.i  
Client Sample ID: PBLK01LCS



**PCB**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1324  
Lab Sample ID: 1202023863  
Client Sample: QC for batch 944882  
Client ID: RE15-10-8411MS  
Batch ID: 944883  
Run Date: 01/28/2010 17:45  
Prep Date: 01/25/2010 20:44  
Data File: 047f4701.d  
047b4701.d

Date Collected: 01/14/2010 12:00  
Date Received: 01/20/2010 08:45  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.13 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 15.4  
Project: QC  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

| CAS No.    | Parname      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ | Column |
|------------|--------------|-----------|--------|-------|---------|---------|--------|
| 12674-11-2 | Aroclor-1016 |           | 15.2   | ug/kg | 1.31    | 3.92    | 1      |
| 11104-28-2 | Aroclor-1221 | U         | 3.92   | ug/kg | 1.31    | 3.92    | 1      |
| 11141-16-5 | Aroclor-1232 | U         | 3.92   | ug/kg | 1.31    | 3.92    | 1      |
| 53469-21-9 | Aroclor-1242 | U         | 3.92   | ug/kg | 1.31    | 3.92    | 1      |
| 12672-29-6 | Aroclor-1248 | U         | 3.92   | ug/kg | 1.31    | 3.92    | 1      |
| 11097-69-1 | Aroclor-1254 | U         | 3.92   | ug/kg | 1.31    | 3.92    | 1      |
| 11096-82-5 | Aroclor-1260 |           | 15.5   | ug/kg | 1.31    | 3.92    | 1      |



Data File: /chem/ecdl1a.i/012810a.b/047f4701.d  
Report Date: 01-Feb-2010 14:50

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/047f4701.d  
Lab Smp Id: 1202023863 Client Smp ID: RE15-10-8411MS  
Inj Date : 28-JAN-2010 17:45  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |1202023863|1|  
Misc Info : |ECD82P\_1S|944883|SVA|QC A|SOIL|MS|  
Comment :  
Method : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m  
Meth Date : 29-Jan-2010 09:10 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 47 QC Sample: MS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1324.sub  
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value    | Description                    |
|------|----------|--------------------------------|
| DF   | 1.00000  | Dilution Factor                |
| Uf   | 1.00000  | Correction factor              |
| Vt   | 1.00000  | Volume of final extract (mL)   |
| Vi   | 1.00000  | Volume injected (uL)           |
| Ws   | 30.13000 | Weight of sample extracted (g) |
| M    | 15.35810 | % Moisture                     |

Cpnd Variable Local Compound Variable

| CONCENTRATIONS                   |        |        |                   |         |                |        |
|----------------------------------|--------|--------|-------------------|---------|----------------|--------|
|                                  |        |        | ON-COL            | FINAL   |                |        |
| RT                               | EXP RT | DLT RT | RESPONSE ( ug/L)  | (ug/Kg) | TARGET RANGE   | RATIO  |
| ==                               | =====  | =====  | =====             | =====   | =====          | =====  |
| \$ 11 4cmx                       |        |        | CAS #: 877-09-8   |         |                |        |
| 1.966                            | 1.966  | 0.000  | 30341325 78.4101  | 3.1     | 80.00- 120.00  | 100.00 |
| \$ 12 Decachlorobiphenyl         |        |        | CAS #: 2051-24-3  |         |                |        |
| 5.276                            | 5.278  | -0.002 | 21992037 76.5842  | 3.0     | 80.00- 120.00  | 100.00 |
| 1 Aroclor-1016                   |        |        | CAS #: 12674-11-2 |         |                |        |
| 2.421                            | 2.422  | -0.001 | 6570351 476.815   | 18.7    | 80.00- 120.00  | 100.00 |
| 2.708                            | 2.710  | -0.002 | 7220628 412.487   | 16.2    | 113.22- 153.22 | 109.90 |
| 2.788                            | 2.791  | -0.003 | 3829520 332.975   | 13.0    | 65.23- 105.23  | 58.28  |
| 2.826                            | 2.828  | -0.002 | 2333184 340.829   | 13.4    | 31.10- 71.10   | 35.51  |
| 3.036                            | 3.039  | -0.003 | 3334206 375.415   | 14.7    | 45.89- 85.89   | 50.75  |
| Average of Peak Concentrations = |        |        |                   | 15.2    |                |        |

CONCENTRATIONS

ON-COL FINAL

| RT | EXP RT | DLT RT | RESPONSE ( ug/L) | (ug/Kg) | TARGET RANGE | RATIO |
|----|--------|--------|------------------|---------|--------------|-------|
|----|--------|--------|------------------|---------|--------------|-------|

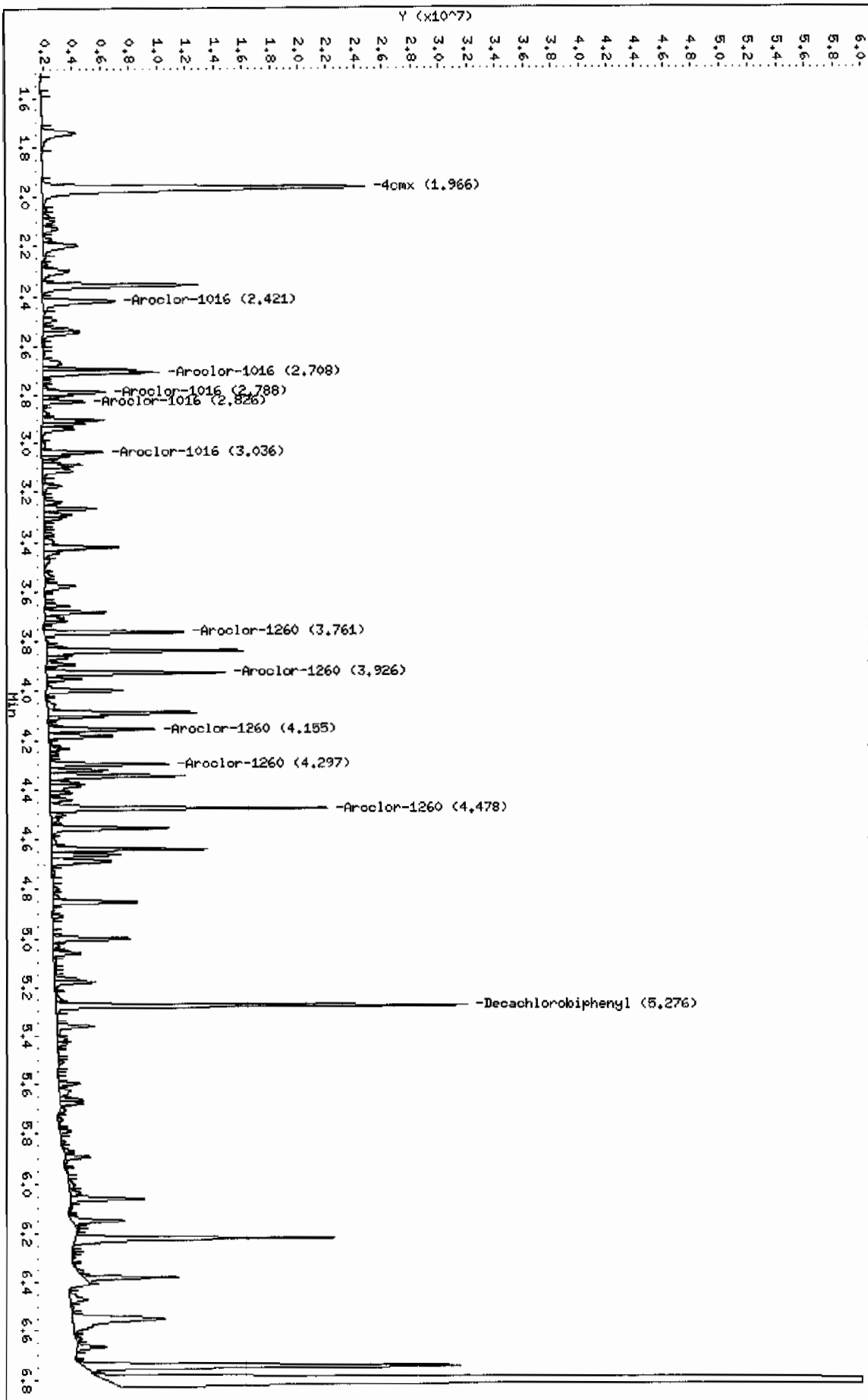
|                |       |        |                   |      |                |        |
|----------------|-------|--------|-------------------|------|----------------|--------|
| 7 Aroclor-1260 |       |        | CAS #: 11096-82-5 |      |                |        |
| 3.761          | 3.765 | -0.004 | 7223961 430.570   | 16.9 | 80.00- 120.00  | 100.00 |
| 3.926          | 3.928 | -0.002 | 9478423 374.137   | 14.7 | 131.66- 171.66 | 131.21 |
| 4.155          | 4.158 | -0.003 | 5280990 352.563   | 13.8 | 70.17- 110.17  | 73.10  |
| 4.297          | 4.301 | -0.004 | 5987350 384.750   | 15.1 | 74.48- 114.48  | 82.88  |
| 4.478          | 4.480 | -0.002 | 15089262 435.529  | 17.1 | 193.45- 233.45 | 208.88 |

Average of Peak Concentrations = 15.5

Data File: /chem/eod1a.i/012810a.b/047f4701.d  
Date: 28-JAN-2010 17:45  
Client ID: REIS-10-8411HS  
Sample Info: 1120202386311  
Volume Injected (uL): 1.0  
Column Phase: CLP1

Instrument: eod1a.i  
Operator: YSL  
Column diameter: 0.25

/chem/eod1a.i/012810a.b/047f4701.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/047b4701.d  
 Lab Smp Id: 1202023863 Client Smp ID: RE15-10-8411MS  
 Inj Date : 28-JAN-2010 17:45  
 Operator : YSl Inst ID: ecd1a.i  
 Smp Info : |1202023863|1|  
 Misc Info : |ECD82P\_1\$|944883|SVA|QC A|SOIL|MS|||  
 Comment :  
 Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m  
 Meth Date : 29-Jan-2010 06:54 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
 Als bottle: 47 QC Sample: MS  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1324.sub  
 Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

| Name | Value    | Description                    |
|------|----------|--------------------------------|
| DF   | 1.00000  | Dilution Factor                |
| Uf   | 1.00000  | Correction factor              |
| Vt   | 1.00000  | Volume of final extract (mL)   |
| Vi   | 1.00000  | Volume injected (uL)           |
| Ws   | 30.13000 | Weight of sample extracted (g) |
| M    | 15.35810 | % Moisture                     |

Cpnd Variable Local Compound Variable

| CONCENTRATIONS                   |        |        |                  |        |                   |              |       |
|----------------------------------|--------|--------|------------------|--------|-------------------|--------------|-------|
| RT                               | EXP RT | DLT RT | RESPONSE ( ug/L) | ON-COL | FINAL             | TARGET RANGE | RATIO |
| \$ 11 4cmx                       |        |        |                  |        | CAS #: 877-09-8   |              |       |
| 2.297                            | 2.298  | -0.001 | 22582641 80.8900 | 3.2    | 80.00- 120.00     | 100.00       |       |
| \$ 12 Decachlorobiphenyl         |        |        |                  |        | CAS #: 2051-24-3  |              |       |
| 5.943                            | 5.944  | -0.001 | 15282444 87.5206 | 3.4    | 80.00- 120.00     | 100.00       |       |
| 1 Aroclor-1016                   |        |        |                  |        | CAS #: 12674-11-2 |              |       |
| 3.194                            | 3.195  | -0.001 | 4481905 367.525  | 14.4   | 80.00- 120.00     | 100.00(M)    |       |
| 3.276                            | 3.278  | -0.002 | 3351514 409.164  | 16.0   | 44.90- 84.90      | 74.78        |       |
| 3.340                            | 3.341  | -0.001 | 2198327 432.993  | 17.0   | 20.22- 60.22      | 49.05        |       |
| 3.566                            | 3.568  | -0.002 | 2768403 432.704  | 17.0   | 30.82- 70.82      | 61.77        |       |
| 3.642                            | 3.644  | -0.002 | 2021044 341.487  | 13.4   | 27.45- 67.45      | 45.09        |       |
| Average of Peak Concentrations = |        |        |                  | 15.6   |                   |              |       |

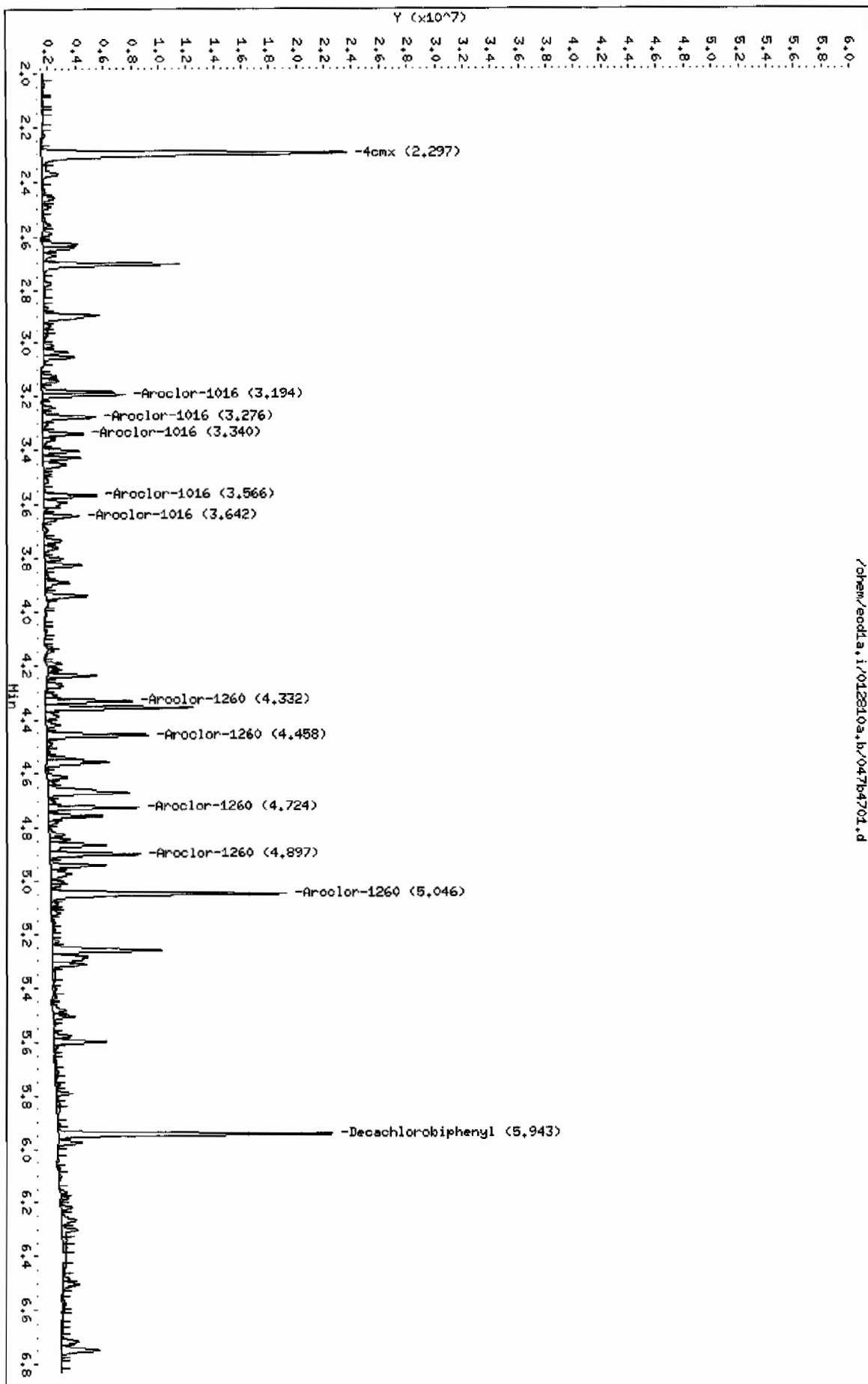
| CONCENTRATIONS                   |        |        |          |                   |         |                |        |
|----------------------------------|--------|--------|----------|-------------------|---------|----------------|--------|
|                                  |        |        | ON-COL   |                   | FINAL   |                |        |
| RT                               | EXP RT | DLT RT | RESPONSE | ( ug/L)           | (ug/Kg) | TARGET RANGE   | RATIO  |
| =====                            |        |        |          |                   |         |                |        |
| 7 Aroclor-1260                   |        |        |          | CAS #: 11096-82-5 |         |                |        |
| 4.332                            | 4.335  | -0.003 | 4605277  | 386.125           | 15.1    | 80.00- 120.00  | 100.00 |
| 4.458                            | 4.459  | -0.001 | 5359160  | 372.985           | 14.6    | 101.61- 141.61 | 116.37 |
| 4.724                            | 4.725  | -0.001 | 4606165  | 422.250           | 16.6    | 71.00- 111.00  | 100.02 |
| 4.897                            | 4.899  | -0.002 | 4819413  | 430.095           | 16.9    | 73.09- 113.09  | 104.65 |
| 5.046                            | 5.046  | 0.000  | 15012515 | 618.743           | 24.3    | 185.37- 225.37 | 325.99 |
| Average of Peak Concentrations = |        |        |          |                   | 17.5    |                |        |

# QC Flag Legend

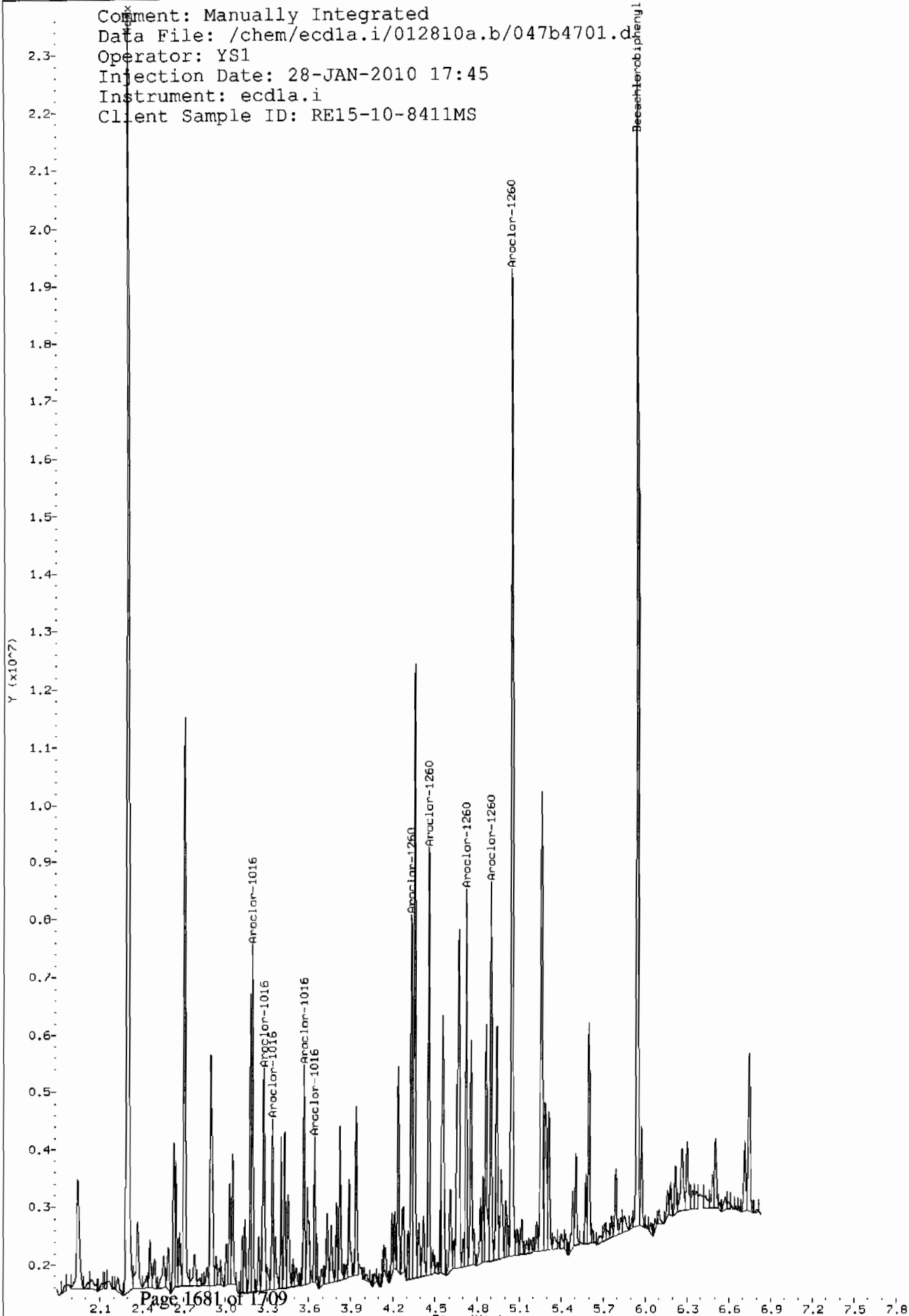
M - Compound response manually integrated.

Data File: /chem/ecdl.a.i/012810a.b/047b4701.d  
Date: 28-JAN-2010 17:45  
Client ID: RE15-10-841HS  
Sample Info: 1120202386311  
Volume Injected (uL): 1.0  
Column phase: CLP2

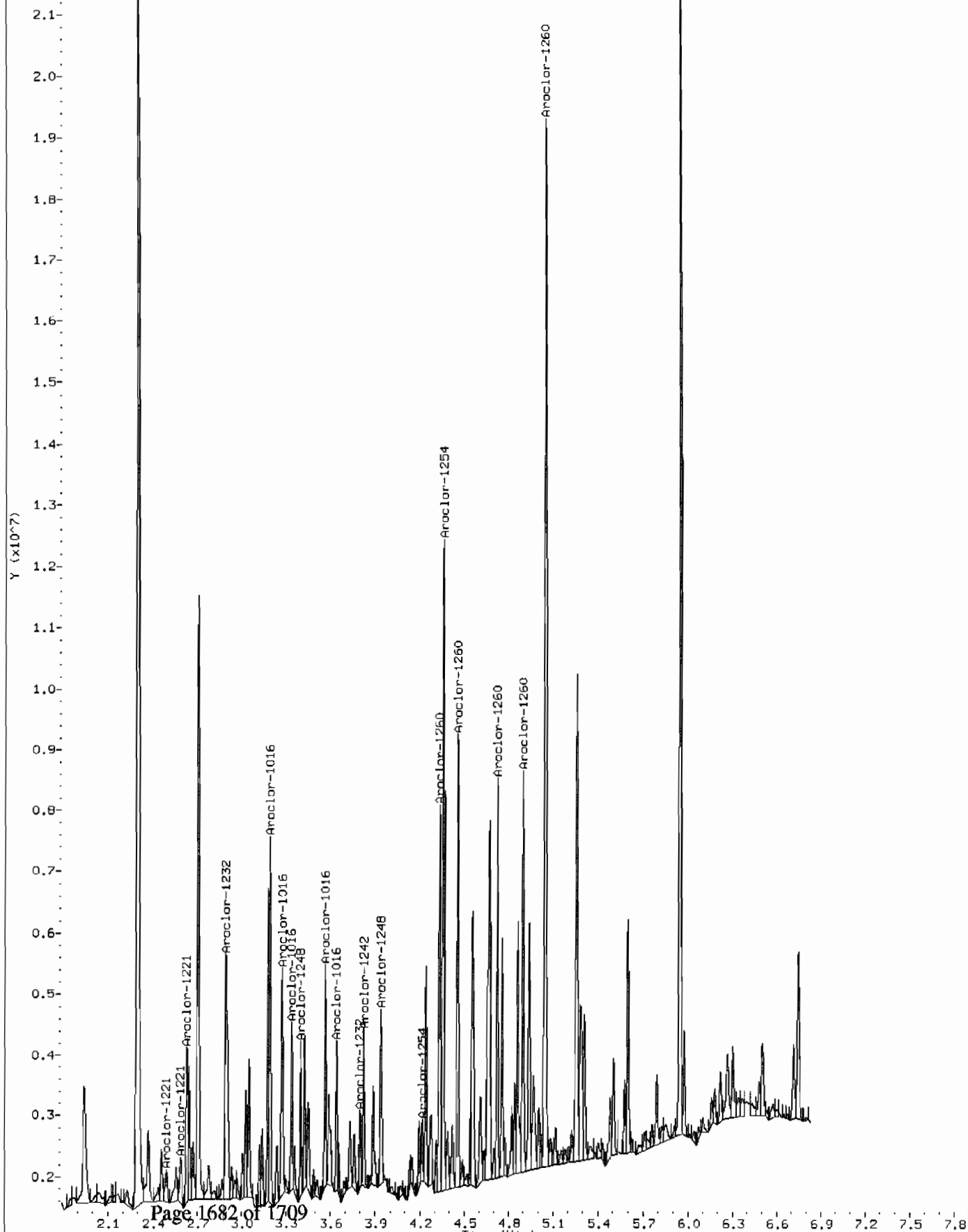
Instrument: ecdl.a.i  
Operator: YSL  
Column diameter: 0.25



Comment: Manually Integrated  
Data File: /chem/ecdl1.i/012810a.b/047b4701.d  
Operator: YS1  
Injection Date: 28-JAN-2010 17:45  
Instrument: ecdl1.i  
Client Sample ID: RE15-10-8411MS



~~Thuydriqurttuul~~





## PCB

Page 1 of 1

Certificate of Analysis  
Sample Summary

|                |                     |                 |                  |               |             |
|----------------|---------------------|-----------------|------------------|---------------|-------------|
| SDG Number:    | 10-1324             | Date Collected: | 01/14/2010 12:00 | Matrix:       | R           |
| Lab Sample ID: | 1202023864          | Date Received:  | 01/20/2010 08:45 | %Moisture:    | 15.4        |
| Client Sample: | QC for batch 944882 | Client:         | LANL010          | Project:      | QC          |
| Client ID:     | RE15-10-8411MSD     | Method:         | SW846 8082       | SOP Ref:      | GL-OA-E-040 |
| Batch ID:      | 944883              | Inst:           | ECD1A.I          | Dilution:     | 1           |
| Run Date:      | 01/28/2010 17:58    | Analyst:        | YS1              | Inj. Vol:     | 1 uL        |
| Prep Date:     | 01/25/2010 20:44    | Aliquot:        | 30.02 g          | Final Volume: | 1 mL        |
| Data File:     | 048f4801.d          | Column:         | 1 CLP1           | Level:        | LOW         |
|                | 048b4801.d          |                 | 2 CLP2           |               |             |

| CAS No.    | Parname      | Qualifier | Result | Units | MDL/LOD | PQL/LOQ | Column |
|------------|--------------|-----------|--------|-------|---------|---------|--------|
| 12674-11-2 | Aroclor-1016 |           | 14.9   | ug/kg | 1.31    | 3.94    | 1      |
| 11104-28-2 | Aroclor-1221 | U         | 3.94   | ug/kg | 1.31    | 3.94    | 1      |
| 11141-16-5 | Aroclor-1232 | U         | 3.94   | ug/kg | 1.31    | 3.94    | 1      |
| 53469-21-9 | Aroclor-1242 | U         | 3.94   | ug/kg | 1.31    | 3.94    | 1      |
| 12672-29-6 | Aroclor-1248 | U         | 3.94   | ug/kg | 1.31    | 3.94    | 1      |
| 11097-69-1 | Aroclor-1254 | U         | 3.94   | ug/kg | 1.31    | 3.94    | 1      |
| 11096-82-5 | Aroclor-1260 |           | 15.3   | ug/kg | 1.31    | 3.94    | 1      |

Data File: /chem/ecdl1a.i/012810a.b/048f4801.d  
Report Date: 29-Jan-2010 07:36

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/048f4801.d  
Lab Smp Id: 1202023864 Client Smp ID: RE15-10-8411MSD  
Inj Date : 28-JAN-2010 17:58  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |1202023864|1|  
Misc Info : |ECD82P\_1S|944883|SVA|QC A|SOIL|MSD|||  
Comment :  
Method : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m  
Meth Date : 29-Jan-2010 06:55 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 48 QC Sample: MSD  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1324.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpclp1

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

| Name | Value    | Description                    |
|------|----------|--------------------------------|
| DF   | 1.00000  | Dilution Factor                |
| Uf   | 1.00000  | Correction factor              |
| Vt   | 1.00000  | Volume of final extract (mL)   |
| Vi   | 1.00000  | Volume injected (uL)           |
| Ws   | 30.02000 | Weight of sample extracted (g) |
| M    | 15.35810 | % Moisture                     |

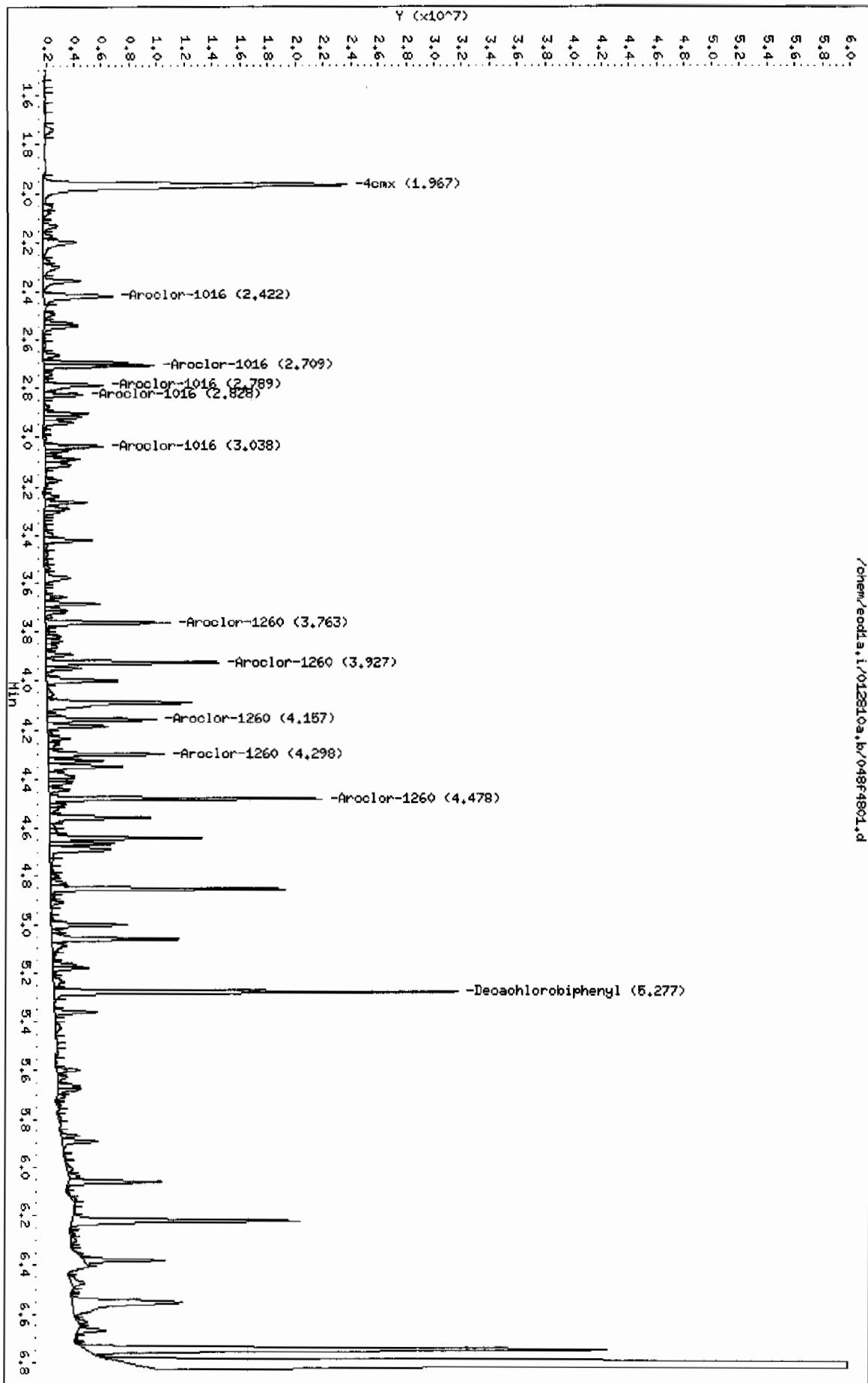
Cpnd Variable Local Compound Variable

| CONCENTRATIONS                            |        |        |                  |         |                |        |  |
|---|--------|--------|------------------|---------|----------------|--------|--|
|   |        | ON-COL |                  | FINAL   |                |        |  |
| RT  | EXP RT | DLT RT | RESPONSE ( ug/L) | (ug/Kg) | TARGET RANGE   | RATIO  |  |
| ==  | =====  | =====  | =====            | =====   | =====          | =====  |  |
| \$ 11 4cmx CAS #: 877-09-8                |        |        |                  |         |                |        |  |
| 1.967                                     | 1.966  | 0.001  | 28732274 74.2519 | 2.9     | 80.00- 120.00  | 100.00 |  |
| -----                                     |        |        |                  |         |                |        |  |
| \$ 12 Decachlorobiphenyl CAS #: 2051-24-3 |        |        |                  |         |                |        |  |
| 5.277                                     | 5.278  | -0.001 | 22030930 76.7196 | 3.0     | 80.00- 120.00  | 100.00 |  |
| -----                                     |        |        |                  |         |                |        |  |
| 1 Aroclor-1016 CAS #: 12674-11-2          |        |        |                  |         |                |        |  |
| 2.422                                     | 2.422  | 0.000  | 6175043 448.127  | 17.6    | 80.00- 120.00  | 100.00 |  |
| 2.709                                     | 2.710  | -0.001 | 6913850 394.962  | 15.5    | 110.41- 150.41 | 111.96 |  |
| 2.789                                     | 2.791  | -0.002 | 4327371 376.263  | 14.8    | 64.79- 104.79  | 70.08  |  |
| 2.828                                     | 2.828  | 0.000  | 2174859 317.701  | 12.5    | 30.68- 70.68   | 35.22  |  |

| CONCENTRATIONS                   |        |        |                   |         |         |                       |
|----------------------------------|--------|--------|-------------------|---------|---------|-----------------------|
|                                  |        |        | ON-COI.           |         | FINAL   |                       |
| RT                               | EXP RT | DLT RT | RESPONSE ( ug/L)  |         | (ug/Kg) | TARGET RANGE RATIO    |
| ==                               | =====  | =====  | =====             | =====   | =====   | =====                 |
| 1 Aroclor-1016 (continued)       |        |        |                   |         |         |                       |
| 3.038                            | 3.039  | -0.001 | 3224034           | 363.010 | 14.3    | 45.02- 85.02 52.21    |
| Average of Peak Concentrations = |        |        |                   |         | 14.9    |                       |
| -----                            |        |        |                   |         |         |                       |
| 7 Aroclor-1260                   |        |        | CAS #: 11096-82-5 |         |         |                       |
| 3.763                            | 3.765  | -0.002 | 6531300           | 389.285 | 15.3    | 80.00- 120.00 100.00  |
| 3.927                            | 3.928  | -0.001 | 9340624           | 368.697 | 14.5    | 131.11- 171.11 143.01 |
| 4.157                            | 4.158  | -0.001 | 5408845           | 361.099 | 14.2    | 68.60- 108.60 82.81   |
| 4.298                            | 4.301  | -0.003 | 6469057           | 415.704 | 16.4    | 71.52- 111.52 99.05   |
| 4.478                            | 4.480  | -0.002 | 14077454          | 406.325 | 16.0    | 185.98- 225.98 215.54 |
| Average of Peak Concentrations = |        |        |                   |         | 15.3    |                       |
| -----                            |        |        |                   |         |         |                       |

Data File: /chem/ecdl.a.i/012810a.b/048f4801.d  
Date : 28-JAN-2010 17:58  
Client ID: RE15-10-841MSD  
Sample Info: 1120202386411  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdl.a.i  
Operator: YSL  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/048b4801.d  
Lab Smp Id: 1202023864 Client Smp ID: RE15-10-8411MSD  
Inj Date : 28-JAN-2010 17:58  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |1202023864|1|  
Misc Info : |ECD82P\_1S|944883|SVA|QC A|SOIL|MSD|  
Comment :  
Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m  
Meth Date : 29-Jan-2010 06:54 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
Als bottle: 48 QC Sample: MSD  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1324.sub  
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

| Name | Value    | Description                    |
|------|----------|--------------------------------|
| DF   | 1.00000  | Dilution Factor                |
| Uf   | 1.00000  | Correction factor              |
| Vt   | 1.00000  | Volume of final extract (mL)   |
| Vi   | 1.00000  | Volume injected (uL)           |
| Ws   | 30.02000 | Weight of sample extracted (g) |
| M    | 15.35810 | % Moisture                     |

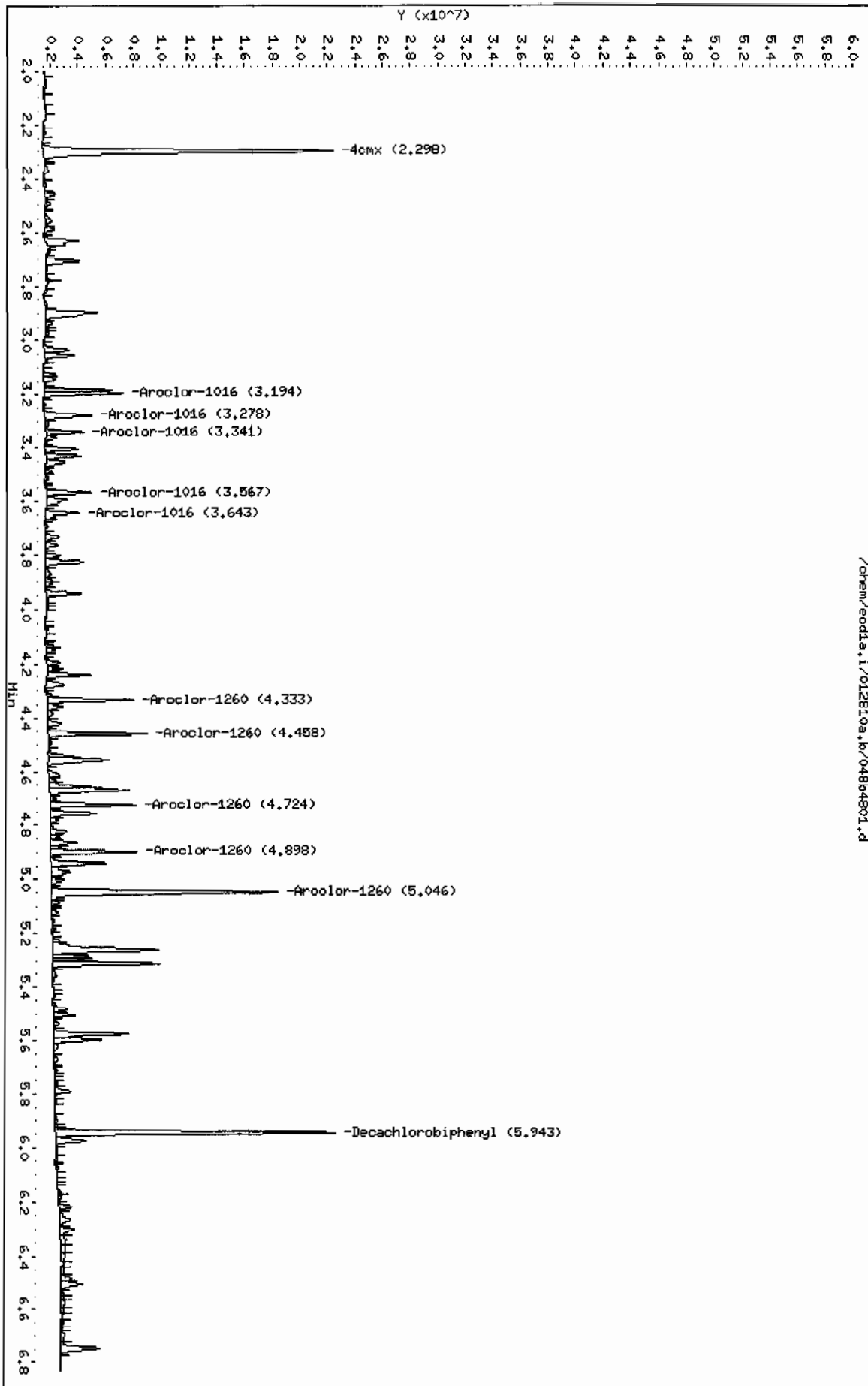
Cpnd Variable Local Compound Variable

| CONCENTRATIONS                   |        |        |                  |        |                   |              |       |
|----------------------------------|--------|--------|------------------|--------|-------------------|--------------|-------|
| RT                               | EXP RT | DLT RT | RESPONSE ( ug/L) | ON-COL | FINAL             | TARGET RANGE | RATIO |
| \$ 11 4cmx                       |        |        |                  |        | CAS #: 877-09-8   |              |       |
| 2.298                            | 2.298  | 0.000  | 20988745 75.1807 | 3.0    | 80.00- 120.00     | 100.00       |       |
| \$ 12 Decachlorobiphenyl         |        |        |                  |        | CAS #: 2051-24-3  |              |       |
| 5.943                            | 5.944  | -0.001 | 15120019 86.5904 | 3.4    | 80.00- 120.00     | 100.00       |       |
| 1 Aroclor-1016                   |        |        |                  |        | CAS #: 12674-11-2 |              |       |
| 3.194                            | 3.195  | -0.001 | 4035215 330.895  | 13.0   | 80.00- 120.00     | 100.00       |       |
| 3.278                            | 3.278  | 0.000  | 2887696 352.540  | 13.9   | 44.90- 84.90      | 71.56        |       |
| 3.341                            | 3.341  | 0.000  | 1761972 347.047  | 13.6   | 20.22- 60.22      | 43.66        |       |
| 3.567                            | 3.568  | -0.001 | 2236066 349.499  | 13.8   | 30.82- 70.82      | 55.41        |       |
| 3.643                            | 3.644  | -0.001 | 2123643 358.823  | 14.1   | 27.45- 67.45      | 52.63        |       |
| Average of Peak Concentrations = |        |        |                  | 13.7   |                   |              |       |

| CONCENTRATIONS                   |        |        |          |         |                   |                |        |       |
|----------------------------------|--------|--------|----------|---------|-------------------|----------------|--------|-------|
| RT                               | EXP RT | DLT RT | ON-COL   |         | FINAL             | TARGET RANGE   | RATIO  |       |
|                                  |        |        | RESPONSE | ( ug/L) | (ug/Kg)           |                |        |       |
| ==                               | =====  | =====  | =====    | =====   | =====             | =====          | =====  | ===== |
| 7 Aroclor-1260                   |        |        |          |         | CAS #: 11096-82-5 |                |        |       |
| 4.333                            | 4.335  | -0.002 | 4352999  | 364.973 | 14.4              | 80.00- 120.00  | 100.00 |       |
| 4.458                            | 4.459  | -0.001 | 4978632  | 346.501 | 13.6              | 101.61- 141.61 | 114.37 |       |
| 4.724                            | 4.725  | -0.001 | 4320943  | 396.104 | 15.6              | 71.00- 111.00  | 99.26  |       |
| 4.898                            | 4.899  | -0.001 | 4698664  | 419.319 | 16.5              | 73.09- 113.09  | 107.94 |       |
| 5.046                            | 5.046  | 0.000  | 14500527 | 597.642 | 23.5              | 185.37- 225.37 | 333.12 |       |
| Average of Peak Concentrations = |        |        |          |         | 16.7              |                |        |       |
| -----                            |        |        |          |         |                   |                |        |       |

Data File: /chem/ecdl.a.i/012810a.b/048b4801.d  
Date: 28-JAN-2010 17:58  
Client ID: REL5-10-8411MSD  
Sample Info: 1120202386411  
Volume Injected (uL): 1.0  
Column Phase: CLP2

Instrument: ecdl.a.i  
Operator: YSL  
Column diameter: 0.25



# MISCELLANEOUS DATA



## GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 12/15/2009

METHOD: ECD1-F-8082-121409.m

OPERATOR: YS1

REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

HARDWARE CONFIGURATION &amp; METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT DA385  
ALUMINA LOT 1230997-A  
COPPER LOT 236547-A

## Calibration &amp; QC Information

Initial Calibration Dates: See Calibration History and Standard Logbook.

Initial Calibration Std ID's: See Calibration History and Standard Logbook.

GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082

Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,  
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,  
BF-Before, AF-After.

Sequence Number: /chem/ecdla.i/121409.b Injection Volume: 0.5 ul

| Data File   | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch | SDG    | Dilution | Client       | Comments |
|-------------|-------------------|---------|---------------------|-------|--------|----------|--------------|----------|
| 0001f0101.d | WAR091130-99 01   | YS1     | 14-DEC-2009 04:44   |       | 121409 | 1.0      | CLEAN        |          |
| 0002f0201.d | WAR091211-60 01   | YS1     | 14-DEC-2009 04:54   |       | 121409 | 1.0      | DUSE RE-ICAL |          |
| 0003f0301.d | WAR091102-54      | YS1     | 14-DEC-2009 05:05   |       | 121409 | 1.0      | DUSE RE-ICAL |          |
| 0004f0401.d | WAR0911102-42     | YS1     | 14-DEC-2009 05:15   |       | 121409 | 1.0      | DUSE RE-ICAL |          |
| 0005f0501.d | WAR091027-48      | YS1     | 14-DEC-2009 05:26   |       | 121409 | 1.0      | DUSE RE-ICAL |          |
| 0006f0601.d | WAR090930-32      | YS1     | 14-DEC-2009 05:36   |       | 121409 | 1.0      | PATTERN ONLY |          |
| 0007f0701.d | WAR090803-21      | YS1     | 14-DEC-2009 05:47   |       | 121409 | 1.0      | PATTERN ONLY |          |
| 0008f0801.d | WAR090803-62      | YS1     | 14-DEC-2009 05:58   |       | 121409 | 1.0      | PATTERN ONLY |          |
| 0009f0901.d | WAR091106-68      | YS1     | 14-DEC-2009 06:08   |       | 121409 | 1.0      | DUSE RE-ICAL |          |
| 0010f1001.d | 1660-1            | YS1     | 14-DEC-2009 06:19   |       | 121409 | 1.0      | DUSE         |          |
| 0011f1101.d | 1660-2            | YS1     | 14-DEC-2009 06:29   |       | 121409 | 1.0      | DUSE         |          |
| 0012f1201.d | 1660-3            | YS1     | 14-DEC-2009 06:40   |       | 121409 | 1.0      | DUSE         |          |
| 0013f1301.d | 1660-4            | YS1     | 14-DEC-2009 06:50   |       | 121409 | 1.0      | DUSE         |          |
| 0014f1401.d | WAR091102-01      | YS1     | 14-DEC-2009 07:01   |       | 121409 | 1.0      | DUSE         |          |
| 0015f1501.d | WAR091211-60 01   | YS1     | 14-DEC-2009 07:11   |       | 121409 | 1.0      | DUSE         |          |

Instrument Batch: /chem/ecdla.i/121409.b

Page: 1

| Data File | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch | SDG | Dilution | Client | Comments |
|-----------|-------------------|---------|---------------------|-------|-----|----------|--------|----------|
|-----------|-------------------|---------|---------------------|-------|-----|----------|--------|----------|

|            |                 |     |                   |  |        |  |     |                        |  |
|------------|-----------------|-----|-------------------|--|--------|--|-----|------------------------|--|
| 016f1601.d | WAR091214-05 54 | YS1 | 14-DEC-2009 07:22 |  | 121409 |  | 1.0 | AR1254 I-CAL LEVEL 1   |  |
| 017f1701.d | WAR091214-06 54 | YS1 | 14-DEC-2009 07:32 |  | 121409 |  | 1.0 | AR1254 I-CAL LEVEL 2   |  |
| 018f1801.d | WAR091214-07 54 | YS1 | 14-DEC-2009 07:43 |  | 121409 |  | 1.0 | AR1254 I-CAL LEVEL 3   |  |
| 019f1901.d | WAR091214-08 54 | YS1 | 14-DEC-2009 07:53 |  | 121409 |  | 1.0 | AR1254 I-CAL LEVEL 4   |  |
| 020f2001.d | IAR091027-01    | YS1 | 14-DEC-2009 08:04 |  | 121409 |  | 1.0 | AR1254 I-CAL LEVEL 5   |  |
| 021f2101.d | WAR091102-54    | YS1 | 14-DEC-2009 08:14 |  | 121409 |  | 1.0 | PASSED ON BOTH COLUMNS |  |
| 022f2201.d | WAR091214-09 42 | YS1 | 14-DEC-2009 08:25 |  | 121409 |  | 1.0 | AR1242 I-CAL LEVEL 1   |  |
| 023f2301.d | WAR091214-10 42 | YS1 | 14-DEC-2009 08:35 |  | 121409 |  | 1.0 | AR1242 I-CAL LEVEL 2   |  |
| 024f2401.d | WAR091214-11 42 | YS1 | 14-DEC-2009 08:46 |  | 121409 |  | 1.0 | AR1242 I-CAL LEVEL 3   |  |
| 025f2501.d | WAR091214-12 42 | YS1 | 14-DEC-2009 08:56 |  | 121409 |  | 1.0 | AR1242 I-CAL LEVEL 4   |  |
| 026f2601.d | IAR091111-01    | YS1 | 14-DEC-2009 09:07 |  | 121409 |  | 1.0 | AR1242 I-CAL LEVEL 5   |  |
| 027f2701.d | WAR091102-42    | YS1 | 14-DEC-2009 09:17 |  | 121409 |  | 1.0 | PASSED ON BOTH COLUMNS |  |
| 028f2801.d | WAR091214-13 48 | YS1 | 14-DEC-2009 09:28 |  | 121409 |  | 1.0 | AR1248 I-CAL LEVEL 1   |  |
| 029f2901.d | WAR091214-14 48 | YS1 | 14-DEC-2009 09:38 |  | 121409 |  | 1.0 | AR1248 I-CAL LEVEL 2   |  |
| 030f3001.d | WAR091214-15 48 | YS1 | 14-DEC-2009 09:49 |  | 121409 |  | 1.0 | AR1248 I-CAL LEVEL 3   |  |
| 031f3101.d | WAR091214-16 48 | YS1 | 14-DEC-2009 09:59 |  | 121409 |  | 1.0 | AR1248 I-CAL LEVEL 4   |  |
| 032f3201.d | IAR091027-02    | YS1 | 14-DEC-2009 10:10 |  | 121409 |  | 1.0 | AR1248 I-CAL LEVEL 5   |  |
| 033f3301.d | WAR091027-48    | YS1 | 14-DEC-2009 10:20 |  | 121409 |  | 1.0 | PASSED ON BOTH COLUMNS |  |
| 034f3401.d | WAR091214-01 60 | YS1 | 14-DEC-2009 10:31 |  | 121409 |  | 1.0 | AR1660 I-CAL LEVEL 1   |  |
| 035f3501.d | WAR091214-02 60 | YS1 | 14-DEC-2009 10:41 |  | 121409 |  | 1.0 | AR1660 I-CAL LEVEL 2   |  |

Instrument Batch: /chem/ecdl.a.i/121409.b

| Data File  | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch | SDG    | Dilution | Client | Comments               |
|------------|-------------------|---------|---------------------|-------|--------|----------|--------|------------------------|
| 036f3601.d | WAR091214-03 60   | YS1     | 14-DEC-2009 10:52   |       | 121409 |          | 1.0    | AR1660 I-CAL LEVEL 3   |
| 037f3701.d | WAR091214-04 60   | YS1     | 14-DEC-2009 11:02   |       | 121409 |          | 2.0    | AR1660 I-CAL LEVEL 4   |
| 038f3801.d | IAR091102-01      | YS1     | 14-DEC-2009 11:13   |       | 121409 |          | 1.0    | AR1660 I-CAL LEVEL 5   |
| 039f3901.d | WAR091211-60 01   | YS1     | 14-DEC-2009 11:23   |       | 121409 |          | 1.0    | PASSED ON BOTH COLUMNS |
| 040f4001.d | WAR091214-17 68   | YS1     | 14-DEC-2009 11:34   |       | 121409 |          | 1.0    | AR1268 I-CAL LEVEL 1   |

|            |                 |     |                   |        |        |  |           |                                 |
|------------|-----------------|-----|-------------------|--------|--------|--|-----------|---------------------------------|
| 041f401.d  | WAR091214-18 68 | YS1 | 14-DEC-2009 11:44 |        | 121409 |  | 1.0       | ARI268 I-CAL LEVEL 2            |
| 042f4201.d | WAR091214-19 68 | YS1 | 14-DEC-2009 11:55 |        | 121409 |  | 1.0       | ARI268 I-CAL LEVEL 3            |
| 043f4301.d | WAR091214-20 68 | YS1 | 14-DEC-2009 12:06 |        | 121409 |  | 1.0       | ARI268 I-CAL LEVEL 4            |
| 044f4401.d | IAR090817-02    | YS1 | 14-DEC-2009 12:16 |        | 121409 |  | 1.0       | ARI268 I-CAL LEVEL 5            |
| 045f4501.d | WAR091106-68    | YS1 | 14-DEC-2009 12:27 |        | 121409 |  | 1.0       | PASSED ON BOTH COLUMNS          |
| 046f4601.d | WAR091020-DDT   | YS1 | 14-DEC-2009 12:37 |        | 121409 |  | 1.0       | DDT ANALOG STANDARD             |
| 047f4701.d | WAR091130-99 02 | YS1 | 14-DEC-2009 12:48 |        | 121409 |  | 1.0       | CLEAN                           |
| 048f4801.d | 1201991693      | YS1 | 14-DEC-2009 12:58 | 931140 | 10-782 |  | 1.0 QC A  | UPLOAD BOTH COLUMNS, USE HIGHER |
| 049f4901.d | 1201991694      | YS1 | 14-DEC-2009 13:09 | 931140 | 10-782 |  | 1.0 QC A  | UPLOAD BOTH COLUMNS, USE HIGHER |
| 050f5001.d | 242297001       | YS1 | 14-DEC-2009 13:19 | 931140 | 10-782 |  | 1.0 LANL  | UPLOAD BOTH COLUMNS, USE HIGHER |
| 051f5101.d | 242297002       | YS1 | 14-DEC-2009 13:30 | 931140 | 10-782 |  | 10.0 LANL | UPLOAD BOTH COLUMNS, USE HIGHER |
| 052f5201.d | 242297003       | YS1 | 14-DEC-2009 13:40 | 931140 | 10-782 |  | 1.0 LANL  | UPLOAD BOTH COLUMNS, USE HIGHER |
| 053f5301.d | 242297004       | YS1 | 14-DEC-2009 13:51 | 931140 | 10-782 |  | 5.0 LANL  | UPLOAD BOTH COLUMNS, USE HIGHER |
| 054f5401.d | 242297005       | YS1 | 14-DEC-2009 14:03 | 931140 | 10-782 |  | 5.0 LANL  | UPLOAD BOTH COLUMNS, USE HIGHER |
| 055f5501.d | 242297006       | YS1 | 14-DEC-2009 14:16 | 931140 | 10-782 |  | 10.0 LANL | UPLOAD BOTH COLUMNS, USE HIGHER |

Instrument Batch: /chem/ecd1a.i/121409.b

| Data File  | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch  | SDG    | Dilution | Client    | Comments                        |
|------------|-------------------|---------|---------------------|--------|--------|----------|-----------|---------------------------------|
| 056f5601.d | 242297007         | YS1     | 14-DEC-2009 14:29   | 931140 | 10-782 |          | 5.0 LANL  | UPLOAD BOTH COLUMNS, USE HIGHER |
| 057f5701.d | 242297008         | YS1     | 14-DEC-2009 14:41   | 931140 | 10-782 |          | 25.0 LANL | UPLOAD BOTH COLUMNS, USE HIGHER |
| 058f5801.d | WAR091211-60 02   | YS1     | 14-DEC-2009 14:52   |        | 121409 |          | 1.0       | PASSED ON BOTH COLUMNS          |
| 059f5901.d | WAR091130-99 03   | YS1     | 14-DEC-2009 15:02   |        | 121409 |          | 1.0       | CLEAN                           |
| 060f6001.d | 242297009         | YS1     | 14-DEC-2009 15:13   | 931140 | 10-782 |          | 1.0 LANL  | UPLOAD BOTH COLUMNS, USE HIGHER |
| 061f6101.d | 242297010         | YS1     | 14-DEC-2009 15:25   | 931140 | 10-782 |          | 1.0 LANL  | DCB LOW RE                      |
| 062f6201.d | 242297011         | YS1     | 14-DEC-2009 15:38   | 931140 | 10-782 |          | 5.0 LANL  | UPLOAD BOTH COLUMNS, USE HIGHER |
| 063f6301.d | 242297012         | YS1     | 14-DEC-2009 15:51   | 931140 | 10-782 |          | 5.0 LANL  | UPLOAD BOTH COLUMNS, USE HIGHER |
| 064f6401.d | 242297013         | YS1     | 14-DEC-2009 16:03   | 931140 | 10-782 |          | 10.0 LANL | UPLOAD BOTH COLUMNS, USE HIGHER |

|                              |     |                   |        |        |  |          |  |                                 |  |
|------------------------------|-----|-------------------|--------|--------|--|----------|--|---------------------------------|--|
| 065f6501.d  242305004        | YS1 | 14-DEC-2009 16:16 | 931140 | 10-786 |  | 5.0 LANL |  | UPLOAD BOTH COLUMNS, USE HIGHER |  |
| 066f6601.d  1201991695       | YS1 | 14-DEC-2009 16:28 | 931140 | 10-786 |  | 5.0 QC A |  | UPLOAD BOTH COLUMNS, USE HIGHER |  |
| 067f6701.d  1201991696       | YS1 | 14-DEC-2009 16:41 | 931140 | 10-786 |  | 5.0 QC A |  | UPLOAD BOTH COLUMNS, USE HIGHER |  |
| 068f6801.d  242305005        | YS1 | 14-DEC-2009 16:53 | 931140 | 10-786 |  | 5.0 LANL |  | UPLOAD BOTH COLUMNS, USE HIGHER |  |
| 069f6901.d  242305006        | YS1 | 14-DEC-2009 17:06 | 931140 | 10-786 |  | 5.0 LANL |  | UPLOAD BOTH COLUMNS, USE HIGHER |  |
| 070f7001.d  WAR091211--60 03 | YS1 | 14-DEC-2009 17:19 |        | 121409 |  | 1.0      |  | PASSED ON BOTH COLUMNS          |  |
| 071f7101.d  WAR091130--99 04 | YS1 | 14-DEC-2009 17:31 |        | 121409 |  | 1.0      |  | CLEAN                           |  |
| 072f7201.d  1201992645       | YS1 | 14-DEC-2009 17:44 | 931553 | 242521 |  | 1.0 QC A |  | UPLOAD BOTH COLUMNS, USE HIGHER |  |
| 073f7301.d  1201992646       | YS1 | 14-DEC-2009 17:57 | 931553 | 242521 |  | 1.0 QC A |  | UPLOAD BOTH COLUMNS, USE HIGHER |  |
| 074f7401.d  242264001        | YS1 | 14-DEC-2009 18:09 | 931553 | 242264 |  | 5.0 ENRG |  | UPLOAD BOTH COLUMNS, USE HIGHER |  |
| 075f7501.d  242521001        | YS1 | 14-DEC-2009 18:22 | 931553 | 242521 |  | 5.0 EMSC |  | UPLOAD BOTH COLUMNS, USE HIGHER |  |

Instrument Batch: /chem/ecdla.i/121409.b

Page: 4

| Data File  | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch  | SDG    | Dilution | Client | Comments                        |
|------------|-------------------|---------|---------------------|--------|--------|----------|--------|---------------------------------|
| 076f7601.d | 1201992647        | YS1     | 14-DEC-2009 18:35   | 931553 | 242521 | 5.0 QC A |        | UPLOAD BOTH COLUMNS, USE HIGHER |
| 077f7701.d | 1201992648        | YS1     | 14-DEC-2009 18:47   | 931553 | 242521 | 5.0 QC A |        | UPLOAD BOTH COLUMNS, USE HIGHER |
| 078f7801.d | 242521002         | YS1     | 14-DEC-2009 19:00   | 931553 | 242521 | 5.0 EMSC |        | UPLOAD BOTH COLUMNS, USE HIGHER |
| 079f7901.d | 242521003         | YS1     | 14-DEC-2009 19:12   | 931553 | 242521 | 5.0 EMSC |        | UPLOAD BOTH COLUMNS, USE HIGHER |
| 080f8001.d | 242521004         | YS1     | 14-DEC-2009 19:25   | 931553 | 242521 | 5.0 EMSC |        | UPLOAD BOTH COLUMNS, USE HIGHER |
| 081f8101.d | 242521005         | YS1     | 14-DEC-2009 19:38   | 931553 | 242521 | 5.0 EMSC |        | UPLOAD BOTH COLUMNS, USE HIGHER |
| 082f8201.d | WAR091211-60 04   | YS1     | 14-DEC-2009 19:50   |        | 121409 | 1.0      |        | PASSED ON BOTH COLUMNS          |
| 083f8301.d | WAR091130-99 05   | YS1     | 14-DEC-2009 20:03   |        | 121409 | 1.0      |        | CLEAN                           |
| 084f8401.d | 242521006         | YS1     | 14-DEC-2009 20:15   | 931553 | 242521 | 5.0 EMSC |        | UPLOAD BOTH COLUMNS, USE HIGHER |
| 085f8501.d | 242521007         | YS1     | 14-DEC-2009 20:28   | 931553 | 242521 | 5.0 EMSC |        | UPLOAD BOTH COLUMNS, USE HIGHER |
| 086f8601.d | 242521008         | YS1     | 14-DEC-2009 20:41   | 931553 | 242521 | 5.0 EMSC |        | UPLOAD BOTH COLUMNS, USE HIGHER |
| 087f8701.d | WAR091211-60 05   | YS1     | 14-DEC-2009 20:53   |        | 121409 | 1.0      |        | PASSED ON BOTH COLUMNS          |
| 088f8801.d | WAR091130-99 06   | YS1     | 14-DEC-2009 21:06   |        | 121409 | 1.0      |        | CLEAN                           |
| 089f8901.d | 242297010         | YS1     | 14-DEC-2009 21:19   | 931140 | 10-782 | 1.0 LANL |        |                                 |

|            |                 |     |                   |        |     |                        |
|------------|-----------------|-----|-------------------|--------|-----|------------------------|
| 090f9001.d | WAR091211-60 06 | YS1 | 14-DEC-2009 21:31 | 121409 | 1.0 | PASSED ON BOTH COLUMNS |
| 091f9101.d | WAR091130-99 07 | YS1 | 14-DEC-2009 21:44 | 121409 | 1.0 | CLEAN                  |
| 092f9201.d | 1660            | YS1 | 14-DEC-2009 21:56 | 121409 | 1.0 | screen                 |
| 093f9301.d | 1660            | YS1 | 14-DEC-2009 22:09 | 121409 | 1.0 | screen                 |
| 094f9401.d | 1660            | YS1 | 14-DEC-2009 22:22 | 121409 | 1.0 | screen                 |

Instrument Batch: /chem/ecd1a.i/121409.b

Page: 5

## GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 01/25/2010 METHOD: ECD1-F-8082-121409.m OPERATOR: YS1 REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

HARDWARE CONFIGURATION &amp; METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT DA699  
ALUMINA LOT 1240553-A  
COPPER LOT 236547-ACalibration & QC Information  
Initial Calibration Dates: See Calibration History and Standard Logbook.  
Initial Calibration Std ID's: See Calibration History and Standard Logbook.GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082  
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,  
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,  
BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/012210.b Injection Volume: 0.5 ul

| Data File  | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch | SDG    | Dilution | Client | Comments               |
|------------|-------------------|---------|---------------------|-------|--------|----------|--------|------------------------|
| 001f0101.d | WARI00105-99 01   | YS1     | 122-JAN-2010 05:55  |       | 012210 | 1        | 1.0I   | CLEAN                  |
| 002f0201.d | WARI00104-60 01   | YS1     | 122-JAN-2010 06:06  |       | 012210 | 1        | 1.0I   | DUSE RE I-CAL          |
| 003f0301.d | WARI091216-54     | YS1     | 122-JAN-2010 06:16  |       | 012210 | 1        | 1.0I   | PASSED ON BOTH COLUMNS |
| 004f0401.d | WARI091217-42     | YS1     | 122-JAN-2010 06:27  |       | 012210 | 1        | 1.0I   | PASSED ON BOTH COLUMNS |
| 005f0501.d | WARI091217-48     | YS1     | 122-JAN-2010 06:37  |       | 012210 | 1        | 1.0I   | PASSED ON BOTH COLUMNS |
| 006f0601.d | WARI00122-05 32   | YS1     | 122-JAN-2010 06:48  |       | 012210 | 1        | 1.0I   | ARI1232 I-CAL LEVEL 1  |
| 007f0701.d | WARI00122-06 32   | YS1     | 122-JAN-2010 06:58  |       | 012210 | 1        | 1.0I   | ARI1232 I-CAL LEVEL 2  |
| 008f0801.d | WARI00122-07 32   | YS1     | 122-JAN-2010 07:09  |       | 012210 | 1        | 1.0I   | ARI1232 I-CAL LEVEL 3  |
| 009f0901.d | WARI00122-08 32   | YS1     | 122-JAN-2010 07:19  |       | 012210 | 1        | 1.0I   | ARI1232 I-CAL LEVEL 4  |
| 010f1001.d | WARI00104-03 32   | YS1     | 122-JAN-2010 07:30  |       | 012210 | 1        | 1.0I   | ARI1232 I-CAL LEVEL 5  |
| 011f1101.d | WARI00104-32      | YS1     | 122-JAN-2010 07:40  |       | 012210 | 1        | 1.0I   | PASSED ON BOTH COLUMNS |
| 012f1201.d | WARI00104-21      | YS1     | 122-JAN-2010 07:51  |       | 012210 | 1        | 1.0I   | PATTERN ONLY           |
| 013f1301.d | WARI00122-09 62   | YS1     | 122-JAN-2010 08:01  |       | 012210 | 1        | 1.0I   | ARI1262 I-CAL LEVEL 1  |
| 014f1401.d | WARI00122-10 62   | YS1     | 122-JAN-2010 08:12  |       | 012210 | 1        | 1.0I   | ARI1262 I-CAL LEVEL 2  |
| 015f1501.d | WARI00122-11 62   | YS1     | 122-JAN-2010 08:22  |       | 012210 | 1        | 1.0I   | ARI1262 I-CAL LEVEL 3  |

Instrument Batch: /chem/ecd1a.i/012210.b

Page: 1

| Data File | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch | SDG | Dilution | Client | Comments |
|-----------|-------------------|---------|---------------------|-------|-----|----------|--------|----------|
|-----------|-------------------|---------|---------------------|-------|-----|----------|--------|----------|

|            |                 |     |                   |        |        |  |          |  |                                 |  |
|------------|-----------------|-----|-------------------|--------|--------|--|----------|--|---------------------------------|--|
| 016f1601.d | WARI00122-12 62 | YS1 | 22-JAN-2010 08:36 |        | 012210 |  | 1.0      |  | AR1262 I-CAL LEVEL 4            |  |
| 017f1701.d | IARI00-04-04 62 | YS1 | 22-JAN-2010 08:47 |        | 012210 |  | 1.0      |  | AR1262 I-CAL LEVEL 5            |  |
| 018f1801.d | WARI00104-62    | YS1 | 22-JAN-2010 08:57 |        | 012210 |  | 1.0      |  | PASSED ON BOTH COLUMNS          |  |
| 019f1901.d | WARI00122-13 60 | YS1 | 22-JAN-2010 09:08 |        | 012210 |  | 1.0      |  | AR1660 I-CAL LEVEL 1            |  |
| 020f2001.d | WARI00122-14 60 | YS1 | 22-JAN-2010 09:19 |        | 012210 |  | 1.0      |  | AR1660 I-CAL LEVEL 2            |  |
| 021f2101.d | WARI00-22-15 60 | YS1 | 22-JAN-2010 09:29 |        | 012210 |  | 1.0      |  | AR1660 I-CAL LEVEL 3            |  |
| 022f2201.d | WARI00122-16 60 | YS1 | 22-JAN-2010 09:40 |        | 012210 |  | 1.0      |  | AR1660 I-CAL LEVEL 4            |  |
| 023f2301.d | IARI00104-01 60 | YS1 | 22-JAN-2010 09:50 |        | 012210 |  | 1.0      |  | AR1660 I-CAL LEVEL 5            |  |
| 024f2401.d | WARI00-04-60 01 | YS1 | 22-JAN-2010 10:01 |        | 012210 |  | 1.0      |  | PASSED ON BOTH COLUMNS          |  |
| 025f2501.d | WARI00122-68    | YS1 | 22-JAN-2010 10:11 |        | 012210 |  | 1.0      |  | PASSED ON BOTH COLUMNS          |  |
| 026f2601.d | WARI091219-DDT  | YS1 | 22-JAN-2010 10:22 |        | 012210 |  | 1.0      |  | DDT ANALOG STANDARD             |  |
| 027f2701.d | WARI00105-99 02 | YS1 | 22-JAN-2010 10:32 |        | 012210 |  | 1.0      |  | CLEAN                           |  |
| 028f2801.d | 1202021361      | YS1 | 22-JAN-2010 10:43 | 944018 | SP4017 |  | 1.0 QC A |  | UPLOAD BOTH COLUMNS, USE HIGHER |  |
| 029f2901.d | 1202021362      | YS1 | 22-JAN-2010 10:55 | 944018 | SP4017 |  | 1.0 QC A |  | UPLOAD BOTH COLUMNS, USE HIGHER |  |
| 030f3001.d | 1245199001      | YS1 | 22-JAN-2010 11:08 | 944018 | SP4017 |  | 2.0 ORNL |  | UPLOAD BOTH COLUMNS, USE HIGHER |  |
| 031f3101.d | 1202021363      | YS1 | 22-JAN-2010 11:21 | 944018 | SP4017 |  | 2.0 QC A |  | UPLOAD BOTH COLUMNS, USE HIGHER |  |
| 032f3201.d | 1202021364      | YS1 | 22-JAN-2010 11:33 | 944018 | SP4017 |  | 2.0 QC A |  | UPLOAD BOTH COLUMNS, USE HIGHER |  |
| 033f3301.d | WARI00104-60 02 | YS1 | 22-JAN-2010 11:46 |        | 012210 |  | 1.0      |  | PASSED ON BOTH COLUMNS          |  |
| 034f3401.d | WARI00105-99 03 | YS1 | 22-JAN-2010 11:56 |        | 012210 |  | 1.0      |  | CLEAN                           |  |
| 035f3501.d | 1202018791      | YS1 | 22-JAN-2010 12:07 | 942925 |        |  | 1.0 QC A |  | REPORT FROM ECD8                |  |

Instrument Batch: /chem/ecdl1a.i/012210.b

Page: 2

| Data File  | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch  | SDG                 | Dilution | Client   | Comments            |
|------------|-------------------|---------|---------------------|--------|---------------------|----------|----------|---------------------|
| 036f3601.d | 1202018792        | YS1     | 22-JAN-2010 12:17   | 942925 |                     |          | 1.0 QC A | REPORT FROM ECD8    |
| 037f3701.d | 1243909001        | YS1     | 22-JAN-2010 12:28   | 942925 | 2010MDLVECD11232-L1 |          | 1.0 QCQA | UPLOAD BOTH COLUMNS |
| 038f3801.d | 1243909002        | YS1     | 22-JAN-2010 12:39   | 942925 | 2010MDLVECD11232-L1 |          | 1.0 QCQA | UPLOAD BOTH COLUMNS |
| 039f3901.d | 1243909003        | YS1     | 22-JAN-2010 12:49   | 942925 | 2010MDLVECD11232-L1 |          | 1.0 QCQA | UPLOAD BOTH COLUMNS |
| 040f4001.d | 1243909004        | YS1     | 22-JAN-2010 13:00   | 942925 | 2010MDLVECD11232-L1 |          | 1.0 QCQA | UPLOAD BOTH COLUMNS |

|            |                 |     |                   |        |         |  |          |                                 |
|------------|-----------------|-----|-------------------|--------|---------|--|----------|---------------------------------|
| 041f4101.d | WAR100104-60 03 | YS1 | 22-JAN-2010 13:10 |        | 012210  |  | 1.0      | PASSED ON BOTH COLUMNS          |
| 042f4201.d | WAR100105-99 04 | YS1 | 22-JAN-2010 13:21 |        | 012210  |  | 1.0      | CLEAN                           |
| 043f4301.d | 1202021249      | YS1 | 22-JAN-2010 13:31 | 943953 | 10-1274 |  | 1.0 QC A | UPLOAD BOTH COLUMNS, USE HIGHER |
| 044f4401.d | 1202021250      | YS1 | 22-JAN-2010 13:42 | 943953 | 10-1274 |  | 1.0 QC A | UPLOAD BOTH COLUMNS, USE HIGHER |
| 045f4501.d | 244902001       | YS1 | 22-JAN-2010 13:53 | 943953 | 10-1274 |  | 1.0 LANL | UPLOAD BOTH COLUMNS, USE HIGHER |
| 046f4601.d | 244923001       | YS1 | 22-JAN-2010 14:03 | 943953 | 10-1287 |  | 1.0 LANL | UPLOAD BOTH COLUMNS, USE HIGHER |
| 047f4701.d | 244923002       | YS1 | 22-JAN-2010 14:16 | 943953 | 10-1287 |  | 1.0 LANL | DUES RR 10X                     |
| 048f4801.d | 244923003       | YS1 | 22-JAN-2010 14:28 | 943953 | 10-1287 |  | 1.0 LANL | DUES RR                         |
| 049f4901.d | 244923004       | YS1 | 22-JAN-2010 14:41 | 943953 | 10-1287 |  | 1.0 LANL | UPLOAD BOTH COLUMNS, USE HIGHER |
| 050f5001.d | 244923005       | YS1 | 22-JAN-2010 14:54 | 943953 | 10-1287 |  | 1.0 LANL | UPLOAD BOTH COLUMNS, USE HIGHER |
| 051f5101.d | 244923006       | YS1 | 22-JAN-2010 15:06 | 943953 | 10-1287 |  | 1.0 LANL | UPLOAD BOTH COLUMNS, USE HIGHER |
| 052f5201.d | 244923007       | YS1 | 22-JAN-2010 15:19 | 943953 | 10-1287 |  | 1.0 LANL | UPLOAD BOTH COLUMNS, USE HIGHER |
| 053f5301.d | WAR100104-60 04 | YS1 | 22-JAN-2010 15:32 |        | 012210  |  | 1.0      | PASSED ON BOTH COLUMNS          |
| 054f5401.d | WAR100105-99 05 | YS1 | 22-JAN-2010 15:44 |        | 012210  |  | 1.0      | CLEAN                           |
| 055f5501.d | 244923008       | YS1 | 22-JAN-2010 15:57 | 943953 | 10-1287 |  | 1.0 LANL | UPLOAD BOTH COLUMNS, USE HIGHER |

Instrument Batch: /chem/ecdl.a.i/012210.b

Page: 3

|            |                   |         |                     |        |         |          |          |                                 |
|------------|-------------------|---------|---------------------|--------|---------|----------|----------|---------------------------------|
| Data File  | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch  | SDG     | Dilution | Client   | Comments                        |
| 056f5601.d | 244923009         | YS1     | 22-JAN-2010 16:10   | 943953 | 10-1287 |          | 1.0 LANL | UPLOAD BOTH COLUMNS, USE HIGHER |
| 057f5701.d | 244923010         | YS1     | 22-JAN-2010 16:22   | 943953 | 10-1287 |          | 1.0 LANL | UPLOAD BOTH COLUMNS, USE HIGHER |
| 058f5801.d | 245106001         | YS1     | 22-JAN-2010 16:35   | 943953 | 10-1304 |          | 1.0 LANL | UPLOAD BOTH COLUMNS, USE HIGHER |
| 059f5901.d | 1202021251        | YS1     | 22-JAN-2010 16:48   | 943953 | 10-1304 |          | 1.0 QC A | UPLOAD BOTH COLUMNS, USE HIGHER |
| 060f6001.d | 1202021252        | YS1     | 22-JAN-2010 17:00   | 943953 | 10-1304 |          | 1.0 QC A | UPLOAD BOTH COLUMNS, USE HIGHER |
| 061f6101.d | 245106002         | YS1     | 22-JAN-2010 17:13   | 943953 | 10-1304 |          | 1.0 LANL | UPLOAD BOTH COLUMNS, USE HIGHER |
| 062f6201.d | 245106003         | YS1     | 22-JAN-2010 17:26   | 943953 | 10-1304 |          | 5.0 LANL | UPLOAD BOTH COLUMNS, USE HIGHER |
| 063f6301.d | 245106004         | YS1     | 22-JAN-2010 17:38   | 943953 | 10-1304 |          | 1.0 LANL | UPLOAD BOTH COLUMNS, USE HIGHER |
| 064f6401.d | 245106005         | YS1     | 22-JAN-2010 17:51   | 943953 | 10-1304 |          | 1.0 LANL | UPLOAD BOTH COLUMNS, USE HIGHER |



|            |                 |     |                   |        |         |         |      |                        |                                 |  |
|------------|-----------------|-----|-------------------|--------|---------|---------|------|------------------------|---------------------------------|--|
| 065f6501.d | WARI00104-60 05 | YS1 | 22-JAN-2010 18:03 |        | 943953  | 10-1304 |      | 1.0                    | PASSED ON BOTH COLUMNS          |  |
| 066f6601.d | WARI00105-99 06 | YS1 | 22-JAN-2010 18:16 |        | 943953  | 10-1304 |      | 1.0                    | CLEAN                           |  |
| 067f6701.d | 245106006       | YS1 | 22-JAN-2010 18:29 | 943953 | 10-1304 |         | 1.0  | LANL                   | UPLOAD BOTH COLUMNS, USE HIGHER |  |
| 068f6801.d | 245106007       | YS1 | 22-JAN-2010 18:41 | 943953 | 10-1304 |         | 1.0  | LANL                   | UPLOAD BOTH COLUMNS, USE HIGHER |  |
| 069f6901.d | 245106008       | YS1 | 22-JAN-2010 18:54 | 943953 | 10-1304 |         | 1.0  | LANL                   | UPLOAD BOTH COLUMNS, USE HIGHER |  |
| 070f7001.d | 244923002       | YS1 | 22-JAN-2010 19:07 | 943953 | 10-1287 |         | 10.0 | LANL                   | UPLOAD BOTH COLUMNS, USE HIGHER |  |
| 071f7101.d | 244923003       | YS1 | 22-JAN-2010 19:19 | 943953 | 10-1287 |         | 1.0  | LANL                   | UPLOAD BOTH COLUMNS, USE HIGHER |  |
| 072f7201.d | WARI00104-60 06 | YS1 | 22-JAN-2010 19:32 |        | 012210  |         | 1.0  | PASSED ON BOTH COLUMNS |                                 |  |
| 073f7301.d | WARI00105-99 07 | YS1 | 22-JAN-2010 19:44 |        | 012210  |         | 1.0  | CLEAN                  |                                 |  |

Instrument Batch: /chem/ecdla.i/012210.b

Page: 4

## GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 01/28/2010 METHOD: ECD1-F-8082-121409.m OPERATOR: YS1 REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DA699  
ALUMINA LOT 1240553-A  
COPPER LOT 236547-A

Calibration & QC Information  
Initial Calibration Dates: See Calibration History and Standard Logbook.  
Initial Calibration Std ID's: See Calibration History and Standard Logbook.  
GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082  
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,  
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,  
BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/012710.b Injection Volume: 0.5 ul

| Data File | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch  | SDG    | Dilution | Client | Comments                       |
|-----------|-------------------|---------|---------------------|--------|--------|----------|--------|--------------------------------|
| 001f001.d | WAR100105-99 01   | YS1     | 27-JAN-2010 06:27   |        | 012710 | 1.0      |        | CLEAN                          |
| 002f020.d | WAR100104-60 01   | YS1     | 27-JAN-2010 06:38   |        | 012710 | 1.0      |        | PASSED ON BOTH COLUMNS         |
| 003f030.d | WAR091216-54      | YS1     | 27-JAN-2010 06:49   |        | 012710 | 1.0      |        | PASSED ON BOTH COLUMNS         |
| 004f040.d | WAR091217-42      | YS1     | 27-JAN-2010 06:59   |        | 012710 | 1.0      |        | PASSED ON BOTH COLUMNS         |
| 005f050.d | WAR091217-48      | YS1     | 27-JAN-2010 07:09   |        | 012710 | 1.0      |        | PASSED ON BOTH COLUMNS         |
| 006f060.d | WAR100104-32      | YS1     | 27-JAN-2010 07:20   |        | 012710 | 1.0      |        | PATTERN ONLY                   |
| 007f070.d | WAR100104-21      | YS1     | 27-JAN-2010 07:30   |        | 012710 | 1.0      |        | PATTERN ONLY                   |
| 008f080.d | WAR100104-62      | YS1     | 27-JAN-2010 07:41   |        | 012710 | 1.0      |        | PATTERN ONLY                   |
| 009f090.d | WAR100107-68      | YS1     | 27-JAN-2010 07:51   |        | 012710 | 1.0      |        | PATTERN ONLY                   |
| 010f100.d | WAR091219-DDT     | YS1     | 27-JAN-2010 08:02   |        | 012710 | 1.0      |        | DDT ANALOG STANDARD            |
| 011f110.d | WAR100105-99 02   | YS1     | 27-JAN-2010 08:12   |        | 012710 | 1.0      |        | CLEAN                          |
| 012f120.d | 1202024973        | YS1     | 27-JAN-2010 08:23   | 945490 | 012710 | 1.0      | QC A   | UPLOAD BOTH COLUMNS, USE FRONT |
| 013f130.d | 1202024974        | YS1     | 27-JAN-2010 08:33   | 945490 |        | 1.0      | QC A   | UPLOAD BOTH COLUMNS, USE FRONT |
| 014f140.d | 1202024975        | YS1     | 27-JAN-2010 08:44   | 945490 |        | 1.0      | QC A   | UPLOAD BOTH COLUMNS, USE FRONT |
| 015f150.d | 245452001         | YS1     | 27-JAN-2010 08:54   | 945490 | 245452 | 1.0      | MECP   | UPLOAD BOTH COLUMNS, USE FRONT |

Instrument Batch: /chem/ecd1a.i/012710.b

Page: 1

| Data File | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch | SDG | Dilution | Client | Comments |
|-----------|-------------------|---------|---------------------|-------|-----|----------|--------|----------|
|-----------|-------------------|---------|---------------------|-------|-----|----------|--------|----------|

|                             |     |                   |        |         |  |          |                                 |
|-----------------------------|-----|-------------------|--------|---------|--|----------|---------------------------------|
| 016f1601.d  245452002       | YS1 | 27-JAN-2010 09:07 | 945490 | 245452  |  | 1.0 MECP | UPLOAD BOTH COLUMNS, USE FRONT  |
| 017f1701.d  245452003       | YS1 | 27-JAN-2010 09:19 | 945490 | 245452  |  | 1.0 MECP | UPLOAD BOTH COLUMNS, USE FRONT  |
| 018f1801.d  245452004       | YS1 | 27-JAN-2010 09:32 | 945490 | 245452  |  | 1.0 MECP | UPLOAD BOTH COLUMNS, USE FRONT  |
| 019f1901.d  245452005       | YS1 | 27-JAN-2010 09:44 | 945490 | 245452  |  | 1.0 MECP | UPLOAD BOTH COLUMNS, USE FRONT  |
| 020f2001.d  245452006       | YS1 | 27-JAN-2010 09:57 | 945490 | 245452  |  | 1.0 MECP | UPLOAD BOTH COLUMNS, USE FRONT  |
| 021f2101.d  WAR100104-60 02 | YS1 | 27-JAN-2010 10:09 |        | 012710  |  | 1.0      | PASSED ON BOTH COLJMNS          |
| 022f2201.d  WAR100105-99 03 | YS1 | 27-JAN-2010 10:20 |        | 012710  |  | 1.0      | CLEAN                           |
| 023f2301.d  1202024219      | YS1 | 27-JAN-2010 10:30 | 945138 | 245337  |  | 1.0 QC A | UPLOAD BOTH COLUMNS, USE HIGHER |
| 024f2401.d  1202024220      | YS1 | 27-JAN-2010 10:41 | 945138 | 245337  |  | 1.0 QC A | UPLOAD BOTH COLUMNS, USE HIGHER |
| 025f2501.d  245337001       | YS1 | 27-JAN-2010 10:51 | 945138 | 245337  |  | 1.0 WSRB | UPLOAD BOTH COLUMNS, USE HIGHER |
| 026f2601.d  245337002       | YS1 | 27-JAN-2010 11:04 | 945138 | 245337  |  | 1.0 WSRB | UPLOAD BOTH COLUMNS, USE HIGHER |
| 027f2701.d  1202024221      | YS1 | 27-JAN-2010 11:17 | 945138 | 245452  |  | 1.0 QC A | UPLOAD BOTH COLUMNS, USE HIGHER |
| 028f2801.d  1202024222      | YS1 | 27-JAN-2010 11:29 | 945138 | 245452  |  | 1.0 QC A | UPLOAD BOTH COLUMNS, USE HIGHER |
| 029f2901.d  245337003       | YS1 | 27-JAN-2010 11:42 | 945138 | 245337  |  | 1.0 WSRB | UPLOAD BOTH COLUMNS, USE HIGHER |
| 030f3001.d  245337004       | YS1 | 27-JAN-2010 11:54 |        | 245337  |  | 1.0 WSRB | UPLOAD BOTH COLUMNS, USE HIGHER |
| 031f3101.d  245337005       | YS1 | 27-JAN-2010 12:07 | 945138 | 245337  |  | 1.0 WSRB | UPLOAD BOTH COLUMNS, HIGHER     |
| 032f3201.d  WAR100104-60 03 | YS1 | 27-JAN-2010 12:19 |        | 012710  |  | 1.0      | PASSED ON BOTH COLUMNS          |
| 033f3301.d  WAR100105-99 04 | YS1 | 27-JAN-2010 12:30 |        | 012710  |  | 1.0      | CLEAN                           |
| 034f3401.d  1202023521      | YS1 | 27-JAN-2010 12:40 | 944883 | 10-1299 |  | 1.0 QC A | UPLOAD BOTH COLUMNS, HIGHER     |
| 035f3501.d  1202023522      | YS1 | 27-JAN-2010 12:51 | 944883 | 10-1299 |  | 1.0 QC A | UPLOAD BOTH COLUMNS, HIGHER     |

Instrument Batch: /chem/ecdl1a.i/012710.b

| Data File  | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch  | SDG     | Dilution | Client    | Comments                    |
|------------|-------------------|---------|---------------------|--------|---------|----------|-----------|-----------------------------|
| 036f3601.d | 245096001         | YS1     | 27-JAN-2010 13:01   | 944883 | 10-1299 |          | 1.0 LANL  | UPLOAD BOTH COLUMNS, HIGHER |
| 037f3701.d | 245096002         | YS1     | 27-JAN-2010 13:14   | 944883 | 10-1299 |          | 1.0 LANL  | UPLOAD BOTH COLUMNS, HIGHER |
| 038f3801.d | 245096003         | YS1     | 27-JAN-2010 13:26   | 944883 | 10-1299 |          | 10.0 LANL | UPLOAD BOTH COLUMNS, HIGHER |
| 039f3901.d | 245096004         | YS1     | 27-JAN-2010 13:39   | 944883 | 10-1299 |          | 5.0 LANL  | UPLOAD BOTH COLUMNS, HIGHER |
| 040f4001.d | 245096005         | YS1     | 27-JAN-2010 13:52   | 944883 | 10-1299 |          | 1.0 LANL  | UPLOAD BOTH COLUMNS, HIGHER |

|            |                 |     |                   |        |         |  |           |                             |
|------------|-----------------|-----|-------------------|--------|---------|--|-----------|-----------------------------|
| 041f4101.d | 245096006       | YS1 | 27-JAN-2010 14:04 | 944883 | 10-1299 |  | 5.0 LANL  | UPLOAD BOTH COLUMNS, HIGHER |
| 042f4201.d | 245096008       | YS1 | 27-JAN-2010 14:17 | 944883 | 10-1299 |  | 1.0 LANL  | DUSE RR 20X                 |
| 043f4301.d | 245096009       | YS1 | 27-JAN-2010 14:29 | 944883 | 10-1299 |  | 10.0 LANL | DUSE RR 10X                 |
| 044f4401.d | WARI00104-60 04 | YS1 | 27-JAN-2010 14:42 |        | 012710  |  | 1.0       | PASSED ON BOTH COLUMNS      |
| 045f4501.d | WARI00105-99 05 | YS1 | 27-JAN-2010 14:52 |        | 012710  |  | 1.0       | CLEAN                       |
| 046f4601.d | 245096010       | YS1 | 27-JAN-2010 15:03 | 944883 | 10-1299 |  | 1.0 LANL  | DUSE RR 20X                 |
| 047f4701.d | 245096011       | YS1 | 27-JAN-2010 15:15 | 944883 | 10-1299 |  | 1.0 LANL  | DUSE RR 20X                 |
| 048f4801.d | 245099015       | YS1 | 27-JAN-2010 15:28 | 944883 | 10-1301 |  | 1.0 LANL  | DUSE RR                     |
| 049f4901.d | 245114002       | YS1 | 27-JAN-2010 15:40 | 944883 | 10-1324 |  | 1.0 LANL  | UPLOAD BOTH COLUMNS, HIGHER |
| 050f5001.d | 245116013       | YS1 | 27-JAN-2010 15:53 | 944883 | 10-1327 |  | 1.0 LANL  | UPLOAD BOTH COLUMNS, HIGHER |
| 051f5101.d | 245116016       | YS1 | 27-JAN-2010 16:06 | 944883 | 10-1327 |  | 1.0 LANL  | UPLOAD BOTH COLUMNS, HIGHER |
| 052f5201.d | WARI00104-60 05 | YS1 | 27-JAN-2010 16:18 | 944883 | 012710  |  | 1.0       | PASSED ON BOTH COLUMNS      |
| 053f5301.d | WARI00105-99 07 | YS1 | 27-JAN-2010 16:31 | 944883 | 012710  |  | 1.0       | CLEAN                       |
| 054f5401.d | 245114006       | YS1 | 27-JAN-2010 16:43 | 944883 | 10-1324 |  | 1.0 LANL  | DUSE RR                     |
| 055f5501.d | 245114005       | YS1 | 27-JAN-2010 16:56 | 944883 | 10-1324 |  | 1.0 LANL  | DUSE RR                     |

Instrument Batch: /chem/ecdl1a.i/012710.b

| Data File  | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch  | SDG     | Dilution | Client    | Comments         |
|------------|-------------------|---------|---------------------|--------|---------|----------|-----------|------------------|
| 056f5601.d | 245114004         | YS1     | 27-JAN-2010 17:09   | 944883 | 10-1324 |          | 1.0 LANL  | DUSE RR          |
| 057f5701.d | 1202023864        | YS1     | 27-JAN-2010 17:21   | 944883 | 10-1324 |          | 1.0 QC A  | DUSE RR          |
| 058f5801.d | 1202023863        | YS1     | 27-JAN-2010 17:34   | 944883 | 10-1324 |          | 1.0 QC A  | DUSE RR          |
| 059f5901.d | 245114003         | YS1     | 27-JAN-2010 17:46   | 944883 | 10-1324 |          | 1.0 LANL  | DUSE RR          |
| 060f6001.d | WARI00105-99 07   | YS1     | 27-JAN-2010 17:59   |        | 012710  |          | 1.0       | DUSE RR          |
| 061f6101.d | 245096008         | YS1     | 27-JAN-2010 18:12   | 944883 | 10-1299 |          | 20.0 LANL | DUSE RR          |
| 062f6201.d | 245096009         | YS1     | 27-JAN-2010 18:24   | 944883 | 10-1299 |          | 10.0 LANL | DUSE RR          |
| 063f6301.d | WARI00104-60 06   | YS1     | 27-JAN-2010 18:37   |        | 012710  |          | 1.0       | DUSE LOW ON BACK |
| 064f6401.d | WARI00105-99 08   | YS1     | 27-JAN-2010 18:49   |        | 012710  |          | 1.0       | CLEAN            |

Instrument Batch: /chem/ecdl1a.i/012710.b

Page: 4

## GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 01/29/2010 METHOD: ECD1-F-8082-121409.m OPERATOR: YS1 REVIEWED BY: \_\_\_\_\_  
HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DA699  
ALUMINA LOT 1240553-A  
COPPER LOT 236547-A

Calibration & QC Information  
Initial Calibration Dates: See Calibration History and Standard Logbook.  
Initial Calibration Std ID's: See Calibration History and Standard Logbook.  
GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082  
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,  
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,  
BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/012810a.b Injection Volume: 0.5 ul

| Data File  | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch | SDG     | Dilution | Client                 | Comments |
|------------|-------------------|---------|---------------------|-------|---------|----------|------------------------|----------|
| 001f0101.d | WAR100105-99 01   | YS1     | 28-JAN-2010 09:16   |       | 012810a | 1.0      | CLEAN                  |          |
| 002f0201.d | WAR100104-60 01   | YS1     | 28-JAN-2010 09:27   |       | 012810a | 1.0      | DUSE RE-I-CAL          |          |
| 003f0301.d | WAR091216-54      | YS1     | 28-JAN-2010 09:37   |       | 012810a | 1.0      | PASSED ON BOTH COLUMNS |          |
| 004f0401.d | WAR091217-42      | YS1     | 28-JAN-2010 09:48   |       | 012810a | 1.0      | PASSED ON BOTH COLUMNS |          |
| 005f0501.d | WAR091217-48      | YS1     | 28-JAN-2010 09:58   |       | 012810a | 1.0      | PASSED ON BOTH COLUMNS |          |
| 006f0601.d | WAR00104-32       | YS1     | 28-JAN-2010 10:09   |       | 012810a | 1.0      | PATTERN ONLY           |          |
| 007f0701.d | WAR100104-21      | YS1     | 28-JAN-2010 10:19   |       | 012810a | 1.0      | PATTERN ONLY           |          |
| 008f0801.d | WAR100104-62      | YS1     | 28-JAN-2010 10:30   |       | 012810a | 1.0      | PATTERN ONLY           |          |
| 009f0901.d | WAR100107-68      | YS1     | 28-JAN-2010 10:40   |       | 012810a | 1.0      | DUSE RE-I-CAL          |          |
| 010f1001.d | WAR100128-01 60   | YS1     | 28-JAN-2010 10:51   |       | 012810a | 1.0      | AR1660 I-CAL LEVEL 1   |          |
| 011f1101.d | WAR100128-02 60   | YS1     | 28-JAN-2010 11:01   |       | 012810a | 1.0      | AR1660 I-CAL LEVEL 2   |          |
| 012f1201.d | WAR100128-03 60   | YS1     | 28-JAN-2010 11:12   |       | 012810a | 1.0      | AR1660 I-CAL LEVEL 3   |          |
| 013f1301.d | WAR100128-04 60   | YS1     | 28-JAN-2010 11:22   |       | 012810a | 1.0      | AR1660 I-CAL LEVEL 4   |          |
| 014f1401.d | WAR100104-01-01   | YS1     | 28-JAN-2010 11:34   |       | 012810a | 1.0      | AR1660 I-CAL LEVEL 5   |          |
| 015f1501.d | WAR100104-60 01   | YS1     | 28-JAN-2010 11:44   |       | 012810a | 1.0      | PASSED ON BOTH COLUMNS |          |

Instrument Batch: /chem/ecd1a.i/012810a.b

Page: 1

| Data File | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch | SDG | Dilution | Client | Comments |
|-----------|-------------------|---------|---------------------|-------|-----|----------|--------|----------|
|-----------|-------------------|---------|---------------------|-------|-----|----------|--------|----------|

|            |                 |     |                   |        |         |       |                                      |
|------------|-----------------|-----|-------------------|--------|---------|-------|--------------------------------------|
| 016f1601.d | WAR100122-68    | YS1 | 28-JAN-2010 11:55 |        | 012810a | 1.0   | DOSE RE-ICAL                         |
| 017f1701.d | WAR091219-DDT   | YS1 | 28-JAN-2010 12:05 |        | 012810a | 1.0   | DDT ANALOG STANDARD                  |
| 018f1801.d | WAR100128-05 68 | YS1 | 28-JAN-2010 12:18 |        | 012810a | 1.0   | AR1268 I-CAL LEVEL 1                 |
| 019f1901.d | WAR100128-06 68 | YS1 | 28-JAN-2010 12:29 |        | 012810a | 1.0   | AR1268 I-CAL LEVEL 2                 |
| 020f2001.d | WAR100128-07 68 | YS1 | 28-JAN-2010 12:39 |        | 012810a | 1.0   | AR1268 I-CAL LEVEL 3                 |
| 021f2101.d | WAR100128-08 68 | YS1 | 28-JAN-2010 12:50 |        | 012810a | 1.0   | AR1268 I-CAL LEVEL 4                 |
| 022f2201.d | WAR100104-05    | YS1 | 28-JAN-2010 13:00 |        | 012810a | 1.0   | AR1268 I-CAL LEVEL 5                 |
| 023f2301.d | WAR100107-68    | YS1 | 28-JAN-2010 13:11 |        | 012810a | 1.0   | PASSED ON BOTH COLUMNS               |
| 024f2401.d | WAR100105-99 02 | YS1 | 28-JAN-2010 13:21 |        | 012810a | 1.0   | CLEAN                                |
| 025f2501.d | 1202026135      | YS1 | 28-JAN-2010 13:32 | 945965 | 245586  | 1.0   | QC A UPLOAD BOTH COLUMNS, USE HIGHER |
| 026f2601.d | 1202026136      | YS1 | 28-JAN-2010 13:42 | 945965 | 245586  | 1.0   | QC A UPLOAD BOTH COLUMNS, USE HIGHER |
| 027f2701.d | 245586001       | YS1 | 28-JAN-2010 13:53 | 945965 | 245586  | 250.0 | NNES UPLOAD BOTH COLUMNS, USE HIGHER |
| 028f2801.d | 1202026137      | YS1 | 28-JAN-2010 14:05 | 945965 | 245586  | 250.0 | QC A UPLOAD BOTH COLUMNS, USE HIGHER |
| 029f2901.d | 1202026138      | YS1 | 28-JAN-2010 14:18 | 945965 | 245586  | 250.0 | QC A UPLOAD BOTH COLUMNS, USE HIGHER |
| 030f3001.d | 245586002       | YS1 | 28-JAN-2010 14:30 | 945965 | 245586  | 50.0  | NNES UPLOAD BOTH COLUMNS, USE HIGHER |
| 031f3101.d | 245586003       | YS1 | 28-JAN-2010 14:43 | 945965 | 245586  | 1.0   | NNES UPLOAD BOTH COLUMNS, USE HIGHER |
| 032f3201.d | WAR100104-60 02 | YS1 | 28-JAN-2010 14:56 |        | 012810a | 1.0   | PASSED ON BOTH COLUMNS               |
| 033f3301.d | WAR091216-54 02 | YS1 | 28-JAN-2010 15:06 |        | 012810a | 1.0   | PASSED ON BOTH COLUMNS               |
| 034f3401.d | WAR091217-42 02 | YS1 | 28-JAN-2010 15:16 |        | 012810a | 1.0   | PASSED ON BOTH COLUMNS               |
| 035f3501.d | WAR091217-48 02 | YS1 | 28-JAN-2010 15:27 |        | 012810a | 1.0   | PASSED ON BOTH COLUMNS               |

Instrument Batch: /chem/ecdl1a.i/012810a.b

Page: 2

| Data File  | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch | SDG     | Dilution | Client | Comments               |
|------------|-------------------|---------|---------------------|-------|---------|----------|--------|------------------------|
| 036f3601.d | WAR100104-32 02   | YS1     | 28-JAN-2010 15:38   |       | 012810a | 1.0      |        | PATTERN ONLY           |
| 037f3701.d | WAR100104-21 02   | YS1     | 28-JAN-2010 15:48   |       | 012810a | 1.0      |        | PATTERN ONLY           |
| 038f3801.d | WAR100104-62 02   | YS1     | 28-JAN-2010 15:58   |       | 012810a | 1.0      |        | PATTERN ONLY           |
| 039f3901.d | WAR100122-68 02   | YS1     | 28-JAN-2010 16:09   |       | 012810a | 1.0      |        | PASSED ON BOTH COLUMNS |

|            |                 |     |                   |        |         |      |       |
|------------|-----------------|-----|-------------------|--------|---------|------|-------|
| 040f4001.d | WAR100105-99 03 | YS1 | 28-JAN-2010 16:19 |        | 012810a | 1.0  | CLEAN |
| 041f4101.d | 245096008       | YS1 | 28-JAN-2010 16:30 | 944883 | 10-1299 | 20.0 | LANL  |
| 042f4201.d | 245096009       | YS1 | 28-JAN-2010 16:43 | 944883 | 10-1299 | 10.0 | LANL  |
| 043f4301.d | 245096010       | YS1 | 28-JAN-2010 16:55 | 944883 | 10-1299 | 20.0 | LANL  |
| 044f4401.d | 245096011       | YS1 | 28-JAN-2010 17:08 | 944883 | 10-1299 | 20.0 | LANL  |
| 045f4501.d | 245099015       | YS1 | 28-JAN-2010 17:20 | 944883 | 10-1301 | 2.0  | LANL  |
| 046f4601.d | 245114003       | YS1 | 28-JAN-2010 17:33 | 944883 | 10-1324 | 1.0  | LANL  |
| 047f4701.d | 11202023863     | YS1 | 28-JAN-2010 17:45 | 944883 | 10-1324 | 1.0  | QC A  |
| 048f4801.d | 11202023864     | YS1 | 28-JAN-2010 17:58 | 944883 | 10-1324 | 1.0  | QC A  |
| 049f4901.d | 245114004       | YS1 | 28-JAN-2010 18:11 | 944883 | 10-1324 | 1.0  | LANL  |
| 050f5001.d | 245114005       | YS1 | 28-JAN-2010 18:23 | 944883 | 10-1324 | 1.0  | LANL  |
| 051f5101.d | WAR100-04-60 03 | YS1 | 28-JAN-2010 18:38 |        | 012810a | 1.0  |       |
| 052f5201.d | WAR100105-99 04 | YS1 | 28-JAN-2010 18:50 |        | 012810a | 1.0  |       |
| 053f5301.d | 245114006       | YS1 | 28-JAN-2010 19:03 | 944883 | 10-1324 | 1.0  | LANL  |
| 054f5401.d | WAR-00104-60 04 | YS1 | 28-JAN-2010 19:17 |        | 012810a | 1.0  |       |
| 055f5501.d | WAR100105-99 05 | YS1 | 28-JAN-2010 19:30 |        | 012810a | 1.0  |       |

Instrument Batch: /chem/ecdl1a.i/012810a.b

Page: 3

| Data File  | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch  | SDG     | Dilution | Client | Comments                        |
|------------|-------------------|---------|---------------------|--------|---------|----------|--------|---------------------------------|
| 056f5601.d | 11202026131       | YS1     | 28-JAN-2010 19:42   | 945963 | 10-1372 | 1.0      | QC A   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 057f5701.d | 11202026132       | YS1     | 28-JAN-2010 19:55   | 945963 | 10-1372 | 1.0      | QC A   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 058f5801.d | 245376001         | YS1     | 28-JAN-2010 20:08   | 945963 | 10-1372 | 1.0      | LANL   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 059f5901.d | 245376002         | YS1     | 28-JAN-2010 20:20   | 945963 | 10-1372 | 1.0      | LANL   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 060f6001.d | 245376003         | YS1     | 28-JAN-2010 20:33   | 945963 | 10-1372 | 5.0      | LANL   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 061f6101.d | 245376004         | YS1     | 28-JAN-2010 20:45   | 945963 | 10-1372 | 5.0      | LANL   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 062f6201.d | 245376005         | YS1     | 28-JAN-2010 20:58   | 945963 | 10-1372 | 5.0      | LANL   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 063f6301.d | 245376006         | YS1     | 28-JAN-2010 21:10   | 945963 | 10-1372 | 5.0      | LANL   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 064f6401.d | 245376007         | YS1     | 28-JAN-2010 21:23   | 945963 | 10-1372 | 1.0      | LANL   | UPLOAD BOTH COLUMNS, USE HIGHER |



Instrument Batch: /chem/ecdl1a.i/012810a.b

| Data File  | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch  | SDG      | Dilution | Client | Comments                        |
|------------|-------------------|---------|---------------------|--------|----------|----------|--------|---------------------------------|
| 065f6501.d | 245381002         | YS1     | 28-JAN-2010 21:36   | 945963 | 10-1380  | 1.0      | LANL   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 066f6601.d | WAR100104-60 05   | YS1     | 28-JAN-2010 21:48   |        | 012810a  | 1.0      |        | PASSED ON BOTH COLUMNS          |
| 067f6701.d | WAR100105-99 06   | YS1     | 28-JAN-2010 22:01   |        | 012810a  | 1.0      |        | CLEAN                           |
| 068f6801.d | 245384001         | YS1     | 28-JAN-2010 22:13   | 945963 | 10-1382  | 1.0      | LANL   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 069f6901.d | 1202026133        | YS1     | 28-JAN-2010 22:26   | 945963 | 10-1382  | 1.0      | QC A   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 070f7001.d | 1202026134        | YS1     | 28-JAN-2010 22:39   | 945963 | 10-1382  | 1.0      | QC A   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 071f7101.d | 245384002         | YS1     | 28-JAN-2010 22:51   | 945963 | 10-1382  | 1.0      | LANL   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 072f7201.d | 245384003         | YS1     | 28-JAN-2010 23:04   | 945963 | 10-1382  | 5.0      | LANL   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 073f7301.d | 245384004         | YS1     | 28-JAN-2010 23:16   | 945963 | 10-1382  | 1.0      | LANL   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 074f7401.d | 245384005         | YS1     | 28-JAN-2010 23:29   | 945963 | 10-1382  | 1.0      | LANL   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 075f7501.d | 245384006         | YS1     | 28-JAN-2010 23:41   | 945963 | 10-1382  | 1.0      | LANL   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 076f7601.d | 245384007         | YS1     | 28-JAN-2010 23:54   | 945963 | 10-1382  | 5.0      | LANL   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 077f7701.d | 245384008         | YS1     | 29-JAN-2010 00:07   | 945963 | 10-1382  | 5.0      | LANL   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 078f7801.d | WAR100104-60 06   | YS1     | 29-JAN-2010 00:19   |        | 012810a  | 1.0      |        | PASSED ON BOTH COLUMNS          |
| 079f7901.d | WAR100105-99 07   | YS1     | 29-JAN-2010 00:32   |        | 012810a  | 1.0      |        | CLEAN                           |
| 080f8001.d | 245384012         | YS1     | 29-JAN-2010 00:45   | 945963 | 10-1382  | 1.0      | LANL   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 081f8101.d | WAR100104-60 07   | YS1     | 29-JAN-2010 00:57   |        | 012810a  | 1.0      |        | PASSED ON BOTH COLUMNS          |
| 082f8201.d | WAR100105-99 08   | YS1     | 29-JAN-2010 01:10   |        | 012810a  | 1.0      |        | CLEAN                           |
| 083f8301.d | 1202026309        | YS1     | 29-JAN-2010 01:22   | 946042 | EUI-7483 | 1.0      | QC A   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 084f8401.d | 1202026310        | YS1     | 29-JAN-2010 01:35   | 946042 | EUI-7483 | 1.0      | QC A   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 085f8501.d | 1202026313        | YS1     | 29-JAN-2010 01:48   | 946042 | EUI-7483 | 1.0      | QC A   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 086f8601.d | 245309001         | YS1     | 29-JAN-2010 02:00   | 946042 | EUI-7483 | 1.0      | CARE   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 087f8701.d | 1202026311        | YS1     | 29-JAN-2010 02:13   | 946042 | EUI-7483 | 1.0      | QC A   | UPLOAD BOTH COLUMNS, USE HIGHER |
| 088f8801.d | 1202026312        | YS1     | 29-JAN-2010 02:25   | 946042 | EUI-7483 | 1.0      | QC A   | UPLOAD BOTH COLUMNS, USE HIGHER |

|             |                 |     |                   |         |      |                        |  |
|-------------|-----------------|-----|-------------------|---------|------|------------------------|--|
| 1089f8901.d | WAR100104-60 08 | YS1 | 29-JAN-2010 02:38 | 012810a | 1.01 | PASSED ON BOTH COLUMNS |  |
| 090f9001.d  | WAR100105-99 09 | YS1 | 29-JAN-2010 02:51 | 012810a | 1.01 | CLEAN                  |  |

Instrument Batch: /chem/ecd1a.i/012810a.b

Page: 5

# Prep Logbook

## Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 944882  
 Analyst: Andrew Schwemin  
 Method: SW846 3550B

Verified by: \_\_\_\_\_

Lab SOP: GL-OA-E-010 REV# 18  
 Instrument: Semi-Volatiles Manual

| Sample ID                  | Run Date             | Aliquot (g) | Clean Up  | Prior to Clean up (mL) | Amount Cleaned (mL) | After Clean up (mL) | Prepped Aliquot (mL) | Prepped Factor (mL/g) |
|----------------------------|----------------------|-------------|-----------|------------------------|---------------------|---------------------|----------------------|-----------------------|
| 1202023521 MB              | 25-JAN-2010 20:44:32 | 30          | H2SO4/KM2 |                        | 2                   | 9                   | 1                    | 0.03333               |
| 1202023522 LCS             | 25-JAN-2010 20:44:32 | 30          | H2SO4/KM2 |                        | 2                   | 9                   | 1                    | 0.03333               |
| 245096001                  | 25-JAN-2010 20:44:32 | 30.06       | H2SO4/KM2 |                        | 2                   | 9                   | 1                    | 0.03327               |
| 245096002                  | 25-JAN-2010 20:44:32 | 30.01       | H2SO4/KM2 |                        | 2                   | 9                   | 1                    | 0.03332               |
| 245096003                  | 25-JAN-2010 20:44:32 | 30.18       | H2SO4/KM2 |                        | 2                   | 9                   | 1                    | 0.03313               |
| 245096004                  | 25-JAN-2010 20:44:32 | 30.19       | H2SO4/KM2 |                        | 2                   | 9                   | 1                    | 0.03312               |
| 245096005                  | 25-JAN-2010 20:44:32 | 30.11       | H2SO4/KM2 |                        | 2                   | 9                   | 1                    | 0.03321               |
| 245096006                  | 25-JAN-2010 20:44:32 | 30.19       | H2SO4/KM2 |                        | 2                   | 9                   | 1                    | 0.03312               |
| 245096008                  | 25-JAN-2010 20:44:32 | 30.01       | H2SO4/KM2 |                        | 2                   | 9                   | 1                    | 0.03332               |
| 245096009                  | 25-JAN-2010 20:44:32 | 30.02       | H2SO4/KM2 |                        | 2                   | 9                   | 1                    | 0.03331               |
| 245096010                  | 25-JAN-2010 20:44:32 | 30.01       | H2SO4/KM2 |                        | 2                   | 9                   | 1                    | 0.03332               |
| 245096011                  | 25-JAN-2010 20:44:32 | 30.04       | H2SO4/KM2 |                        | 2                   | 9                   | 1                    | 0.03329               |
| 245099015                  | 25-JAN-2010 20:44:32 | 30.01       | H2SO4/KM2 |                        | 2                   | 9                   | 1                    | 0.03332               |
| 245114002                  | 25-JAN-2010 20:44:32 | 30.04       | H2SO4/KM2 |                        | 2                   | 9                   | 1                    | 0.03326               |
| 245114003                  | 25-JAN-2010 20:44:32 | 30.07       | H2SO4/KM2 |                        | 2                   | 9                   | 1                    | 0.03319               |
| 1202023863 MS (245114003)  | 25-JAN-2010 20:44:32 | 30.13       | H2SO4/KM2 |                        | 2                   | 9                   | 1                    | 0.03331               |
| 1202023864 MSD (245114003) | 25-JAN-2010 20:44:32 | 30.02       | H2SO4/KM2 |                        | 2                   | 9                   | 1                    | 0.03317               |
| 245114004                  | 25-JAN-2010 20:44:32 | 30.15       | H2SO4/KM2 |                        | 2                   | 9                   | 1                    | 0.03313               |
| 245114005                  | 25-JAN-2010 20:44:32 | 30.18       | H2SO4/KM2 |                        | 2                   | 9                   | 1                    | 0.03315               |
| 245114006                  | 25-JAN-2010 20:44:32 | 30.17       | H2SO4/KM2 |                        | 2                   | 9                   | 1                    | 0.03323               |
| 245116013                  | 25-JAN-2010 20:44:32 | 30.09       | H2SO4/KM2 |                        | 2                   | 9                   | 1                    | 0.0332                |
| 245116016                  | 25-JAN-2010 20:44:32 | 30.12       | H2SO4/KM2 |                        | 2                   | 9                   | 1                    | 0.0332                |

| Type  | Sample Id  | Description                       | Serial Number | Spike Amt | Units | Comments:                 |
|-------|------------|-----------------------------------|---------------|-----------|-------|---------------------------|
| LCS   | 1202023522 | PCB Laboratory Control            | WE100105-07   | 1         | mL    | Clean up Date: 01/25/10   |
| MS    | 1202023863 | PCB Laboratory Control            | WE100105-07   | 1         | mL    | Clean up Initials: AJS    |
| MSD   | 1202023864 | PCB Laboratory Control            | WE100105-07   | 1         | mL    | Verified By: AV           |
| SURR  | All        | PEST LOW LEVEL SURROGATE 200 UG/L | UE100108-15   | 1         | mL    | Final Solvent: Hexane     |
| REGNT | All        | 1:1 sulfuric acid                 | 1133264a      | 5         | mL    | Clean Up SOP: GL-OA-E-037 |
| REGNT | All        | Acetone                           | 1259670       | 1.50      | mL    |                           |
| REGNT | All        | Hexane                            | 1259672-B2    | 1.50      | mL    |                           |
| REGNT | All        | 5% Potassium Permanganate         | BI202457-F    | 5         | mL    |                           |
| SOURC | All        | SODIUM SULFATE                    | 1256907       | 30        | g     |                           |